1. Introduction

- Project Summary
- Purpose
- Scope
- Technology and Literature Review

Project Summary:

Title	: JOB-PORTAL SYSTEM
Definition	: To manage the jobseeker and recruiter [employer]
Developed at	: HCL Info System Pvt. Ltd. Ahmadabad.
Team Size	: 2
Team Members	: Prajapati Pratik .J
	: Yadav Mangal .D
Software Requirements	: Microsoft Visual Studio 2005, SQL Server.NET Framework 2.0
Development Platform	: Microsoft Visual Studio 2008
Front-end-tool	: ASP.NET
Back-end-tool	: SQL Server
Office Automation Tools	: Ms-word
Project Guide	: Mr.PAWAN JAIN

PURPOSE:

- We have developed the job-portal. This portal can handle data of Recruits (Several Companies) who are looking for suitable candidates for their vacancies.

- This portal will be most useful for Consultants for searching of matching job with jobseekers etc.

- The classic Functionality of this Application focuses on data storage. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary.

- An administrator is provided through which can enter Recruiter's record /type of jobs/jobseeker's description. A registration form is provided through which user can enter details of company like location of company/type of job/status of job/Qualification of jobseekers. This data once entered can be edited/deleted as required when there will be vast entries of data user can scroll the data.

- There are sections provided for Recruiter Requirement/Resource.

Recruiter:

In Recruiter sections, user can enter the details of companies through the help of portal. The portal has a form that's will ask details like company id/name/location/address/city/country/contact person/contact number/email_id. Once after entering the details the data will be saved by clicking save button and the details will be stored in the Recruiter database.

Requirement:

In Requirement sections, various vacancies of various companies are stored. All the details like job_id , job title , job location , functional skills , technical skills , company_id , contact_id , contact person , contact number , email_id are stored in database.

Resource:

In Resource sections, details of various Jobseekers are stored. All the Personal details and Technical and Educational background, work experience.

Search:

In search section, user will search for matching requirement and jobseeker as per their requirement from of the portal and fill the form as it given above.

SCOPE:

- There is no any online Payment gateway provided in this portal. So, any company which would register would not be able to pay online. Payment would be done by check/case.
- There are no banners for advertisement on the site.
- This system can run only on Windows platform.
- Supported only in My SQL database.
- No security of data.
- No N-level category.
- Supportive language is only English.

TECHNOLOGY AND LITERATURE REVIEW

In developing the Job portal website, we have used ASP.NET 2008. In which C# is used for server side coding. SQL Server is used for as the database. In which .Net framework 3.5 is included. Here are the some features of Asp.Net 3.5 and C# 2.0.

Front-End:

Asp.Net 3.5 and C# 2.0

ASP.NET is a unified Web development model that includes the services necessary for you to build enterprise-class Web applications with a minimum of coding. ASP.NET is part of the .NET Framework, and when coding ASP.NET applications you have access to classes in the .NET Framework. You can code your applications in any language compatible with the common language runtime (CLR), including Microsoft Visual Basic, C#, JScript .NET, and J#. These languages enable you to develop ASP.NET applications that benefit from the common language runtime, type safety, inheritance, and so on.

ASP.NET includes:

- A page and controls framework
- The ASP.NET compiler
- Security infrastructure
- State-management facilities
- Application configuration
- Health monitoring and performance features

- Debugging support
- An XML Web services framework
- Extensible hosting environment and application life cycle management
- An extensible designer environment

ASP.NET

ASP.NET provides a unified Web development model that includes the services necessary for you to build enterprise-class Web applications. ASP.NET is part of the .NET Framework and enables you to take full advantage of the features of the common language runtime, such as type safety, inheritance, language interoperability, and versioning.

The topics in this section provide you with conceptual information about how ASP.NET works and procedural topics that show you how to write code that takes advantage of the power of ASP.NET to create dynamic Web applications.

● Why is ASP.Net 3.5 proffered?

The Microsoft .NET Framework version 3.5 includes significant enhancements to ASP.NET in virtually all areas. ASP.NET has been improved to provide out-of-the-box support for the most common Web application situations. You will find that you can get Web sites and pages up and running more easily and with less code than ever before. At the same time, you can add custom features to ASP.NET to accommodate your own requirements.

Specific areas in which ASP.NET has been improved are:

- **Productivity:** You can easily and quickly create ASP.NET Web pages and applications using new ASP.NET server controls and existing controls with new features. New areas such as membership, personalization, and themes provide system-level functionality that would normally require extensive developer coding. Core development scenarios, particularly data, have been addressed by new data controls, no-code binding, and smart data-display controls.
- **Flexibility and extensibility:** Many ASP.NET features are extensible so that you can easily incorporate custom features into applications. The ASP.NET provider model, for example, provides pluggable support for different data sources.

- **Performance:** Features such as recompilations, configurable caching, and SQL cache invalidation allow you to optimize the performance of your Web applications.

- **Security:** It is now easier than ever to add authentication and authorization to your Web applications.

- **Hosting:** ASP.NET includes new features that make it easier to manage a hosting environment and create more opportunities for hosters to add value.
- **Completeness:** New and existing features work in concert to allow you to create end-to-end scenarios that address real-world Web development challenges.

The following sections describe changes made in different areas of ASP.NET:

- Web Site Management
- Page Design
- Controls

- Data
- Security

● Web Site Management

Web site configuration is improved to include many more settings. You can easily manage application settings using the Web Site Administration Tool, which provides a wizard-like interface for setting up and maintaining your applications. The Web Site Administration Tool is particularly useful for managing remote sites (for example, sites that are hosted by an ASP.NET-compatible ISP).

If you host sites for others, you can use a new ASP.NET Microsoft Management Console (MMC) plug-in or an administrative API to manage sites and monitor their health. You can add value to your hosting site by offering controls or services that you can selectively enable or disable.

● New Administration Features and Tools

ASP.NET includes features to make Web site management easier for both Web site developers and for administrators. Configuration files include a richer set of elements that give site developers control over new features and finer control over existing ones. A new configuration API makes it possible to control configuration programmatically. New tools provide a GUI interface for configuring applications — the new Web Site Administration Tool makes it easy for Web site developers to manage their own sites using a Web-based interface (both locally and remotely), and an ASP.NET-specific MMC snap-in allows site administrators to manage complex configuration scenarios using a standard Windows server-based tool.

● Reserved Folders for Special Functionality

Web sites can include an App_Code folder into which site developers can put source code that is then compiled automatically as part of the Web site, making it unnecessary to compile components or controls before using them in a site. An App_Data folder is reserved for databases (for example, SQL Server Express Edition .mdf files). Special folders for resources contain XML-based files containing strings and other resources for localization, which are dynamically compiled into assemblies at runtime.

● Recompiling Web Sites for Error Checking and Deployment

You can now precompile your Web site, which allows you to enhance performance by avoiding the overhead of dynamic compilation and allows you to catch compile-time errors. You can also precompile a site for deployment, producing a version of the site that you can easily copy to or install on a production server. Precompiling for deployment strips source code, which helps you protect your intellectual property.

● Navigation

You can add site navigation to your Web sites by defining a site map (typically an XML file). You can then use new navigation controls such as the SiteMapPath controls that can automatically create a menu or tree view of pages, or that can display a navigation path (also known as a breadcrumb) showing the current page hierarchy.

● *Page Design*

New features of ASP.NET help you easily create pages that are more consistent and can offer a richer experience to users.

❑ Pages Consistent Layout using Master

You can use master pages to create a consistent page layout for your Web site or for a group of related pages. On the master page, you define a common look; you can then create individual content pages that provide the dynamic content that is displayed using the master page as a template

● Themes for Consistent Appearance

Themes allow you to create a consistent look for your site. A theme contains a collection of control skins that define property settings (such as background color and font), CSS style settings, and images to specify the appearance of a control.

● New Code-Behind Model for Pages

ASP.NET continues to support the single-file model from the previous version of ASP.NET and now includes a new code-behind model. The new model allows you to use a new .NET Framework feature, partial classes, to create a code file with just the code in it that you need, such as event handlers. The end result is a clean separation of the markup from the code in a page, and a robust model for managing a page's code

● User-Customizable Web Pages

With Web parts, you can create modularized Web pages that users can customize extensively. A Web part incorporates a discrete piece of functionality, such as a weather report, a stock ticker, or a window for reading news. ASP.NET allows you to create your own Web parts. You can then create Web pages that include a selection of Web parts. Using the Web parts architecture, you can allow users to customize individual Web parts (for example, by typing in a ZIP code to display local information) and change the layout of Web parts.

You can also allow users to add and remove Web parts, thereby giving users the ultimate flexibility in using your site

● User-Specific Values

You can provide users with a custom experience in your Web site by defining and using profile properties, which you can use to track user information (address, city), preferences (color scheme, list of stocks to follow), or any custom information required by your application (shopping cart). Once you have defined profile properties, ASP.NET automatically associates individual instances of the profile properties with each user, and you can use code to set or get the values. ASP.NET persists property values in a data store (which you can configure), and the next time a user visits your site, ASP.NET automatically retrieves the profile property value for that user.

● New Caching Features

Enhancements to caching help you increase the performance of your site and manage the cache more precisely. You can manage caching at the Web site level using Web.config settings, rather than managing it at the page level. You can now invalidate cache contents programmatically. If you are using SQL Server 7.0 or later, you can set up a cache dependency based on a SQL Server database table so that when the table changes, the cache entry dependent on it is made invalid.

● Enhanced Client-Side Functionality

ASP.NET pages make it easier to add client-side functionality to pages to enhance the run-time experience for users. You can more easily bind client-side event handlers to controls and add better support for accelerator keys. For multi-page forms, you can use the new Wizard control, or you can take advantage of the new cross-page-posting facility in Web pages.

- **Controls**

ASP.NET features many improvements to Web server controls, including both enhancements to existing controls and a selection of new controls.

- **General Control Improvements**

A major area of enhancement in ASP.NET 3.5 is in the controls you use to create ASP.NET Web pages. General improvements to controls include:

- By default, controls now generate markup that is compatible with the XHMTL 1.1. standard.

- All controls support adaptive rendering, and can emit markup that is appropriate for the requesting browser.

- All data controls can use either the new data-binding model with data source controls, or can continue to use the model used in earlier versions of ASP.NET.

- All controls support themes and skins so that you can customize their appearance using an ASP.NET theme.

- You can use device filtering with many control properties, specifying different property values for different devices. When the control is rendered, the appropriate property value is set based on the requesting browser.

- Validation controls can now be grouped, which allows you to selectively enable validation for some controls.

- Improvements to individual controls such as the Label control, List Box control, and others to add functionality often requested by developers.

● New Controls

ASP.NET offers a greater selection of controls to help you create fully featured Web pages much more quickly. You can now take advantage of the following controls:

- **Navigation.** You can add navigation paths (also known as breadcrumbs) to pages with the **SiteMapPath** control and display a site map using the **TreeView** control.

- **Security.** You can authenticate users with a suite of login controls that allow you to get and validate user credentials, display custom output for logged-in users, and more.

- **Web Parts.** A new set of Web Part controls allow you to create portal pages that users can personalize at run time. For example, you can create a Web Part that allows a user to enter a custom value such as a postal code and get localized weather reports.

- **Client behavior.** New controls provide ASP.NET server control functionality for tasks that previously were handled only by HTML elements. These include the FileUpload control, ImageMap control, and the HiddenField control.

- The new Wizard control allow you to create a page with multiple panels that step the user through multi-part forms.

In addition, existing ASP.NET controls have been enhanced with new features. All controls now support the new data-binding model, themes, and personalization.

You can also use all controls to create pages for devices; controls now automatically support adaptive rendering and device filtering.

- **Data**

ASP.NET includes substantially improved support for working with data in your Web applications.

- **Data Source Controls**

For binding data to controls on Web pages, you can now use data source controls, which encapsulate connections, query commands, and parameters into a single control. ASP.NET includes data source controls that work with a variety of back-end data sources, including Microsoft SQL Server, Microsoft Access, XML files, Web services, FrontPage site maps, and business objects that return data sets. All data source controls support the same basic object model, giving you a consistent way to work with data regardless of its source.

Data source controls can automatically fetch data and manage it when the page runs. You no longer need to write code to execute commands and manage datasets for common data scenarios. However, if your application requires it, you still have access to the lower-level data functions exposed by ADO.NET.

To pass parameters to data source controls, you can configure the controls to draw parameters values from other controls, Session state, query strings, or cookies; in addition, you can set parameter values programmatically.

● Middle-Tier Data Access

By using the new ObjectDataSource control, you can easily add data access to a page that is based on a middle-tier business object. The **ObjectDataSource** exposes the same binding interface to controls on the page, but instead of performing direct database access, it invokes methods on a component that you specify.

● Data Display Controls

ASP.NET also includes enhanced support for displaying and updating data with controls on Web pages. All controls can now use data source controls as data source instead of working directly against a dataset or other store. You can also take advantage of the following new controls that are specifically built to make data access easier:

- The **GridView** , DetailsView , FormView controls to display and edit data. (The **GridView** control supersedes the DataGrid control from previous versions of ASP.NET.)

- The **TreeView** control to display hierarchical information from XML files, sitemap files, and relational data sources.

- The **SiteMapPath** and Menu controls to provide data-bound support for navigation.

● XML Support

You can use XML data in a variety of ways in ASP.NET. An XML data source control exposes XML data to be used either as hierarchical or tabular data. You can bind a **TreeView**

control to XML data to provide a hierarchical view for users, or you can bind a list control such as the **GridView** control to display XML in a traditional way.

Connection String Storage

To enhance Web site security, you can store connection strings in a dedicated section of the configuration file.

● Security

New ASP.NET features provide built-in support for authenticating and authorizing users. ASP.NET membership manages authentication, providing facilities for validating user credentials and helping users manage their passwords.

The membership service provides APIs that you can call programmatically to create new users, validate credentials, and get user information. To simplify authentication even more, you can use the new login controls, which work with the ASP.NET membership to perform a variety of tasks, often with no extra code required. The Login control prompts users for credentials and validates them. The PasswordRecovery control provides various options for helping users either change or remember their password. You can display user information with the LoginName control, and present a Login or Logout button using the LoginStatus control. The LoginView control allows you to mark content in a page that is visible only to authenticated users.

ASP.NET role management helps you manage authorization, providing high-level ways for you to define and check roles for users.

Both the membership and role management systems use the new ASP.NET provider model, which separates the functionality of the systems from the data store that supports them. For example, membership allows you to store user information in Microsoft SQL Server or Microsoft Access. If these default options are not suitable for your

requirements, you can create your own provider that accepts calls from membership and then fulfills them using your custom data logic.

✔ Microsoft's C#.Net

An ASP.NET page is restricted to code written in a single programming language. Currently, ASP.NET supports Visual Basic, C#, and J#. The default language is Visual Basic, but any other language can be declared as the default language for the page by placing a directive at the top of the page, such as the following:

```
<%@Language="C#"%>
```

The language can also be declared in a **<script language = …>** block, as in the example provided in Code Blocks in ASP.NET. If different languages are declared in separate script blocks on the same page, an error will be thrown.

Although only one language can be used on a single page, any user controls that you use on a page can be written in different languages, including Visual C++. This allows applications to take advantage of function libraries in different languages.

Visual Basic Scripting Edition (VBScript) is not supported, but VBScript syntax is very similar to Visual Basic 2008 syntax, so any required changes to existing code should be minor.

These topics summarize common programming concepts with side-by-side code examples or tables. This information is designed for those who want to learn a new language or refresh their memory of how to work with a particular language.

The following Visual Studio programming languages are covered:

- Visual Basic
- C#

- J#
- C++
- JScript
- Visual FoxPro

Web Forms pages are one way to create the user interface of an ASP.NET–based Web application. You can add Web Forms pages to several types of Visual Studio projects. Most often, when you want to work with Web Forms pages, you will use the ASP.NET Web Application project template. For more information about Web project templates, see Introduction to Web Projects.

To work with a Web Forms page in Visual Studio, you use the Web Forms Designer. The designer includes a WYSIWYG view, called Design view, for laying out the elements of the page. Alternatively, you can switch the designer to an HTML view, called Source view, which gives you direct access to the ASP.NET syntax of the elements on the page. Finally, the designer includes a code editor with IntelliSense that you can use to create the page initialization and event-handler code for your page.

● Project Files Created With Web Forms

When you create a Web project, Visual Studio constructs a Web application directory structure on the target Web server, and a project structure on your local computer. The following table describes the files that relate to your Web Forms pages.

● Deployment

The server on which you create your Web Forms pages is typically not the server on which you will deploy the pages and their associated files for production. To deploy a Web project containing Web Forms pages, you may follow one of two approaches:

- Copy your project to the Web server.
- Create a deployment project.

Back-End:-

✔ Microsoft SQL Server 2005

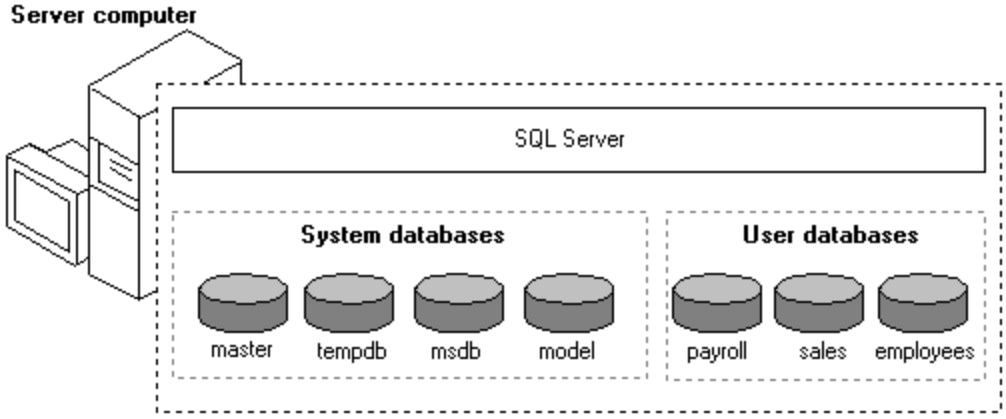
Microsoft® SQL Server™ 2005is a set of components that work together to meet the data storage and analysis needs of the largest Web sites and enterprise data processing systems. The topics in SQL Server Architecture describe how the various components work together to manage data effectively.

Microsoft® SQL Server™ 2005data is stored in databases. The data in a database is organized into the logical components visible to users. A database is also physically implemented as two or more files on disk.

Each instance of SQL Server has four system databases (**master**, **model**, **tempdb**, and **msdb**) and one or more user databases(**hmd_db, Address_Book, payroll, sales, employees**). Some organizations have only one user database, containing all the data for their organization. Some organizations have different databases for each group in their organization, and sometimes a database used by a single application. For example, an organization could have one database for sales, one for payroll, one for a document management application, and so on. Sometimes an application uses only one database; other applications may access several databases.

It is not necessary to run multiple copies of the SQL Server database engine to allow multiple users to access the databases on a server. An instance of the SQL Server Standard or Enterprise Edition is capable of handling thousands of users working in multiple databases at the same time. Each instance of SQL Server makes all databases in the instance available to all users that connect to the instance, subject to the defined security permissions.

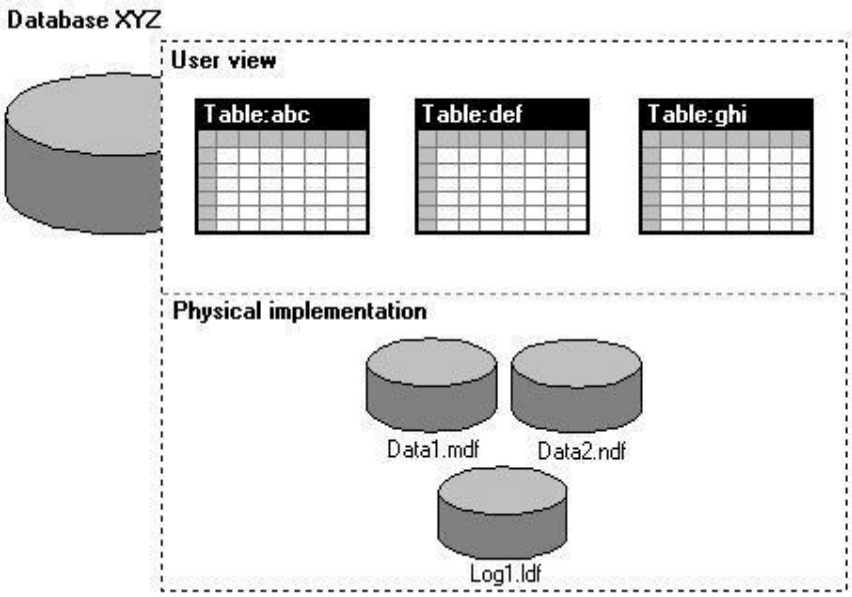
When connecting to an instance of SQL Server, your connection is associated with a particular database on the server. This database is called the current database



✔ Database Architecture

Microsoft® SQL Server™ 2005data is stored in databases. The data in a database is organized into the logical components visible to users. A database is also physically implemented as two or more files on disk.

When using a database, you work primarily with the logical components such as tables, views, procedures, and users. The physical implementation of files is largely transparent. Typically, only the database administrator needs to work with the physical implementations



✔ What's New in Microsoft SQL Server 2005

Microsoft® SQL Server™ 2005 extends the performance, reliability, quality, and ease-of-use of Microsoft SQL Server version 7.0. Microsoft SQL Server 2005 includes several new features that make it an excellent database platform for large-scale online transactional processing (OLTP), data warehousing, and e-commerce applications.

The OLAP Services feature available in SQL Server version 7.0 is now called SQL Server 2005 analysis Services. The term OLAP Services has been replaced with the term Analysis Services. Analysis Services also includes a new data mining component.

The Repository component available in SQL Server version 7.0 is now called Microsoft SQL Server 2005 beta Data Services. References to the component now use the term Meta Data Services. The term repository is used only in reference to the repository engine within Meta Data Services.

The What's New topics contain brief overviews of the new features and links to relevant conceptual topics that provide more detailed information. These conceptual topics provide links to topics that describe the commands or statements you use to work with these features.

✔ **Features of SQL Server 2005**

Microsoft® SQL Server™ 2005 features include:

- **Internet Integration.**

  The SQL Server 2005 database engine includes integrated XML support. It also has the scalability, availability, and security features required to operate as the data storage component of the largest Web sites. The SQL Server 2005 programming model is integrated with the Windows DNA architecture for developing Web applications, and SQL Server 2005 supports features such as English Query and the Microsoft Search Service to incorporate user-friendly queries and powerful search capabilities in Web applications.

- **Scalability and Availability**.

  The same database engine can be used across platforms ranging from laptop computers running Microsoft Windows® 98 through large, multiprocessor servers running Microsoft Windows 2000 Data Center Edition.

  SQL Server 2005 Enterprise Edition supports features such as federated servers, indexed views, and large memory support that allow it to scale to the performance levels required by the largest Web sites.

- **Enterprise-Level Database Features.**

  The SQL Server 2005 relational database engine supports the features required to support demanding data processing environments. The database engine protects data integrity while minimizing the overhead of managing thousands of users concurrently modifying the database. SQL Server 2005 distributed queries allow you to reference data from multiple sources as if it were a part of a SQL Server 2005 database, while at the same time, the distributed transaction support protects the integrity of any updates of the distributed data. Replication allows you to also maintain multiple copies of data, while ensuring that the separate copies remain synchronized. You can replicate a set of data to multiple, mobile, disconnected users, have them work autonomously, and then merge their modifications back to the publisher.

- **Ease of installation, deployment, and use.**

  SQL Server 2005 includes a set of administrative and development tools that improve upon the process of installing, deploying, managing, and using SQL Server across several sites. SQL Server 2005 also supports a standards-based programming model integrated with the Windows DNA, making the use of SQL Server databases and data warehouses a seamless part of building powerful and scalable systems. These features allow you to rapidly deliver SQL Server applications that customers can implement with a minimum of installation and administrative overhead.

- **Data warehousing.**

SQL Server 2005 includes tools for extracting and analyzing summary data for online analytical processing. SQL Server also includes tools for visually designing databases and analyzing data using English.

2. Project Management

- *Project Planning and Scheduling*
- *Risk Management*
- *Estimation*

Project Management

Project Planning and Scheduling

Project planning establishes a plan for the software engineering work that follows. It describes the technical tasks to be conducted, the risks that are likely, the resources that will be required, the work product to be produces, and a work schedule.

Project scheduling is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks. It is important to note, however, that the schedule evolves overtime. During early stages of project planning, a macroscopic schedule is developed. This type of schedule identifies all software framework activities and the product functions to which they are applied. As the project gets under way, each entry on the macroscopic schedule is refined into a detailed schedule. Here, specific software tasks (required to accomplish an activity) are identified and scheduled.

Project Development Approach

To solve actual problems in an industry setting, software engineer or a team of engineers must incorporate a development strategy that encompasses the process, methods and tools layers and generic phase. This strategy is often referred to as process model or a software engineering paradigm. A process model for software engineering is often choosen based on the nature of the project and application, the methods and tools to be used, and the controls and deliverables that required.

To solve actual problems in an industry setting, a software engineer or a team of engineers must incorporate a development strategy that encompass the process, methods, and tool layers.

Types of Software Process Models:

- The Linear sequential Model (Waterfall Model)
- The Prototyping Model
- The Rapid Application Development (RAD) Model
- The Incremental Model
- The Spiral Model
- The WINWIN Spiral Model
- The Concurrent Development Model
- The Formal Methods Model
- The Component Based Developed Model
- Fourth generation Technique (4GT)
- Agile Software Model

- **Note:- Our software is based on Linear sequential Model (Waterfall Model)**

Waterfall Model

The waterfall model derivers its name due to the cascading effect from one phase to the other as is illustrated in above figure. In this model each phase well define starting and ending point, with identifiable deliveries to the next phase.

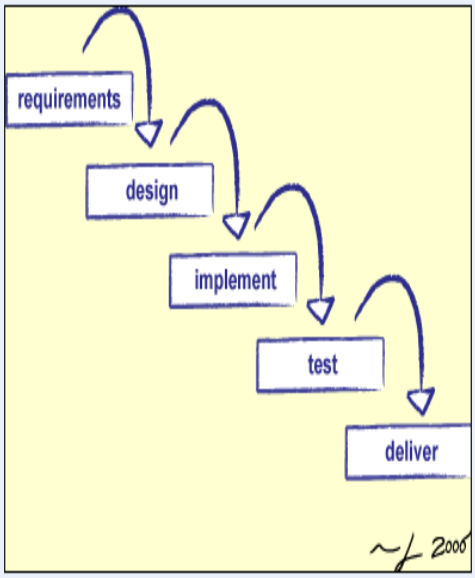
Note that this model is sometime referred to as the linear sequential model or the software life cycle model.

Starting from the existing situation, we proceed towards the desired solution in a number of steps. At each of these steps the Waterfall Model is followed. Consider a *Linear sequential Model* lifecycle model which consists of repeating the following five phases in sequence:

- The water fall diagram is basically divided into following 5 models.
  - **Requirement**
  - **Design**
  - **Implementation**
  - **Verification**
  - **Maintenance**

Software Engineering Paradigm Applied

waterfall_model - Windows Picture and Fax Viewer



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Requirement:-

In the requirement phase the need to create the application is specified. What is the need of the system is defined. What information to be feeder to create the application will come under the requirement phase?

Design:

After the requirement phase the next phase is the Design phase where the application is designed according to the forms and other modules created. This phase is much important phase because it will structure the layout of your application.

Implementation:

Implementation is the process of having a system personnel phase check out and put new equipment into use, train users, install new application and construct any file of data need to use it.

Verification:

After the whole application is being the developed the main phase is the verification phase where the whole application tested and verified to check the whole application.

Maintenance:

After the successful verification of the application the main phase is the maintenance phase where the application needs to be maintained for its successful operation in future.

Disadvantages:

- It is difficult for the customers to state the requirements clearly at the beginning. There is always certain degree of natural uncertainty at beginning of each project.
- Difficult and costlier to change when the changes occur at later stages.
- Customer can see the working version only at the end. Thus any changes suggested here are not only difficult to incorporate but also expensive. This may result in disaster if any undetected problems are precipitated to this stage

Justification

We have implemented Incremental model because of following features:

- The Design phase goes much faster, as designs are only done on the items in the current release (Release 1.0 for example).
- Coding and Testing go much faster because there are less items to code and test. If major design flaws are found, re-work is much faster since the functional areas have been greatly reduced.
- The client gets into production in less than 3 months, allowing them to begin earning revenue or reducing expenses quicker with their product.
- If market conditions change for the client, changes can be incorporated in the next iterative release, allowing the software to be much more nimble.
- As the software is implemented, the client can make recommendations for the next iteration due to experiences learned in the past iteration.
- Deliverables are produced early in the software development lifecycle in each iteration.
- It is flexible and easy to manage
- Risk Management and Testing is easy

Project Plan

Project planning establishes a plan for the software engineering work that follows. It describes the technical tasks to be conducted, the risks that are likely, the recourses that will be required, the work product to be produced, and a work schedule.

Milestones

Sometimes there are events externals to your project that you want to track. If you cannot link to them because they are not in a Project Plan, you can create a milestone to represent them in your own project.

For example, you cannot begin a certain task until another company completes a software application you need to use. You can create a milestone in your project that represents the completion of that application and reminds you to track its progress.

Some milestones may need duration. For example, your project has an approval milestone at the end of a phase and you know that the approval process will take a week.

Following is the scheduler of our project Task Management System.

Scheduler for activities

Weeks Months	Week 1	Week 2	Week 3	Week 4
1st Month	Introduction to the organization. Understand the working of the taken projects.	Introduction to outsourcing projects. Study development of the outsourced project.	Get the knowledge about .Net framework 3.5 and C#.net, Asp.Net	Study the use of AJAX technology. Use of various AJAX tools into the web application.
2nd Month	Understand the required software system in the organization.	Gathering the necessary information about the various attributes associated with the Task Management System.	Deciding the process model of the proposed project. Finish the analysis and decide the GUI design of the web page.	Review the whole concept of the system. Do the necessary changes according to the director. Creation of Data Flow Diagrams
3rd Month	Design the database for proposed system.	Start the coding of the web forms in sequence of System admin, and user side.	Testing and Debugging the errors in the project.	Finally completing the proposed project.

				Prepare the documentation of the project.

Roles and Responsibility

We members of project have performed all the activities related to the analysis, design, documentations, coding and testing from start to end collectively by consensus.

Analysis

Understanding the requirements is among the most difficult tasks that face a software engineer.

As far as our project is concern, we had studied various projects related to administration. We also studied projects previously developed in this organization

We have analyzed this system for fifteen days.

Designing

Design engineering encompasses the set of principles concepts and practices that lead to the development of high quality system or product design principles establishes an overriding philosophy that guides designer in the work that is performed.

Software design sits at the technical kernel of software engineering and is applied regardless of the software process model that is used. Beginning once software requirements have been analyzed and modeled, software design is the last software engineering action within the modeling activity and sets the stage for construction.

As far as our project is concerned, we have designed the process model, data model and also viewer model that will be going to be implemented in the coding phase. To make efficient development model we have developed various diagrams

like use case diagram, data flow diagram, context diagram to understand the user interactions, flow of data through the information system respectively.

Coding

On completion of design phase, we started coding in .Net 2005 express edition.

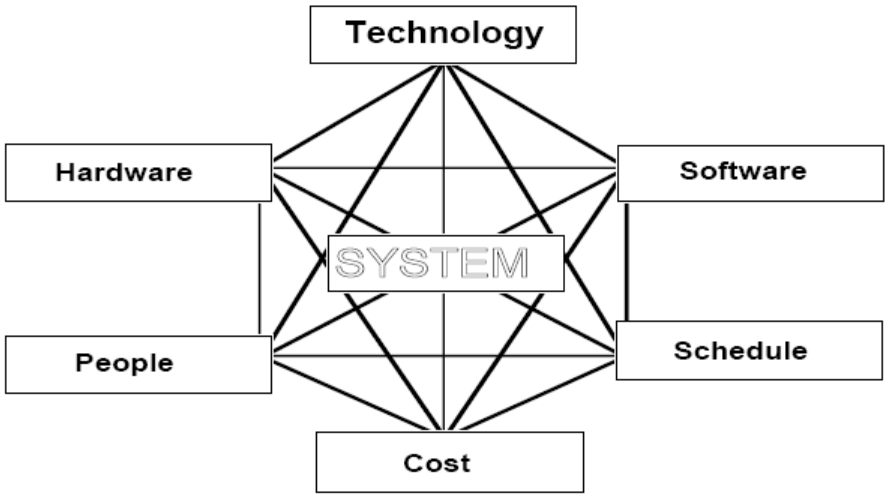
- *In case of responsibility*

Testing

Software testing has a dual function; it is used to establish the presence of defects in the program and it is used to help judge whether or not the program is usable in practice. Thus software testing is use for validation and verification, which ensure that software confirms to its specification and meets the need of the software customer. We have tested almost all interface components together and almost all tests have been succeeded. Testing has been applied for all the stages of process.

❑ Risk Management

It presents a holistic vision of the risk-based methodologies for Software Risk Management (SRM) developed at the Software Engineering Institute (SEI). SRM methodologies address the entire life cycle of software acquisition, development, and maintenance. The premise that the ultimate efficacy of the developed methodologies and tools for software engineering is to buy smarter, manage more effectively, identify opportunities for continuous improvement, use available information and databases more efficiently, improve industry, raise the community's playing field, and review and evaluate progress. The methodologies are based on seven management principles: shared product vision, teamwork, global perspective, forward-looking view, open communication, integrated management, and continuous process.



The need to manage risk increases with system complexity. As the complexity of the system increases, both technical and non-technical (cost and schedule) risks increase. There is an increasing need for more systematic methods and tools to supplement individual knowledge, judgment, and experience. These human traits are often sufficient to address less complex risks. It is worth noting that many managers believe that they are managing risk in its multifaceted dimensions.

Risk Management Identification:

Risk Identification is a systematic attempt to specify threats to the project plan (estimates, schedule, resource loading, etc.). By identifying known and predictable risks, the project manager takes a first step toward avoiding them when possible and controlling them when necessary.

One method of identifying risk is to create a risk item checklist. The checklist can be used for risk identification and focuses on some subset of known and predictable risks in the following generic subcategories:

- **Performance Risk:-**

The degree of uncertainty that the product will meet its requirements and be fit for its intended use

As far as our project is concerned, we have given unambiguous requirement of project so that risk is very less.

- **Cost Risk: -**

The project has not much financial impact because the development cost of the project is very less. So it is not much concerned to our project.

As far as our project is concerned, we have given unambiguous requirement of project so that risk is very less.

- **Support Risk: -**

The degree of uncertainty that the resultant software will be easy to correct, adapt, and enhance. Because of good documentation it's easy to correct adapt or enhance the project in future.

- **Schedule risk: -**

The degree of uncertainty that the project schedule will be maintained and that the product will be delivered on time. It was very less in our case because of effective management and scheduling of our project guide and his support to schedule work evenly.

Risk Analysis

There are certain parameters, which are to be considered while calculating risk analysis for the system, which involves

1. Finding out the possible risks involved in this process.
2. Deciding what precautions we can take if that risk has occurred.

There are three types of risks that are associated with the software development process they are as follows:-

1. Risk related to cost.
2. Risk related to time.
3. Risk related to quality.

Risk Planning

• **Effectiveness:** The analysis and design phase are quite effective. The user can run any function at any time without any failure. We have used the latest technology and more reliable technological framework so called .NET framework.

• **Efficiency:** The Efficiency of the proposed application is quite reliable.

User can perform any type of query related for searching the images and their various attributes. User will find the application very user-friendly and self-guided.

• **Confidentiality:** The login session performed by the user during the submission satellite images is quite secure. The login name & password are quite secure and much confidential.

• **Integrity:** The user input process and the output process are quite perfect i.e. the user gets what he queries. The application is secure from hacking and

prevents itself from poor authority granting procedure since it uses Microsoft's Security services for authorization of users.

- **Availability:** The system application design is quite interactive. The application less threat by availability risk because it depends on availability of web-server (which is quite high).

- **Compliance:** The situation is not expected to occur because we have so far continuously communicated with customers and fulfill their needs. However, if there will be any compliance than.

- **Reliability:** We ensure that all information is quite perfect and reliable. So user can trust on them.

❑ Estimation

Software project management begins with a set of activities that are collectively called project planning. Before the project can begin, the project manager and the software team must estimate the work to be done, the resource that are required, and the time that will elapse from start to finish. Only when this completes, development can proceed further.

There are two commonly used estimation techniques are:

- *LOC - based estimation*
- *FP – based estimation*

While estimating, project planner begins with a bounded statement of software scope and from this statement attempts to decompose software into problem functions that can each be estimated individually. LOC or FP (the estimation variable) is then estimated for each function.

A preliminary statement of scope can be

"To develop a web application which can process imaged uploaded and can manage data related to it herewith. It also can plot image on the map, perform zoom operation on image, perform linearization and many image processing tasks on the same".

3.

Sys

tem

- *User Characteristics*
- *Hardware and Software Requirements*
- *Constraints*

❑ User Characteristics:

End User

- Every user should be comfortable of working with computer and net browsing.

- He must have basic knowledge of English too.
- He has must be some knowledge of how to use any websites.

Administrator

- Administrator is an entity that will manage entire system. He/she will have highest level of access rights and he will be provided with his own interface to access powerful features. An administrator can cover areas such as database, security and integration.

- He can view, modify or delete records. He can do all kind of alterations in the database.

❑ Hardware and software Requirements

✔ Minimal Hardware Requirements:

- Intel Pentium 4.1GHz processor
- 512MB SDRAM
- 5GB Hard disk space
- Internet Connection
- Key Board
- Mouse

✔ Minimal Software Requirements:

- Windows XP/Server 2003
- Microsoft Visual Studio 2008
- Microsoft .Net Framework v3.5
- SQL server 2005
- Microsoft Office 2007
- IIS

Constraints:

- GUI is only in English.
- Limited to the registered user only.

To develop a system with above mentioned requirements in stimulated period of 4 months is a major time constraints. In this time frame is all software engineering activities are to be done including testing.

4. System Analysis

- Study of Current System
- Requirements of New System
- Feasibility Study
- Requirements Validation
- Functions of System
- Functional and Behavioral Modeling

❑ System Analysis

Study of current System:

This application having database which is a repository of an organization's electronically stored data. The databases are designed to facilitate analysis.

The classic Functionality of this Application focuses on data storage. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary.

Functional Components of the project:

- To facilitate easy maintenance of records of various Recruiters (Companies), job and job seekers.
- To check for details prospective jobseekers through quick search provided in the portal.
- To check for matching job with jobseekers.
- Quick access of all record.
- To match the suitable candidates to appropriate job.
- Prevent and reduce human error.
- Reduce manual work.

Requirement of new system

The new system that was to be built in the organization need to have some creative concept that can help the user in the real manner and the next important thing is that it should give the cost effective solution to the user. Due to the collaborative nature of the application the user can really be an important part of it rather than just using it blindly. As the prior applications were not providing the user portability, the new application should be created for manage jobseekers and employers (recruiters) so that user can access the application at any of the corner in the world into his/her hand only. The new application also gives the user the liberty to know and use the application from the web through the web modules which gives complete information of the application.

Performance Characteristics

- 56 kbps or higher Internet connection is required for Client Server Communication.
- System should be able to give response on time. Loading time of system should not be too much.
- Secure access of confidential data (user's details). SSL can be used.
- 24 X 7 availability.
- Better component design to get better performance at peak time
- Flexible service based architecture will be highly desirable for future extension.
- Uninterrupted mail services.

Feasibility Study

The main purpose of feasibility analysis is to check the economic viability of the proposed system. The result of the feasibility study will indicate whether to proceed with the proposed system or not. If the results of the feasibility study are positive, then we can proceed to develop a system otherwise project should not be pursued.

Technical Feasibility

This system will be developed using Asp.net. As we require some time to learn all these technologies, All these technologies are easy to learn and can develop system very rapidly. After developing and deploying the system, any user can view this site on the Internet.

Economical Feasibility

Proposed System requires development tools and software such as visual studio 2008 which are free of cost and available on internet. For developing proposed system, we need various resources such as computers systems, internet connection for e-help, recommended disk space, and memory speed as mention in technical requirement. By looking at all these expenses and comparing with proposed system, we have many benefits from proposed system such are

- As existing system is manual, where data may not accurate, up to date, and available on time. But proposed system will be computerized, so we can overcome all limitations of existing system. Also with this new system insertion, deletion, and modification of various data will be easier to handle.
- This system will reduce the paperwork. And quality of data will be improved.

So keeping all above mentioned benefits and comparing with various expenditures of resources, we conclude that proposed system is economical feasible.

Operational feasibility

Users of the system will the registered user of the website.

To put an orders user should have only basic knowledge of computer and Internet which is not a big issue.

Basic training is required for other users to handle and manage the information.

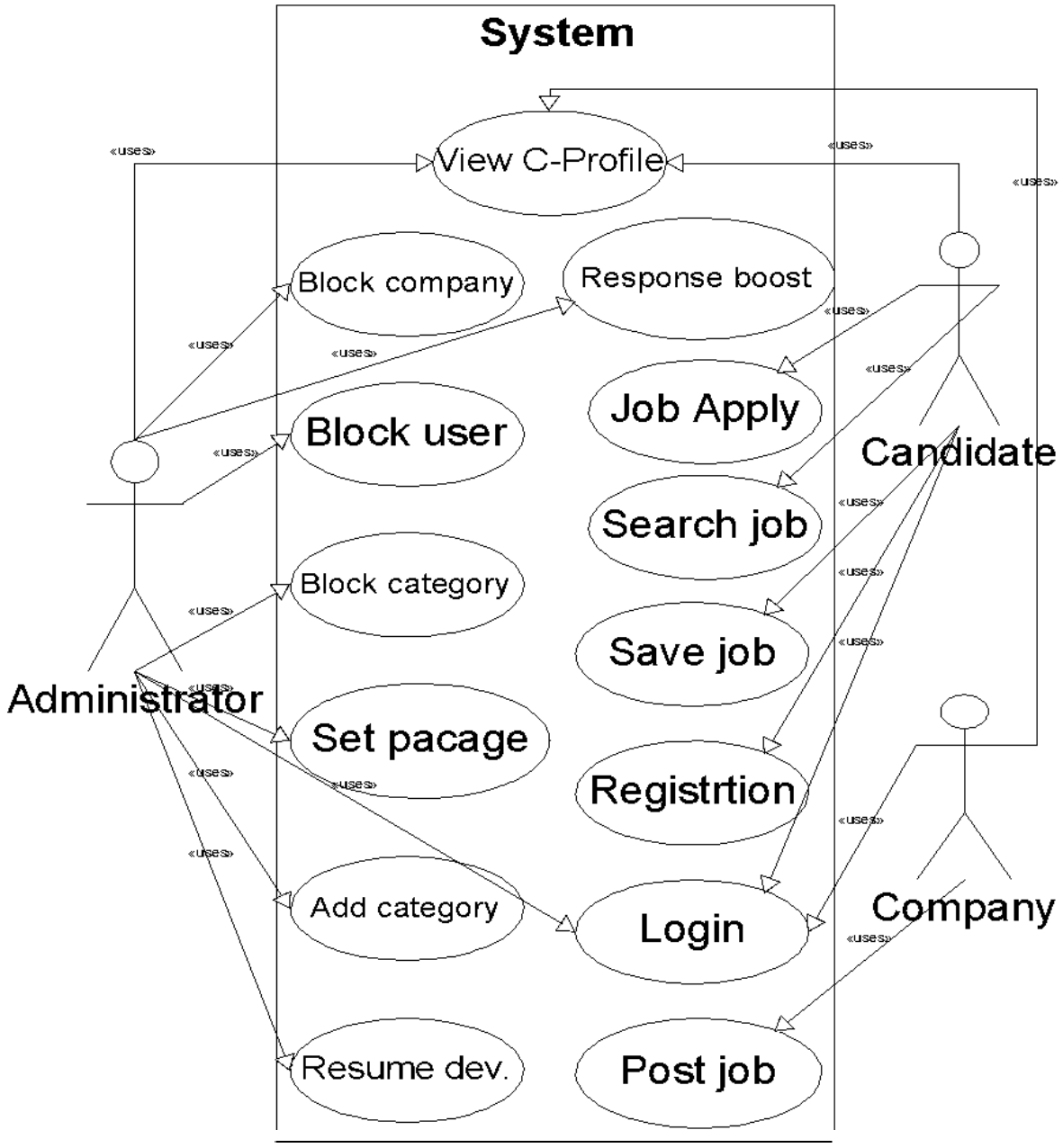
Requirement Validation

- ✔ Username and Password validation that is compulsory to enter within system (Not for visitor).
- ✔ The user must have the email id in Gmail, yahoo or any website.
- ✔ Phone No must be Numeric and length is of maximum 11 Digit.
- ✔ Name must be character not in digit.
- ✔ Pin code No. is of 6 digits.
- ✔ For every new entry of enter all data manually, made entry by adjustment form. So it reduces mismatch in data.
- ✔ The field denoted by (*) are compulsory.

Most of the data are enter from the master table so it also reduces the chances of mismatch data.

- **Functions of System**

Use Case for System Details



Data Dictionary/Database Files

A Data Dictionary is simply a record of data about data. It may be manually compiled or it may be a fully automated package. All definitions of elements in the system – data flows, processes, and data stores – are stored in Data Dictionary.

Data Dictionary is an integral component of structured analysis. Data Dictionary provides additional information about the system.

A Data Dictionary is a catalog- a repository --- of the elements in a system. These elements center on data and the way they are structured to meet user requirements and organization needs. The major elements are data flows, data stores and processes. The data Dictionary stores details and descriptions of these elements

The Data Dictionary is the only common source of definitions for users and investigators alive. It is the single source of answer of answers to all questions regarding the format and context of the data sets used in the system.

Data Elements

The most fundamental level of data is the data element. Data elements are building blocks for all other data in the system like Data Names, Data Description, Aliases, Length, and Data Values.

Data structures

The Data Structure is a set of data items that are related to one another and that collectively describe a component in the system.

- Job Portal

LOGIN

Field name	Data type	Constraint	Description
username	char(20)	Primary key	Name of user
password	varchar2(12)	-	Password of user
Role	char(10)	-	Admin/ HR /Candidate

CANDIDATE

Field name	**Data type**	**Constraint**	**Description**
candidate_id	number	Primary key	ID of Candidate
username	char(15)	Foreign key	Username
que_id	number	Foreign key	ID of Question
Ans	varchar2(15)	-	Answer
profile_date	date	-	Date of Profile
first_name	char(15)	-	First name of user
middle_name	char(15)	-	Middle name of user
last_name	char(15)	-	Last name of user
Gender	char(6)	-	Gender
Dob	date	-	Date of birth
contact_no	number(15)	-	Contact no
email_id	varchar2(30)	-	Email ID
profile_status	char(5)	-	Active / Inactive

CANDIDATE_EDUCATION

Field name	Data type	Constraint	Description
candidate_id	number	Primary key	ID of Candidate
perc11	number(4,2)	-	11th Percentage
perc12	number(4,2)	-	12th Percentage
graduation	varchar2(10)	-	Graduation
institute_grad	varchar2(25)	-	Institute of Graduation
perc_grad	number(4,2)	-	Graduation %
post_grad	varchar2(10)	-	Post-graduation
institute_post_grad	varchar2(25)	-	Institute of Post-grad
perc_post_grad	number(4,2)	-	Post-graduation %
dr_phd	varchar2(10)	-	Doctorate / PhD
institute_dr_phd	varchar2(25)	-	Dr. / PhD Institute
perc_dr_phd	number(4,2)	-	Dr. / PhD %
certification	varchar2(10)	-	Certification Course

CANDIDATE_PROFESSIONAL

Field name	Data type	Constraint	Description
candidate_id	number	Primary key	ID of Candidate
candidate_prof_id	number	-	ID of Professional
area_id	number	Foreign key	ID of area
Expr	varchar2(15)	-	How much Experience
Salary	varchar2(20)	-	Salary
Industry	varchar2(25)	-	Work Industry
ind_role	varchar2(25)	-	Role in industry
Skills	varchar2(50)	-	Key Skills

CANDIDATE_ADDRS

Field name	Data type	Constraint	Description
candidate_id	Number	Foreign key	ID of Candidate
candidate_addrs_id	Number	Primary key	ID of Address
candidate_addrs	varchar2(50)	-	Local address
city_id	Number	Foreign key	ID of City

COMPANY

Field name	Data type	Constraint	Description
company_id	Number	Primary key	ID of Company
company_name	varchar2(20)	-	Name of Company
contact_person	varchar2(25)	-	Contact-person Name
company_contact	number(15)	-	Contact number
company_email_id	varchar2(30)	-	Company email id
company_details	varchar2(200)	-	Details of Company
company_status	char(10)	-	Active / Inactive

COMPANY_BRANCH_ADDRS

Field name	Data type	Constraint	Description
company_id	Number	Foreign key	ID of Company
branch_id	Number	Primary key	ID of Branch
area_id	Number	Foreign key	ID of Area
branch_address	varchar2(50)	-	Local address
city_id	Number	Foreign key	ID of City

PACKAGE

Field name	Data type	Constraint	Description
package_id	Number	Primary key	ID of Package
package_cost	Number	-	Total or Per-resume
no_jobpost	Number	-	No. of Job-postings

COMPANY_PACKAGE

Field name	Data type	Constraint	Description
company_package_id	Number	Primary key	ID-Company package
company_id	Number	Foreign key	ID of Company
package_id	Number	Foreign key	ID of Package
package_date	Date	-	Date of selection

JOB_APPLIED

Field name	Data type	Constraint	Description
applied_id	Number	Primary key	ID of Applied job
candidate_id	Number	Foreign key	ID of Candidate

jobpost_id	Number	Foreign key	ID of Vacancy
resume_id	Number	Foreign key	ID of Resume
applied_date	Date	-	Date when applied

JOB_POST

Field name	**Data type**	**Constraint**	**Description**
jobpost_id	Number	Primary key	ID-Company package
company_id	Number	Foreign key	ID of Company
job_title	varchar2(20)	-	Title of Job
area_id	Number	Foreign key	ID of Area
branch_id	Number	Foreign key	ID of Branch
post_id	Number	Foreign key	ID of Post
no_vacancy	Number	-	Number of vacancy
start_date	Date	-	Starting date
end_date	Date	-	Ending date
expr_req	varchar2(15)	-	Experience Requirement
skills_req	varchar2(30)	-	Skills Requirement
edu_req	varchar2(10)	-	Education Requirement
basic_req	varchar2(30)	-	Basic Requirement
salary_given	varchar2(20)	-	Salary Given
jobpost_status	char(10)	-	Active/ Outdate / Full

COMPANY_BLOCK

Field name	Data type	Constraint	Description
ccb_id	number	Primary key	ID of Blocking
candidate_id	number	Foreign key	ID of Candidate
company_id	number	Foreign key	ID of Company
block_date	date	-	Date when blocked
block_status	char(10)	-	Active / Inactive

POST

Field name	Data type	Constraint	Description
post_id	number	Primary key	ID of Area
area_id	number	Foreign key	ID of Area
post_name	char(10)	-	Name of the Post

CATEGORY

Field name	Data type	Constraint	Description
category_id	number	Primary key	ID of Category
category_name	char(10)	-	Name of Category
category_status	char(10)	-	Active / Inactive

AREA

Field name	Data type	Constraint	Description
area_id	number	Primary key	ID of Area
category_id	number	Foreign key	ID of Category
area_name	varchar2(10)	-	Name of the area

QUESTION

Field name	Data type	Constraint	Description
que_id	number	Primary key	ID of Question
Que	varchar2(50)		Full Question

COUNTRY

Field name	Data type	Constraint	Description

country_id	number	Primary key	ID of Country
country_name	char(20)	-	Name of the Country
country_status	char(10)	-	Active / Inactive

STATE

Field name	**Data type**	**Constraint**	**Description**
state_id	number	Primary key	ID of State
state_name	char(20)	-	Name of the State
country_id	number	Foreign key	ID of the Country
state_status	char(10)	-	Active / Inactive

CITY

Field name	**Data type**	**Constraint**	**Description**
city_id	number	Primary key	ID of City
city name	char(20)	-	Name of the City
state_id	number	Foreign key	ID of the State
dist_status	varchar2(10)	-	Active / Inactive

RESUME

Field name	Data type	Constraint	Description
resume_id	number	Primary key	ID of Resume
resume headline	varchar2(30)	-	Headline of Resume
candidate_id	number	Foreign key	ID of Candidate

PAGES

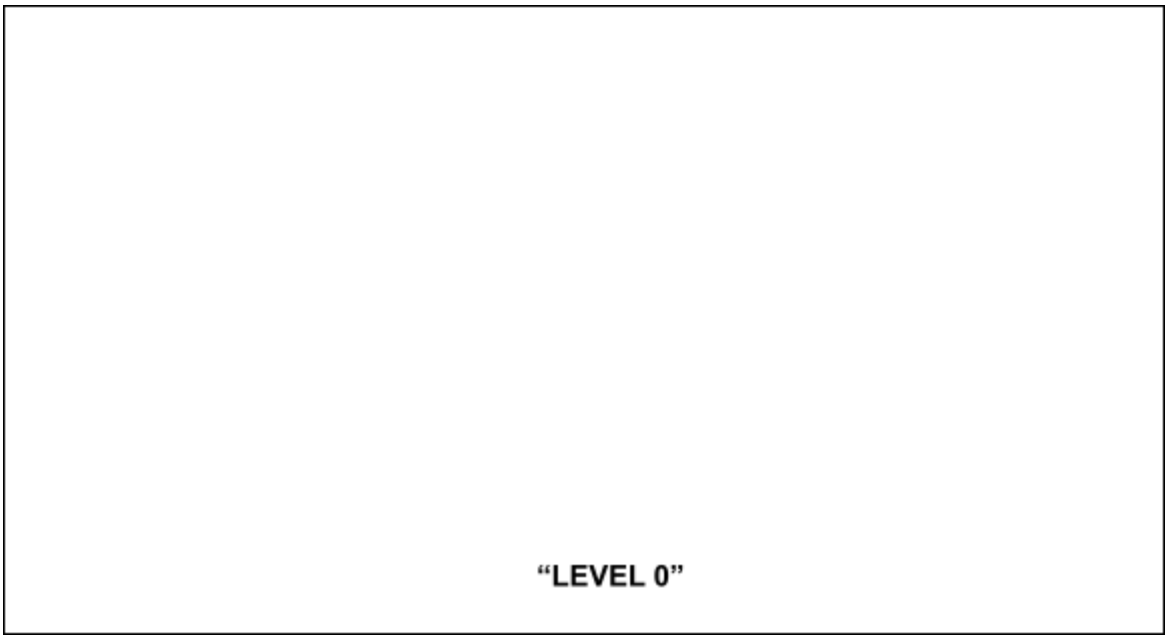
Field name	Data type	Constraint	Description
page_id	number	Primary key	ID of Page
page title	varchar2(20)	-	Title of Page

page_discription	varchar2(500)	-	Description

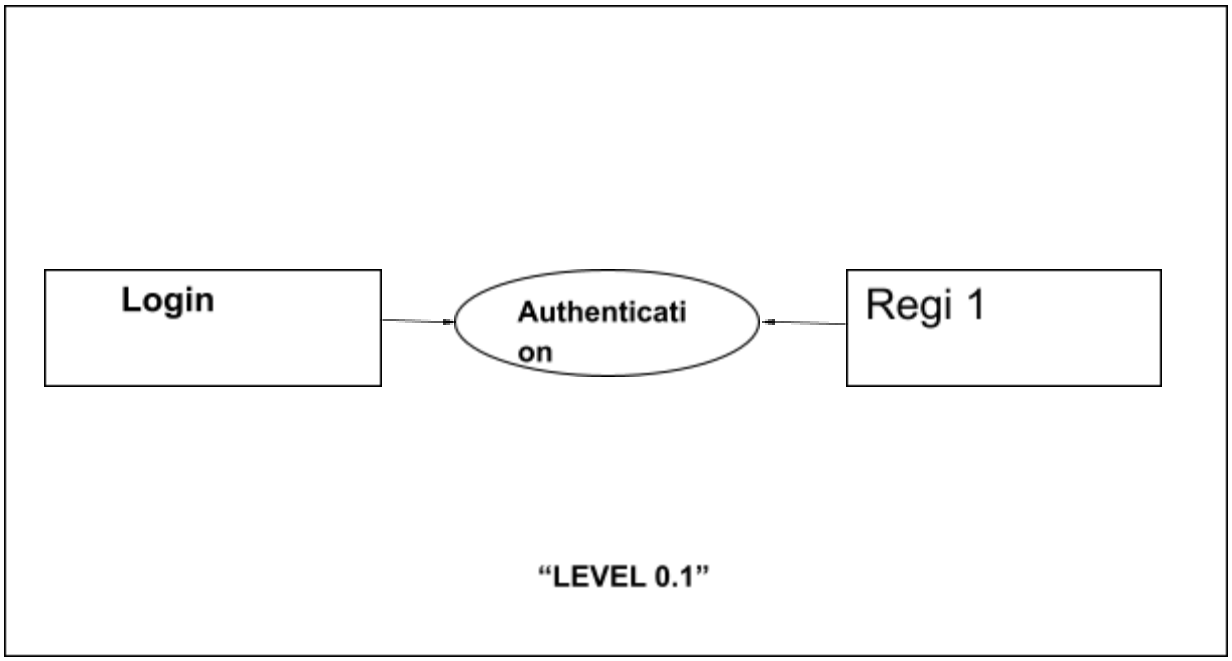
❑ Functional and Behavioral modeling

DFD

Administrator DFD



2 DFD



Main module of System

Jobseeker Section

Registration Module:

- User enter account details, contact details, and resume summary, education details, upload resume information to become a member.
- Free resume posting during the registration.
- User can easily select the job mail alert and news letter alert during the registration itself.
- Activation emails send it to the user after registration.

Login Module

- User easily login with their username and password.

Forget Password Module

- User receive mail for forget password

Home Page Module

- Home town search - user search the job in his / her home town
- Search agent - user can create the agent and search job by any one search agent

- User can block and unblock the companies which one company he / she want to block or unblock Set profile visibility of his / her profile.
- User can set their resume either active or inactive.
- Change password - user change new password into new password.
- User can preview, edit, delete and print their resume.
- User can update the profile

Search job Module

- Quick job search - Enter any keyword to search jobs.
- Advance job search - Enter keyword or experience or location or functional area to search jobs.
- Jobs search by role - Selecting the category or subcategory to search jobs.
- Job search by industry - Choose any one industry to search jobs.
- My Saved Jobs - User can view their saved jobs.

Saved Job Module

- User can save the jobs when they are searching the jobs in the site.
- User can apply the jobs from the saved job list.

Employer Section

Registration Module

- User enters their account information, company details, and primary contact details.
- User can easily select the job mail alert and news letter alert during the registration itself.
- Activation emails send it to the user after registration

Login Module

- User easily login with their username and password.

Forget Password Module

- User receive mail for forget password

Profile

- Profile view

Edit profile

- Update contact details - Name, Gender, DOB, Country and Contact Details

- Update resume summary - Experience, key skills, functional area, industry, resume headline.
- Update education details - Qualification, specialization and year of passing.

Find Candidate

- Find the job seekers who are apply for the posting jobs.
- View their responses.
- Recruiter can send email to the job seekers.
- Recruiters create the common mail message before sending the email.
- Recruiter can download the job seekers resume who are all apply for the job.
- Resume access

Recruiters are searching the application of the user.

- Enter the detail about job position, functional area, industry type, keyword, experience, qualification, location, country, and order by date.
- If the employer or recruiter was not order any package it shows the buy package link
- After the employers or recruiters are buying the package then only they can search the job seeker resumes.

Post job

- Post the job for recruitment.
- For posting the job the employer should order the package.
- If the user was not buying the pack they can't post any single job.

Database access

- Database accessing has two packages.
- By choosing any one they got the database accessing.

Job posting

- Job posting have four packages.
- By choosing any one they got the permission for how many jobs the employer or recruiter can post.
- Based on the package they have some validity. Up to the validity the employer can post the job after that they have to buy the package for post job.

Featured employer

- For featured employer have two types of packages.
- By choosing any one they got the information about the featured employers in their home page.

Posted jobs

- Posted jobs are listed.
- The employer can edit the jobs.
- Delete jobs.
- View jobs.

ADMIN SECTION:

Manage site:

- Administrator
- Maintain the administrator username and password.
- Add username and password.
- Edit and delete password. Functional Area
- Add functional area
- Edit functional area
- Remove functional area Industry Type
- Add industry type
- Edit industry type
- Remove industry type Home Page Ads
- Add home page ads.
- Edit ads
- Remove ads
- Maintain active and inactive ads

Enquires

- Queries or comments are posted by user.
- Manage the admin enquiries
- Reply queries or comments to the user.
- Delete enquiries.
- Edit about Us
- Edit the about us information
- Edit here in user view these information is update well.
- Edit Terms & conditions
- Edit the terms and condition information.
- Admin can edit this information and in user view these

Information will update.

- Edit Copyright
- Edit the copy right information.
- Admin can edit this information and in user view these
- Information will update.

Price settings:

- Database access price
- Add product
- Edit product
- Remove product
- These updates are viewed in the payment package details in user view section**.**

Job Postings

- Add product.
- Edit product.
- Remove product.
- Maintains the product name, days allowed, number jobs, price amount. The admin update and delete and add these details.

Featured Employer

- Add product.
- Edit product.
- Remove product.
- Maintains the product name, days allowed, number jobs, price amount. The admin update and delete and add these details.

Newsletters:

- Job seekers
- Send the news letter about the jobs site to the job seekers.

Recruiters

- Send the news letter about the jobs site to the recruiters.

Manage seekers:

- Users Address

- Maintains the user address information.

User's profile

- Maintains the user profile information.
- Delete the user profile.
- Make the user profile as an active or inactive profile.
- Based on that status when the recruiter search the resumes,
- If the profile status was active recruiter can view their user profile otherwise they can't view their profile information.
- When the admin is going to make the profile status either active or inactive admin have to enter the reason for change the profile status.
- Reason will send it to the user.

- **Manage employers:**

  Featured Employer

- Employer or recruiter buys the package for feature employer.
- Admin Maintain the featured logo details.
- Admin Mark the feature logo status either active or inactive
- Before mark as active or inactive the admin contact the recruiter to send the format of images.
- Based on the admin status it will view in the home page as a featured employer list.

List of Members

- Maintains the database access members
- Maintain the standard employers.
- Maintain the featured employers.
- Maintain the list of premium employers.
- Maintain the list of club members.

Employers Address

- Maintain the employers address details.

Employers Profile

- Maintain the employers profile details
- Admin can delete the employers
- Admin can mark the employer either active or inactive.
- Admin can view employer's profile.

Reports:

- CV's Search-Nationality
- Maintain the CV's by nationality that is country vice.
- List the county and members count.
- Export these details in the excel format.

CV's Search-Industry

- Maintain the CV's by industry that is Industry vice.
- Maintain these details in the excel format.

Members Reports

- Maintain the CV's by nationality that is country vice.

- Maintain these details in the excel format.

Product Features
Manage Logo

- Admin Can Change Logo from Admin Panel
- Admin Also Upload New Logo for Website

Manage Site Information

- Admin can Change Website Name
- Admin can Website Path
- Admin can Manage Email Address

Manage Site Content

- Admin can Change Site Content
- Admin can Change Contact Information

5. System Design

- *Database Design/Data Structure Design*
- *System Procedural Design*
- *Input/output and Interface Design*
- *System Architecture Design*

❑ SYSTEM DESIGN

DATABASE DESIGN/DATA STRUCTURE DESIGN:

Tables and Relationships:

Database Tables' Names and Description

Table Name	Table Description
Login	Login Details
Candidate	Basic information about Candidates
Candidate_education	Educational details about the candidate

Cadidate_Professonal	Professional details about the candidate.
Candidate_addrs	Address about Candidate
Company	Company details
Company_Branch_add	Branch details of company
Package	Package decided by admin
Company_package	Packages held by companies
Job_Applied	Applied jobs by candidates
Job_post	Posted jobs
Post	Post (designation)
Category	Categories.
Area	Areas
Sate	States
Country	Countries
Questions	Security questions
City	cities
Resume	Resumes of candidates

Relationships:

After logged in as an administrator, one can see the all details of jobseeker & recruiter placed by user and all registered user the administrator can also edit the items and the categories.

Logical Description of Data:

Whenever any user puts their information, the data provided by him/her goes to the _master table.

SYSTEM PROCEDURAL DESIGN

Methods for Pseudo Code

Pseudo-code

- intuitive/informal notational system
- Good starting point for representing algorithms in *any* high-level programming language.

Pseudo code is a kind of structured English for describing algorithms. It allows the designer to focus on the logic of the algorithm without being distracted by details of language syntax. At the same time, the pseudo code needs to be complete. It describes the entire logic of the algorithm so that implementation becomes a rote mechanical task of translating line by line into source code.

In general the vocabulary used in the pseudo code should be the vocabulary of the problem domain, not of the implementation domain. The pseudo code is a narrative for someone who knows the requirements (problem domain) and is trying to learn how the solution is organized.

The "structured" part of pseudo code is a notation for representing six specific structured programming constructs: SEQUENCE, WHILE, IF-THEN-ELSE, REPEAT-UNTIL, FOR, and CASE. Each

of these constructs can be embedded inside any other construct. These construct represent the logic, or flow of control in an algorithm.

It has been proven that three basic constructs for flow of control are sufficient to implement any "proper" algorithm.

SEQUENCE is a linear progression where one task is performed sequentially after another.

WHILE is a loop (repetition) with a simple conditional test at its beginning.

IF-THEN-ELSE is a decision (selection) in which a choice is made between two alternative courses of action.

Although these constructs are sufficient, it is often useful to include three more constructs:

REPEAT-UNTIL is a loop with a simple conditional test at the bottom.

CASE is a multiway branch (decision) based on the value of an expression. CASE is a generalization of IF-THEN-ELSE.

FOR is a "counting" loop.

Algorithm for Operations

FOR USERS

Step1 Start.

Step2 First of all users will login.

IF username & password = true THEN

Login

ELSE

Display (Error page, sorry login not valid!!!)

ENDIF

Step 3 Login successfully done.

Step 4 The users will go to home page.

Step 5 if the user want to Search Jobs

CASE Search Jobs to be open

Condition: Fill Search Details.

ENDCASE

Step 6 If Search details submitted then continue

Progress of case

Condition 1: view the progress of your case.

Condition 2: Case id

Step 7 End

Access Control & Security

The ASP.NET security model is designed to support single sign on access to application services. Component developers can specify the security requirements of a component at the method level

to ensure that only users with appropriate permissions can access specific data operations. While ASP.NET provide programmatic security control, the basic role-based security Mechanism (where groups of users share specific permissions) is specified entirely at application deployment time. This provides both greater flexibility and better security control.

In the project the passwords are given to each user of the Bankers Avenue and to the Admin for their login purpose. This criterion is maintained for the security of the project. For more security purpose we can provide digital signature and any other for more security.

State Transition Diagram

Use state diagrams to demonstrate the behavior of an object through many use cases of the system. Only use state diagrams for classes where it is necessary to understand the behavior of the object through the entire system. Not all classes will require a state diagram and state diagrams are not useful for describing the collaboration of all objects in a use case.

SYSTEM ARCHITECTURAL DESIGN

Fundamental design Concepts

A set of fundamental design concepts are evolved over the past three decades. Although the degree of interest in each concept has varied over the years, each has stood the test of time. Each provides the software designer with a foundation from which more sophisticated design methods can be applied. Fundamental design concepts provide the necessary framework for "getting it right".

Abstraction

Abstraction permits one to concentrate on a problem at some level of generalization without regard to irrelevant low level details, use of abstraction also permits one to work with concepts and terms that are familiar in the problem environment without having to transform them to an unfamiliar structure. Two types of abstraction are there, one is procedural abstraction and data abstraction. A procedural abstraction is a named sequence of instructions that has a specific and limited function. A data abstraction is a named collection of data that describes a data object.

Modularity

Modularity is the single attribute software that allows a program to be intellectually manageable. Software architecture embodies modularity, that is, software is divided into named and addressable components, called modules that are integrated to satisfy problem requirements.

Software Architecture

Software Architecture alludes to "the overall structure of the software and the ways in which that structure provides conceptual integrity for a system". Control hierarchy also called program structure", represents the organization of control. The tree structure used to represent the control hierarchy.

Structural Partitioning

The program structure should be partitioned both horizontally and vertically. Horizontal partitioning defines separate branches of the modular hierarchy for each major program function, Vertical partitioning called factoring, suggest that control and work should be distributes top-down in the program architecture. Top level modules should perform control functions and do little actual processing work. Modules reside low in the architecture should be the workers, performing all input, computational, an output tasks.

Data Structure

Data Structure is a representation of logical relationship among individual elements of data. Because the structure of information will invariably affects the final procedural design, data structure is very important as the program structure to the representation of the software architecture. Data structure dictates the organization, methods of access, degree of associatively, and processing alternatives for information. The organization and complexity of a data structure

are limited only by the ingenuity of the designer. Scalar item array and linked list are some of the representations of the data structure.

Software Procedure

Program structure defines control hierarchy without regard to the sequence of processing and decisions. Software procedure focuses on the processing details of each module individually. Procedure must provide a precise specification of processing, including sequence of events, exact, decision points, repetitive operations and even data organization / structure. Information hiding suggests that modules be "characterized by design decisions that hide from all others." In other words, modules should be specified and designed so that information contained within module is inaccessible to other module.

Design is defining a model of the new system and continues by converting this model to a new system. The method is used to convert the model of the proposed system into computer specification. Data models are converted to a database and processes and flows to user procedures and computer programs. Design proposes the new system that meets these requirements. This new system may be built by a fresh or by changing the existing system. The detailed design starts with three activities, database design, user design and program design. Database design uses conceptual data model to produce a database design. User procedure design uses those parts of the DFD outside the automation boundary to design user procedures.

Our system design includes mainly the design of the UML diagrams and constructing the code. The code construction and its description are also given as separate topic. System design may also include the data flow diagrams (DFD) which models a system by using external entities from which data flows to a process, which transforms the data and creates output data flows

which go to other processes or external entities or data stores. Stored data may also flow to processes as inputs. The main merit of DFD is that it can provide an overview of what data a system would process, what transformation of data are done, what data are stored and which stored data are used, and where the results flow. The graphical representation of the system makes it a good communication tool between user and an analyst on the one hand and the analyst and the system designer on the other hand.

DFD is mainly used for the representation of the dataflow in the system, which uses database for the storing and retrieving the data. But as our system doesn't use any database, we haven't provided any data flow diagram here.

Component Diagram

The component diagram contains components and dependencies. Components represent the physical packaging of a module of code. The dependencies between the components show how changes made to one component may affect the other components in the system.

Dependencies in a component diagram are represented by a dashed line between two or more components. Component diagrams can also show the interfaces used by the components to communicate to each other.

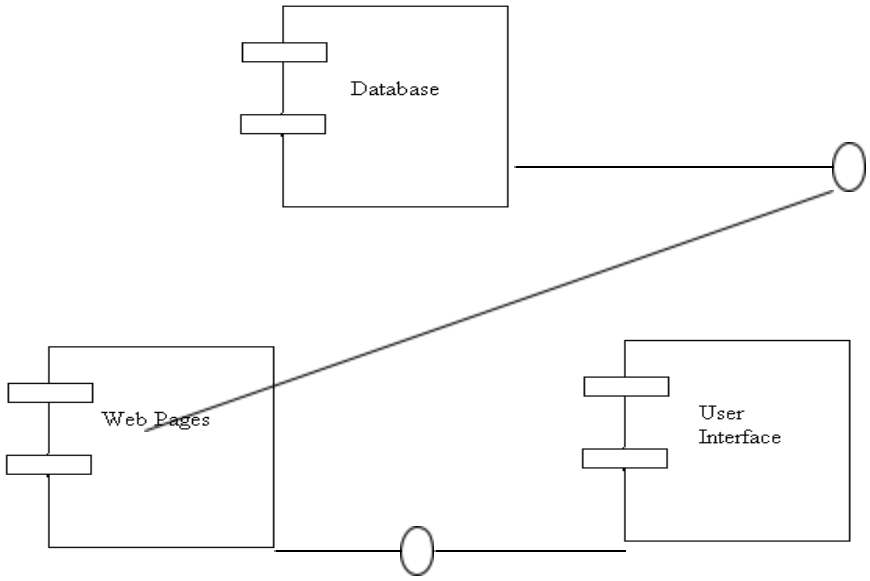
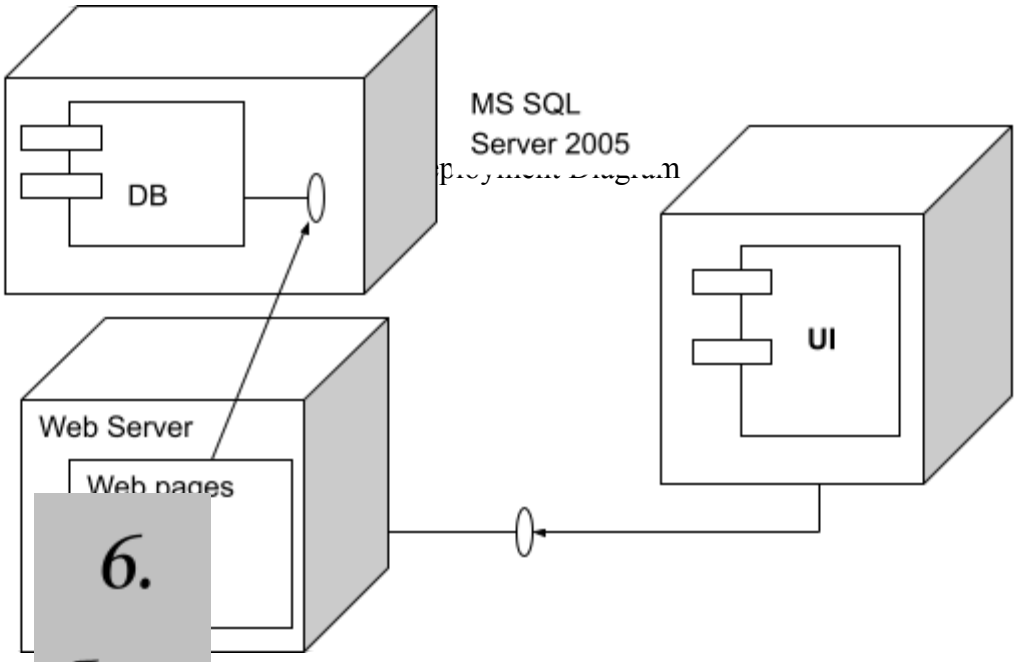


Figure of Component Diagram

Deployment Diagram

Deployment and component diagram combines the features of both diagrams into one diagram.

The deployment diagram contains nodes and connections. A node usually represents a piece of hardware in the system. A connection depicts the communication path used by the hardware to communicate and usually indicates a method such as TCP/IP.



Deployment Diagram

6. Implementation Planning & Detail

- *Implementation Environment*
- *Program/Modules Specification*
- *Security Features*
- *Coding Standards*
- *Sample Coding*

❑ Implementation Environment

Since we have developed a web application which will definitely be a multi-user application.

Factors Considered

Before developing a internet or intranet website, it is a worthwhile to explore the differences between the two, as well as the issues related to developing the internet and intranet websites. The next two sections, "Internet website development" and "Intranet website development" discuss internet and intranet web development as they related to the following topics:

- **Bandwidth availability**

  One major difference between internet and intranet websites is bandwidth available to users browsing the websites. Most internet users are connected to the internet via relatively slow POTS (Plain Old Telephone Service) modem links. Information published on an internet websites should deoptimized for transmittal over low bandwidth internet connections.

- **Server Latency:**

Server latency must be addressed when deploying a website on the internet. Web servers are no longer used exclusively to publish static content on the internet. Increasingly, web servers are using server side applications to create dynamic content. Although a 486DX2/66 computer can saturate a T1 connection with static content, the situation changes dramatically when the same computer has to process database

query and execute server side applications to fulfill http requests. Use windows NT Performance monitor top detect bottlenecks and other server latency issues. Although the performance of your server can be enhanced by adding more RAM , if CPU usage is high, you will have to upgrade your server to a multiprocessor server.

- **SCOPE OF NETWORK:**

Taking to account, the scope of your network when setting up your web server. Confidential information that should remain only within your organization should not be published from a server that accessible via internet.

- **Platform Compatibility:-**

The internet's consist of a wide variety of hardware platforms and operating systems. When publishing information, platform compatibility should be taken into a account to ensure that information published at your web site is accessible to a

wide variety of users. When users need to use a special helper application to view a file at your website, provide URLs for downloading helper application that run on several platforms. At minimum, windows and Macintosh users should be able to view information publish at your website as should those who use widely used flavors of UNIX.

- **Security:-**

While an internet web site is accessible primarily to select individuals, an internet web site is accessible to millions of users all over the world. Never use clear text passwords to protect sensitive information distributed to and from an internet websites. When distributing sensitive information via the internet, configure your website to encrypt the data. See chapter 20 , "Security" , of volume 2 of this kit(Windows NT internet and intranet administration) for more information about internet security encryption.

- **Scope of audience:-**

The internet consists of a very diverse group of users. When developing an internet website, consider the scope of your audience. For example, if the targeted audience of your website is not very technically inclined, do not assume your users use the latest version of internet explorer or Netscape navigator, and do not assume that they have helper application installed on their systems.

❑ SECURITY FEATURES

We have used ASP.NET developer platform. We have used inbuilt security of .Net .

ASP.NET, in conjunction with Microsoft internet information services (IIS) , can authenticate users credential such as names and passwords using any of following authentication methods.

- Windows: basic, digest, integrated windows authentication (NTLM or Kerberos).
- Forms authentication, in which your login page and manage authentication in your application.
- Microsoft passport authentication.
- Client certificate authentication

ASP.NET controls access to site information by comparing authenticated credential, or representations of them, to NTFS file system permissions or an XML file that lists authorized users, authorized roles (group) or authorized http verbs .

ASP.NET membership gives you a built in way to validate and store user credential. ASP.NET membership therefore helps you to manage user authentication in your web sites. You can use ASP.NET membership with ASP.NET forms authentication or with the ASP.NET login controls to create a complete system for authenticating users.

ASP.NET membership supports facilities for :

- Creating new users and passwords
- Storing membership information like username, password, supporting data in Microsoft SQL server, Active directory or alternative data sotres.
- Authenticating users who visit your website. You can authenticate users programmatically, or you can use the ASP.NET T login controls to create a complete authentication system that requires a little or no code.
- Managing a password, that includes creating, changing, and resetting them. Depending on membership options you choose, the membership system can also provide an automated password-reset system that takes a user supplied questions and response.

- Exposing a unique identification for authenticated users that you can use in your own applications and that also integrates with the ASP.NET personalization and role management system.
- Specifying a custom membership provider, which allows you to substitute your own code to manage membership and maintain membership data in a custom data store.

MEMBERSHIP, ROLES AND USER PROFILES

Although the membership is self – standing feature in ASP.NET for authentication, it can be integrated with ASP.Net role management to provide authorization services for your site. Membership can also be integrated with user profile to provide application specific customization that can be tailored individual user.

How membership works?

To use membership, you must first configure it for your site, in outline you follow these steps:

1. Specify membership options as a part of your website configuration. By default , membership is enabled. You can also specify what membership provider you want to use. (In practical terms, this means that you are specifying what type of database you want to keep membership information). The default provider uses a Microsoft SQL server database. You can also choose to use active directory to store membership information or you can specify a custom provider. For information on membership configuration option that can be specified in web config file for your ASP.Net application.

2. Configure your application to use forms authentication (as distinct from Windows or Passport authentication). You typically specify that some pages or folders in your application are protected and are accessible only to authenticated users.

3. Define user accounts for membership. You can do this in a variety of ways. You can use the Web Site Administration Tool, which provides a wizard-like interface for creating new users ASP.NET web page where you collect a username and password (and optionally an e-mail address), and then use a membership function named Create User to create a new user in the membership function.

If you are login controls, they will automatically use the membership system to validate a user. If you have created a login form by hand, you can prompt the user for a user name and password and then call the validate user method to perform the validation. After the user is validated, information about the user can be persisted (for example, with an encrypted cookie if the user's browser accepts cookies) using forms authentication. The login controls perform this task automatically. If you have created a login form by hand, you can call methods of the Forms authentication class to create the cookie and write it to the user's computer. If a user has forgotten his or her password, the login page can call membership functions that help the user remember the password or create a new one.

Each time the user requests another protected page, ASP.NET forms authentication checks, whether the user is authenticated and then either allows the user to view the page or redirects the user to the login page. By default, the authentication cookie remains valid for the user's session.

After a user has been authenticated, the membership system makes available an object that contains information about the current user. For example, you can get properties of the

membership user object to determine the user's name and e-mail address, when the user last logged into your application, and so on.

An important aspect of the membership system is that you never need to explicitly perform any low level database functions to get or set user information. For example, you create a new user by calling the membership called "Create user method" . The membership system handles the details of creating the necessary database records to store the user information. When you call the Validate user method to check the user's credentials, the membership system does all the database lookup for you.

Secure Membership Configuration

The membership feature is enabled by default for ASP.NET applications and can not be disabled. The default configuration settings are set to the most secure values. For information about membership configuration settings and their default values, see membership element (ASP.NET Setting Schema). You should set the requires Questions and Answers attribute to true, especially where enable Password Reset or enable Password Retrieval is likewise true.

Secure Membership Configuration

When storing sensitive information in a configuration file for an application, you should encrypt the sensitive values using Protected Configuration. Information that is especially sensitive includes the encryption keys stored in the machine key configuration element and connection strings to a data stored in the connection strings configuration element.

Secure Encryption Keys and Hashing

It is highly recommended that you encrypt user passwords in the membership data source using a password Format attribute set to Hashed or Encrypted, where Hashed is the most secured format. The encryption key values for the specified encryption algorithm are stored

in the machine key configuration element. For strong encryption, specify an encryption key and specify the IsolateApps option with key.

You can set the machine configuration on a host server to deny applications from overriding configuration settings. This includes denying the ability for encryption keys to be redefined in the Web. Config file for applications.

Securing Connections to a membership Data Source

Connection Strings

To keep the connection to your database server secure, you should encrypt connection-string information in the configuration using Protected Configuration.

Connecting to SQL server using Integrated Security

You should connect to computers running SQL server using integrated security to avoid the possibility of your connection string being compromised and your user id and password being exposed. When you specify a connection that uses Integrated Security to connect to a computer running SQL server, the membership feature reverts to the identity of the process. You should ensure that the identity of the process running ASP.NET (for example , the application pool) is the default process account or a restricted user account.

SQL Server Express Worker Process Identity

SQL Server Express 2005 includes a new mode of operation where it can start a worker process running as the identity of the connecting user. This capability is referred to as " run as faster" mode. Although this mode of operation is suitable for desktop development while using IIS, starting worker processes is not appropriate on Web servers hosting multiple, untrusted customer code bases. Shared hosting servers that contain applications that do not trust each other should explicitly disable the "run as user" functionality. This functionality can be turned off by connecting to the SQL Express instance.

Secure Web Pages that Use Membership

Application pages that work with sensitive data, such as logon pages, should be secured using standard Web-Security mechanisms. These include measures such as using Secured Socket Layer (SSL) and requiring that users be logged on to carry out sensitive operations like updating user information or deleting users.

Additionally, pages should not expose sensitive feature data such as passwords and in some cases user names, in clear text. Ensure that pages that display such information make use of SSL and are available only to authenticated users. Also, avoid storing sensitive feature data in cookies or sending it across insecure connections.

Securing Against Denial of Service Attacks

Methods that perform updates or large search operations can reduce the responsiveness of your membership data source if called concurrently by a number of clients. To reduce exposure to a denial of service attack, restrict access to ASP.NET pages that use methods that perform database updates or searches to administrative users, and expose only ASP.NET pages that provide validation and password management for general use.

❑ CODING STANDARDS

Rules for building High Performance Code

We have got the following rules for creating high-performance software.

- Know where you are going (understand the objective of the software).
- Make a big map (have an overall program design firmly in the mind, so the various parts of the program and the data structures work well together).
- Make lots of little maps (design an algorithm for each separate part of the overall design).
- Know the territory (understand exactly how the computer carries out each task).
- Know when it matters (identify the portions of your programs where performance matters, and don't waste your time optimizing the rest).
- Always consider the alternatives (don't get stuck on a single approach; odds are there's a better way, if you are clever and inventive enough).
- Know how to turn on the juice (optimize the code as best you know how when it does matter).

7. Testing

- Testing Plan
- Testing Strategy
- Testing Methods
- Test cases and result

Testing

Generally, it has been specified thought for testing that:

"Testing is the critical element of any software quality assurance and represents the ultimate review of specification, design and code generation."

Software testing has a dual function; it is used to establish the presence of defects in program and it is used to help judge whether or not the program is usable in practice. Thus software testing is used for validation and verification, which ensure that software conforms to its specification and meets the need of the software customer.

Developer resorted Alpha testing, which usually comes in after the basic design of the program has been completed. The project scientist will look over the program and give suggestions and ideas to improve or to correct the design. They also report and give after a program has been created.

Testability:-

Software Testability is simply how easily a computer program can be tasted. The check list that follows provides a set of characteristics that lead to testable software.

- ✔ Operability
- ✔ Observables
- ✔ Controllability
- ✔ Decomposability
- ✔ Simplicity
- ✔ Stability
- ✔ Understandability

Following are the attributes of the Good Test

- ✔ A good test has a high probability of finding an error.
- ✔ A good test is not redundant.
- ✔ A good test should be “Best of Breed”.
- ✔ A good test would be neither too simple nor too complex.

Compartmentalization:-

In this step we divide the project into number of manageable activities and task like

- ✔ Selection Module
- ✔ System Admin data module
- ✔ Dept. Admin data module
- ✔ Store and assign rendered module
- ✔ Employee data module
- ✔ Task creation data module
- ✔ Task allocation and reply data module
- ✔ Insert category and pwd Authority module
- ✔ Testing Module
- ✔ Documentation Module

Interdependency:-

Interdependencies of each compartmentalized activity were then found out. Some tasks must occur in sequence while there are many tasks, which can occur in parallel.

Software Inspection:-

Analyze and check system representations such as the requirements document, design, diagrams and the program source code. They may be applied at all the stages of process.

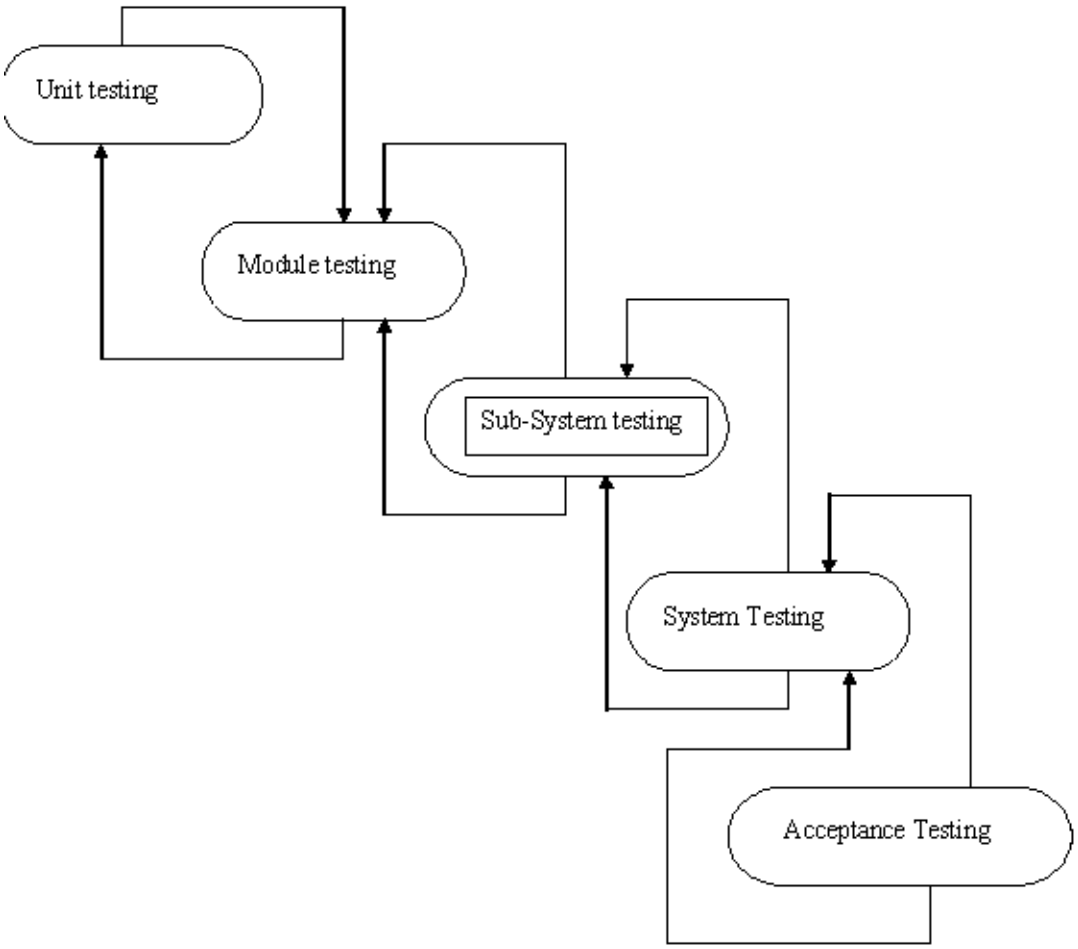


Figure of Testing Process

Test Plan:-

THE TESTING PROCESS

Developer tests the software process activity such as design, implementation and the requirement engineering. Because, design errors are very costly to repair when the system has been started to

operate. Therefore, it is quite obvious to repair them at early stage of the system. So, analysis is the most important process of any project.

REQUIREMENTS TRACTABILITY

As most interested portion is whether the system is meeting its requirements or not, for that testing should be planned so that all requirements are individually tested. Developer checked the output of certain combinations of input, which gives desirable results, or not. Strictly stick to our requirements specifications, give you the path to get desirable results from the system.

TESTED ITEMS

Our tested items are like:

- Data fetching from the database
- Data insertion, updating and deleting in the database
- Form access to particular login

TESTING SCHEDULE

Developer has tested each procedure back to back so that errors and omissions can be found as earliest as possible. Once the system has been developed by fully developer tested it on other machines, which differs in configuration.

TESTING METHODS

Software testing involves executing an implementation of the software which tests data and examining the outputs of the software and its operational behavior to check that it is performing as required.

STATISTICAL TESTING

Statistical testing is used to test the program's performance and reliability and to check how it works under operational conditions. Tests are designed to reflect the actual user inputs and their frequency.

The stages involved in the static analysis for this system are follows:

- ***Control Flow Analysis***
  - Unreachable code
  - Unconditional branches into loops

- ***Data Use analysis***

- Variable used before initialization
- Variables declared but never used
- Variables assigned twice but never used between assignments
- Possible array bound violations
- Declared variables

- ***Interface Analysis***
  - Parameter type mismatches
  - Parameter number mismatches
  - Non-usage of the results of function
  - Uncalled functions and procedures

- ***Storage Management Faults***
  - Data not stored in proper tables
  - Data cannot be fetched from proper table

DEFECT TESTING

Defect testing is intended to find inconsistencies between a program and its specifications. These inconsistencies are usually due to the program faults or defects.

UNIT TESTING:-

The Developer carries out unit testing in order to check if the particular module or unit of code is working fine. The unit testing comes at the very basic level as it is carried out as and when the unit of the code is developed or a particular functionality is built.

In this application we test one most important module as task allocation which is as follows:

LOOP TESTING:

Tester has tested the some condition in a code of application. So they test the looping in source code of application for finding miss route or any error or wrong direction of flow in code**.**

BLACK-BOX TESTING

In black box testing or functional testing, the developer is concerned about the output of the module and software, i.e. whether the software gives proper output as per the requirements or not. In another words, these testing aims to test a program behavior against specification without making any reference to the internal structure of the program or the algorithms used. Therefore, the source code is not needed, and so even purchased modules can be tested. The program just gets a certain input and its functionality is examined by observing the output.

This can be done in the following way:

- Input Interface
- Processing
- Output Interface

The tested program gets certain inputs. Then the program does its job and generates a certain output, which is collected by a second interface. This result is then compared to the excepted output, which has been determined before the test.

WHITEBOX TESTING:

It is also called ***'GLASS BOX'*** or ***'STRUCTURAL'*** testing. Tester has access to the system design.

- ✔ Simple Loops
- ✔ Nested Loops
- ✔ Concatenated Loops
- ✔ Unstructured Loops
- ✔ Continuous Loops

They can:

- Examine the design document
- View source code
- Individual path examine
- Logical path examine one time
- Logical decision on their true and false

The intention in white-box testing is to ensure that all possible feasible flow of control path through a sub-program is traversed while the software is under tested. This is not the same as saying that all statements in the sub-program will be executed as it is possible for all statements to be executed but for not all of the possible paths to be traversed. However, the conversed is true; whether all the possible paths through a sub-program are traversed then all statements in sub-programs will necessarily be executed.

When considering the number of possible paths through a sub-program two other factors need to be remembered. The first is that some of the possible paths through a sub-program turnout upon investigation to be non- feasible paths. The second consideration is that the number of possible paths to a sub-program indicated by a flow-graph analysis will indicate the minimum number of paths to ensure complete coverage. This may be less than the total number of paths which are possible when combinations of paths are allowed.

White-box testing is used as an important primary testing approach. Here, code is inspected to see what it does. Tests are designed to exercise the code. Code is tested using code scripts driver etc. which are employe to directly interfaced with and drive the code.

The tester can analyze the code and used the knowledge about the structure of a component to derive the test data.

Advantages of White box testing:-

- As the knowledge of internal coding structure is prerequisite, it becomes very easy to find out which type of input / data can help in testing the application effectively.
- The other advantage of white box testing is that it helps in optimizing the code.
- It helps in removing the extra lines of code, which can bring in hidden defects.

STRUCTURE TESTING:

Developer has done his path testing to exercise every independent execution path through a component or program. If every independent path is executed then all statements in the components must have been executed at least once. The structure of our program is also cheeked.

INTEGRATION TESTING:-

After our individual modules Developer tested out Developer go to the integrated to create a complete system. This integration process involves building the system for problems that arise from component interactions.

Developer has applied top-down strategy to validate high-level components of a system before design and implementations have been completed. Because, our development process started with high-level components and Developer worked down the component hierarchy.

PERFORMANCE TESTING:-

Performance testing is designed to test the runtime performance of the system within the context of the system. These tests Developer performed as module level as developer as system level. Individual modules developers tested for required performance.

CONDITION TESTING:-

Condition testing is a test case design method that exercises the logical conditions contained in a program module. If the condition is incorrect, then as least one part of the condition is incorrect. It may include:

- Boolean variable error
- String index out of Bound error
- Null pointer Assignment
- Input Output Connection Exceptions
- Arithmetic expression error
- Parsing (conversion) errors
- Image unloaded errors

INTERFACE TESTING:-

Interface testing is integral part of integration testing. Therefore, developer checked for the following.

- Interface misuse
- Interface misunderstanding

Developer examined the code to be tested and explicitly list each call to an external component. In the system, standards tests for various modules have been performed, which are follows.

- All the menu functions and sub menu functions have been checked.
- Validations for all inputs are done.
- All required fields are not left blank.

OBJECT TESTING:-

Object testing is to test object as individual components, which are often larger than single function. Here following activities have taken place.

- Testing the individual operations associated with object.
- Testing individual object classes.
- Testing cluster of objects.
- Testing object oriented systems.

Now we will discuss how testing and debugging is done of this application. Our application can be divided into parts like;

- To make queries to database and retrieve information from it.

- Reduce some memory requirements for the database.
- Maintain database so that unauthorized access can not affect.

Test Cases

Test Object	Inputs	Desired Outputs	Actual Outputs
File upload page of web application.	Zip file including Shape Files and its supporting database files.	Upload Successfully.	Upload Successfully.
Reading data from Text File and placing on the map at proper places.	Text File containing comma separated values.	Read and Placed Successfully.	Read and Placed Successfully.

Viewing Description of particular hotspot.	Text File containing comma separated values.	Viewed Successfully.	Viewed Successfully.

8. User Guide

❖ *Snap Shots*

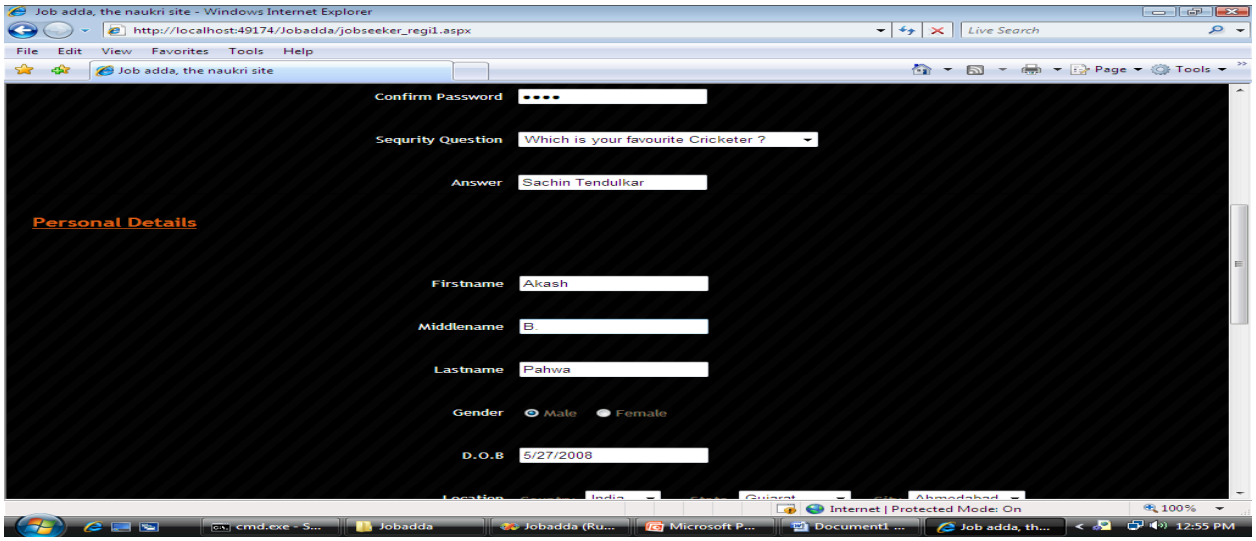
Home Page

Jobseeker's Home page

New Registration:

Personal Details


Job adda, the naukri site - Windows Internet Explorer
http://localhost:49174/Jobadda/jobseeker_regi1.aspx
Live Search
File Edit View Favorites Tools Help
Job adda, the naukri site
Page Tools
Home
Search Jobs
My Profile
Resume
Career Opportunity
About us
Jobadda.com
The Official Job Site
Login Details
Username
Akash
Password
Confirm Password
Internet | Protected Mode: On
100%
12:54 PM


Job adda, the naukri site - Windows Internet Explorer
http://localhost:49174/Jobadda/jobseeker_regi1.aspx
Live Search
File Edit View Favorites Tools Help
Job adda, the naukri site
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Which is your favourite Cricketer ?
Answer
Sachin Tendulkar
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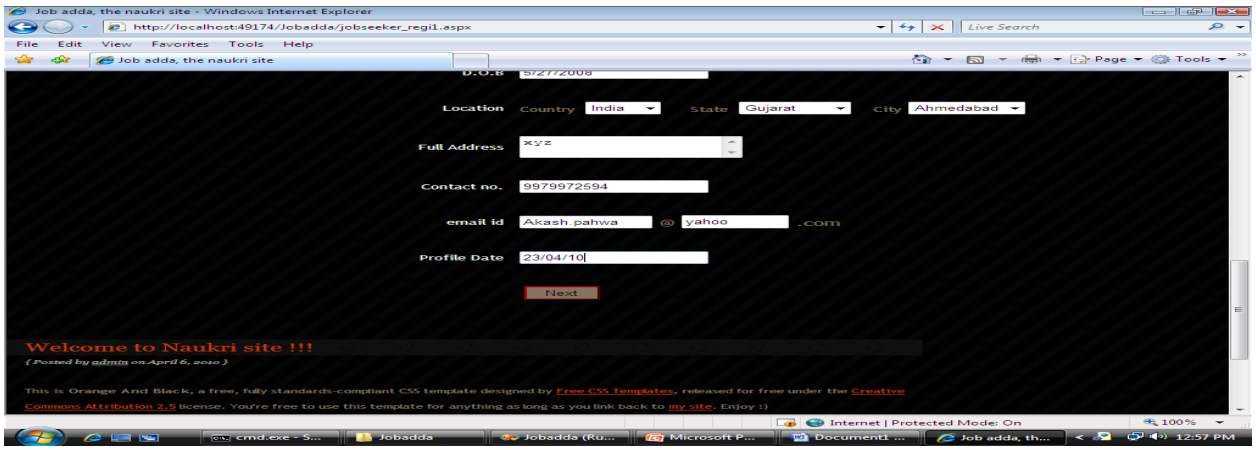
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.com
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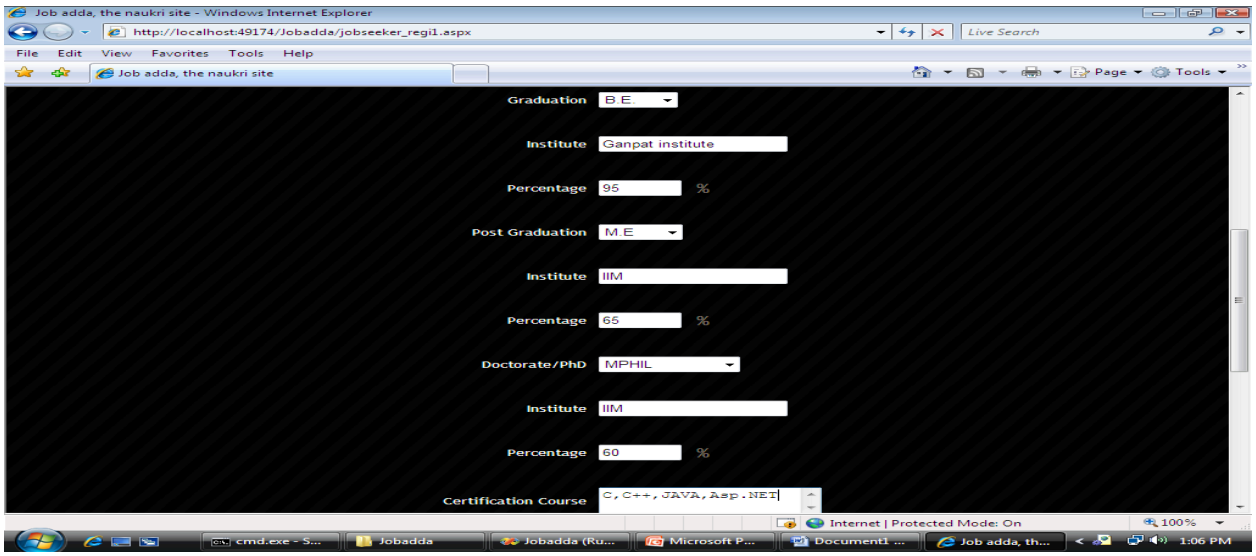
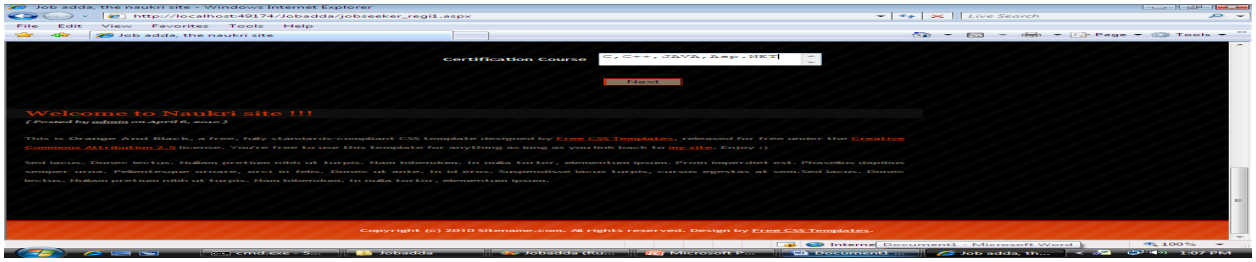
Education Details





Professional Details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Live Search
File Edit View Favorites Tools Help
Job adda, the naukri site
Page Tools
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My Profile
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Career Opportunity
About us
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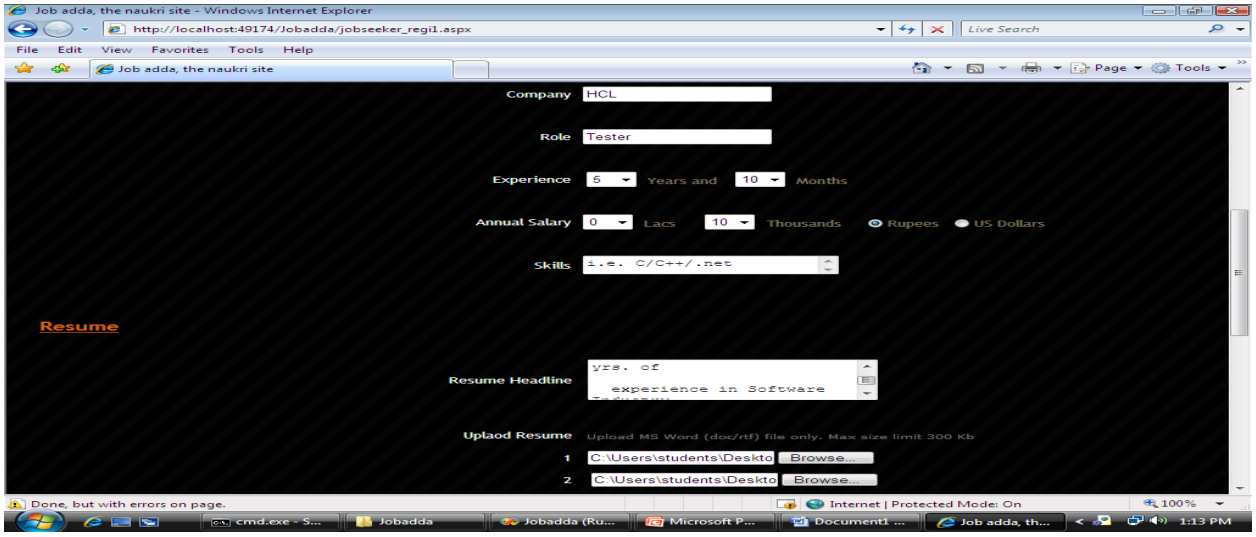
Job adda, the naukri site - Windows Internet Explorer
http://localhost:49174/Jobadda/jobseeker_regi1.aspx
Company HCL
Role Tester
Experience 5 Years and 10 Months
Annual Salary 0 Lacs 10 Thousands Rupees US Dollars
Skills i.e. C/C++/.net
Resume
Resume Headline yrs. of experience in Software
Uplaod Resume Upload MS Word (doc/rtf) file only. Max size limit 300 Kb
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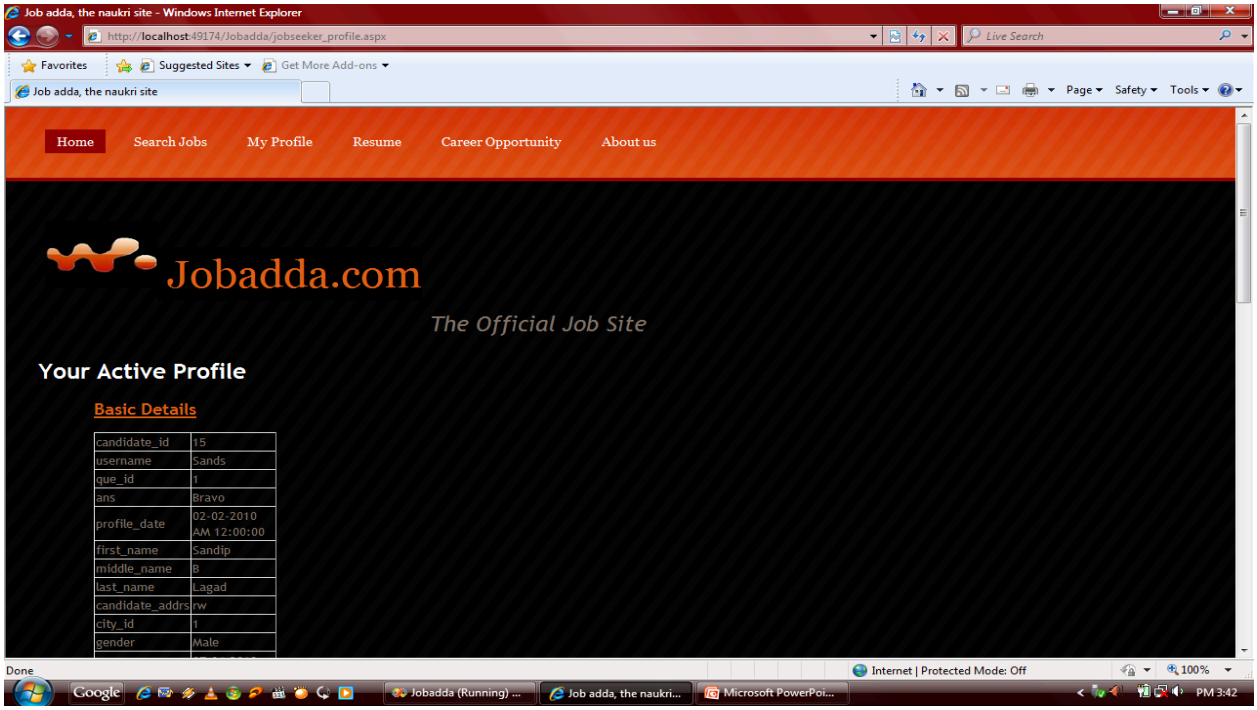
Attach Resume
Create my profile
Welcome to Naukri site !!!

Jobseeker login

Your active profile



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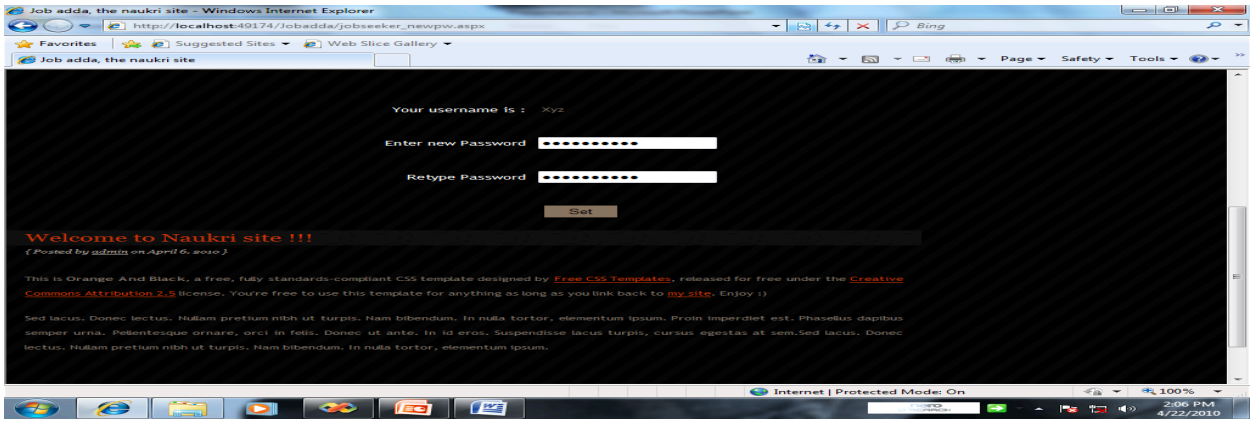
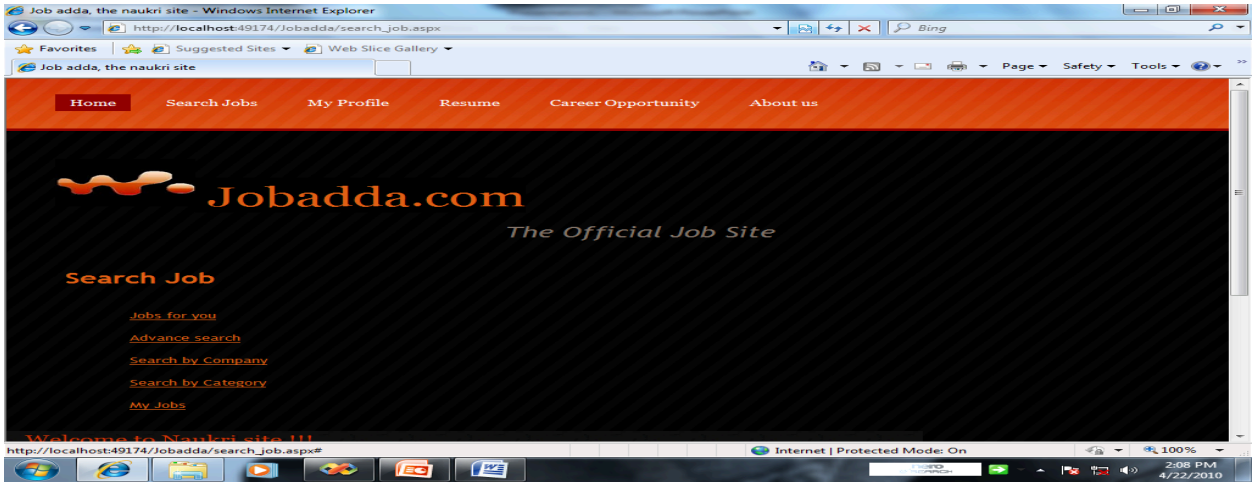


Search Jobs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Job adda, the naukri site
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Search Jobs
My Profile
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Career Opportunity
About us
Jobadda.com
The Official Job Site
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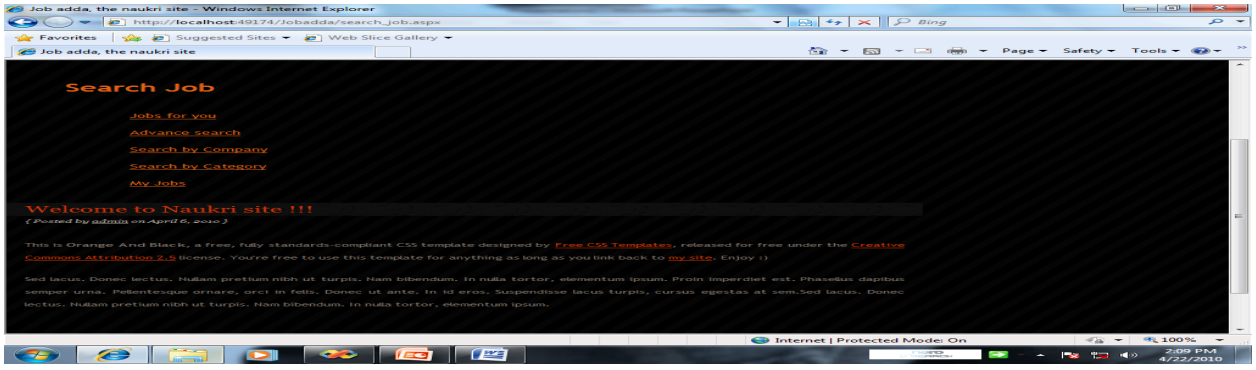
Job adda, the naukri site - Windows Internet Explorer
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Jobs for you
Advance search
Search by Company
Search by Category
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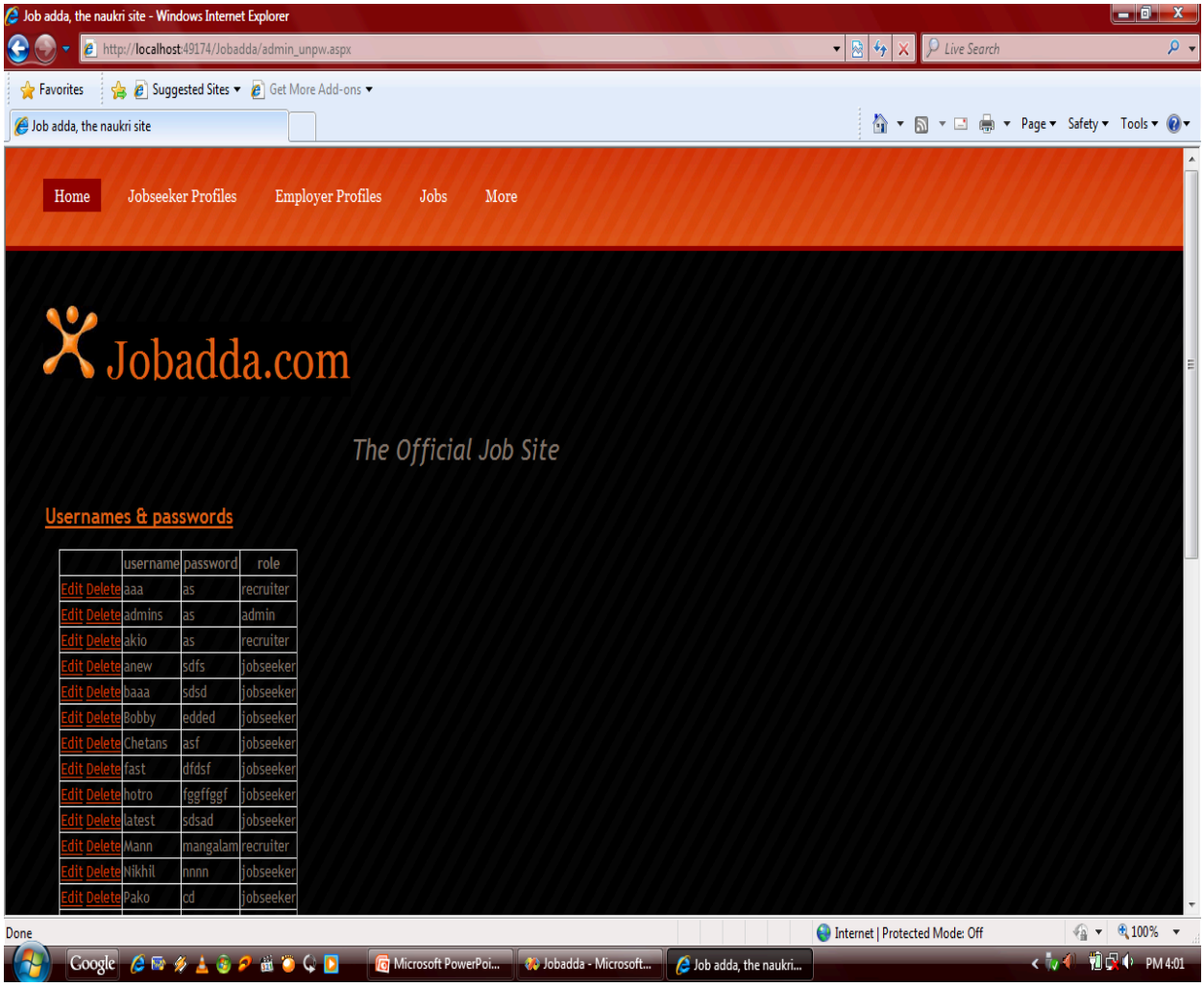
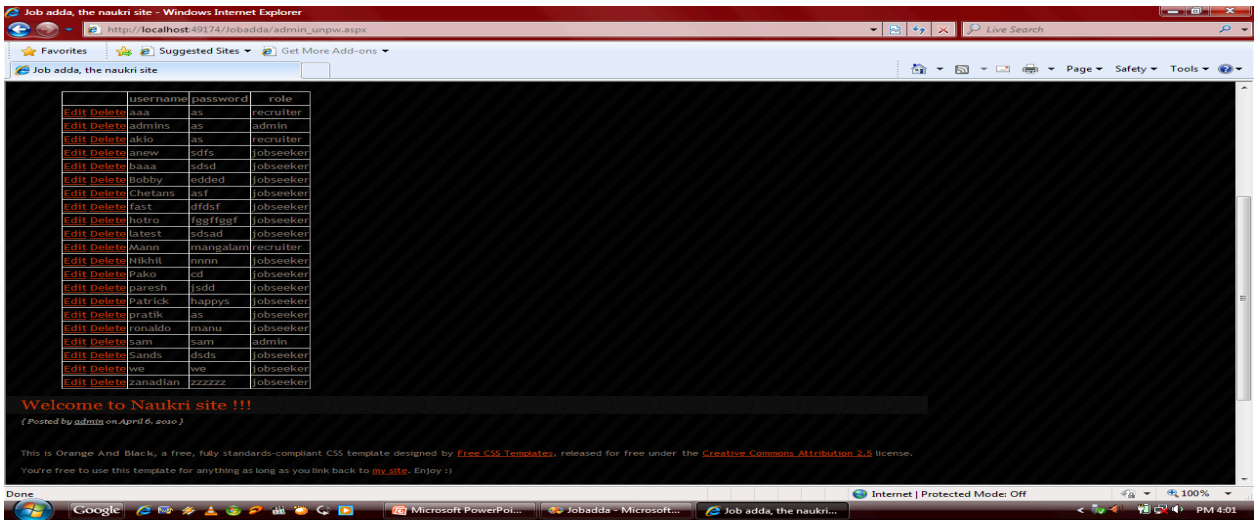
Recruiter Login

Recruiter Profile

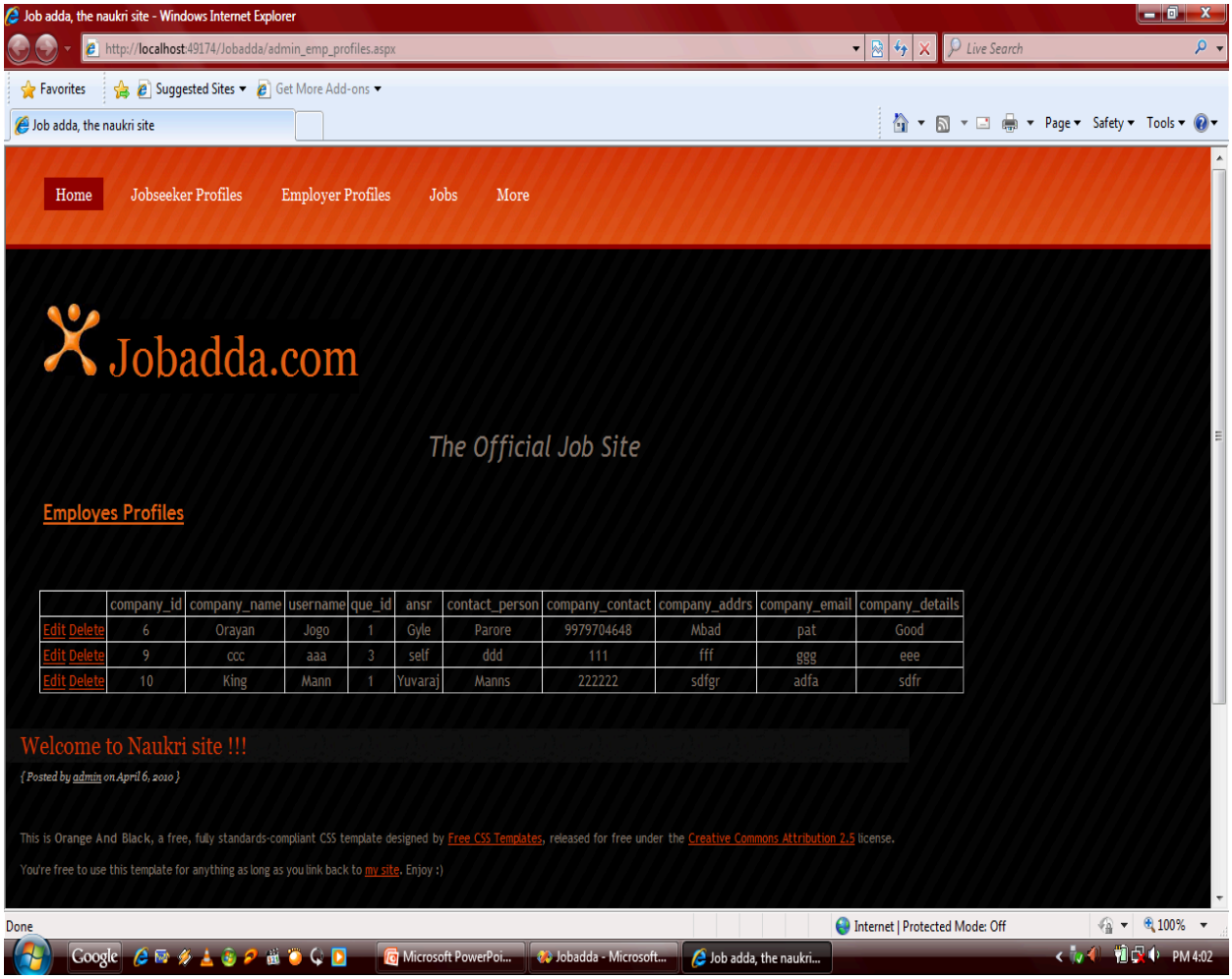
Administrator Login

View Added Un & Pw





Employer's Profile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Live Search
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Welcome to Naukri site !!!
{ Posted by admin on April 6, 2010 }
This is Orange And Black, a free, fully standards-compliant CSS template designed by Free CSS Templates, released for free under the Creative Commons Attribution 2.5 license.
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Done
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Post Jobs

	jobpost_id	company_id	job_title	area_id	city_id	post	no_vacancy	start_date	end_date	expr_req	skills_req	edu_req	basic_req	salary_min	salary_max
Edit Delete	2	1	my job	3	5	cooker	4	02-02-2000 AM 12:00:00	03-03-2010 AM 12:00:00	1Years and1Months	hggf	2	ghfgh	1	25000
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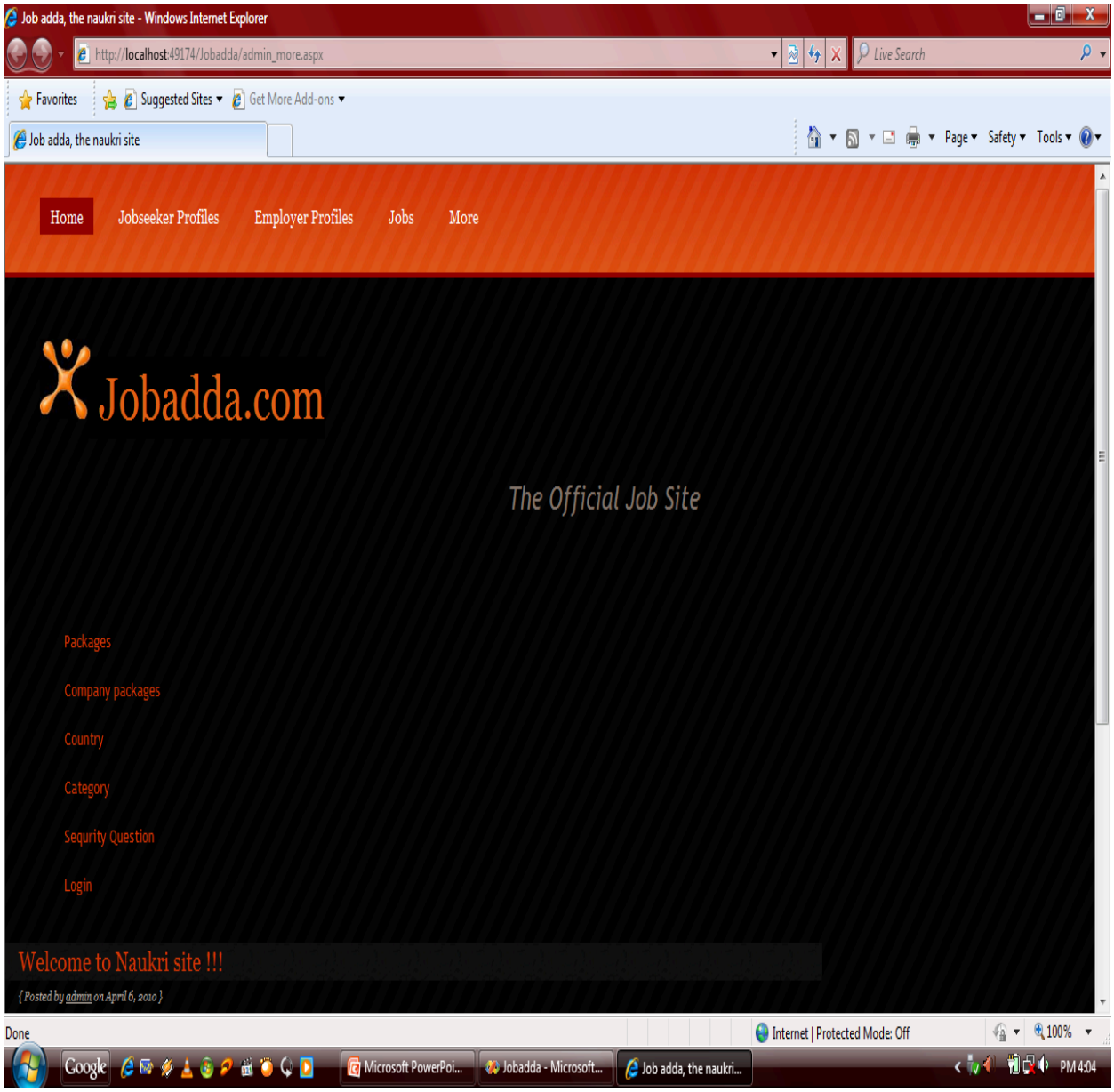
Admin More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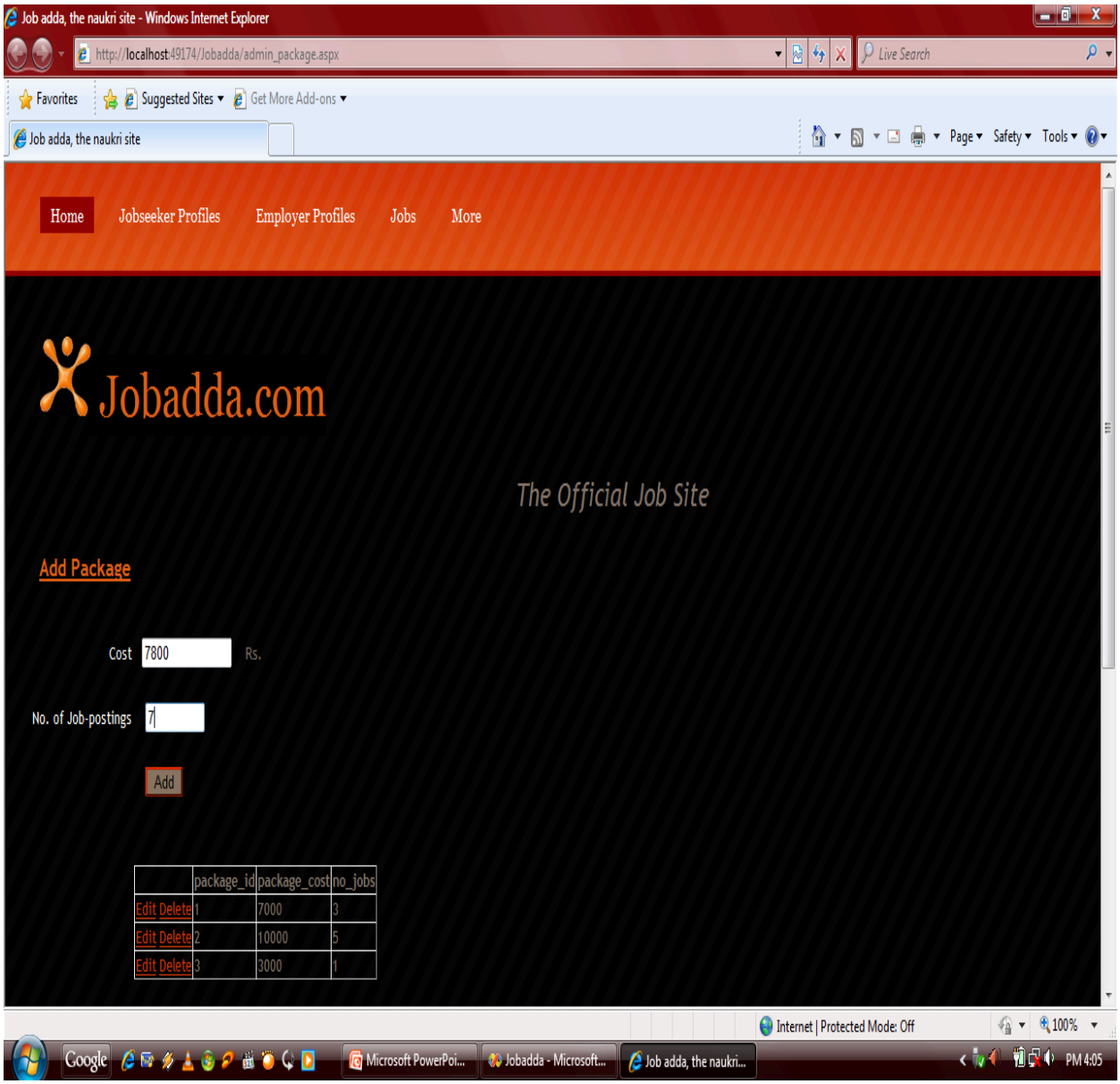
Add Package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The Official Job Site
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Posted Job


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Employer Profiles
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More
Jobadda.com
The Official Job Site
Posted Jobs
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Edit Delete 6 1 asda 1 5 asdad 3 01-01-2010 AM 12:00:00 01-01-2000 AM 12:00:00 1 Years and 2 Months dfsfsfsdf B.E. sdfsf 5000 10000
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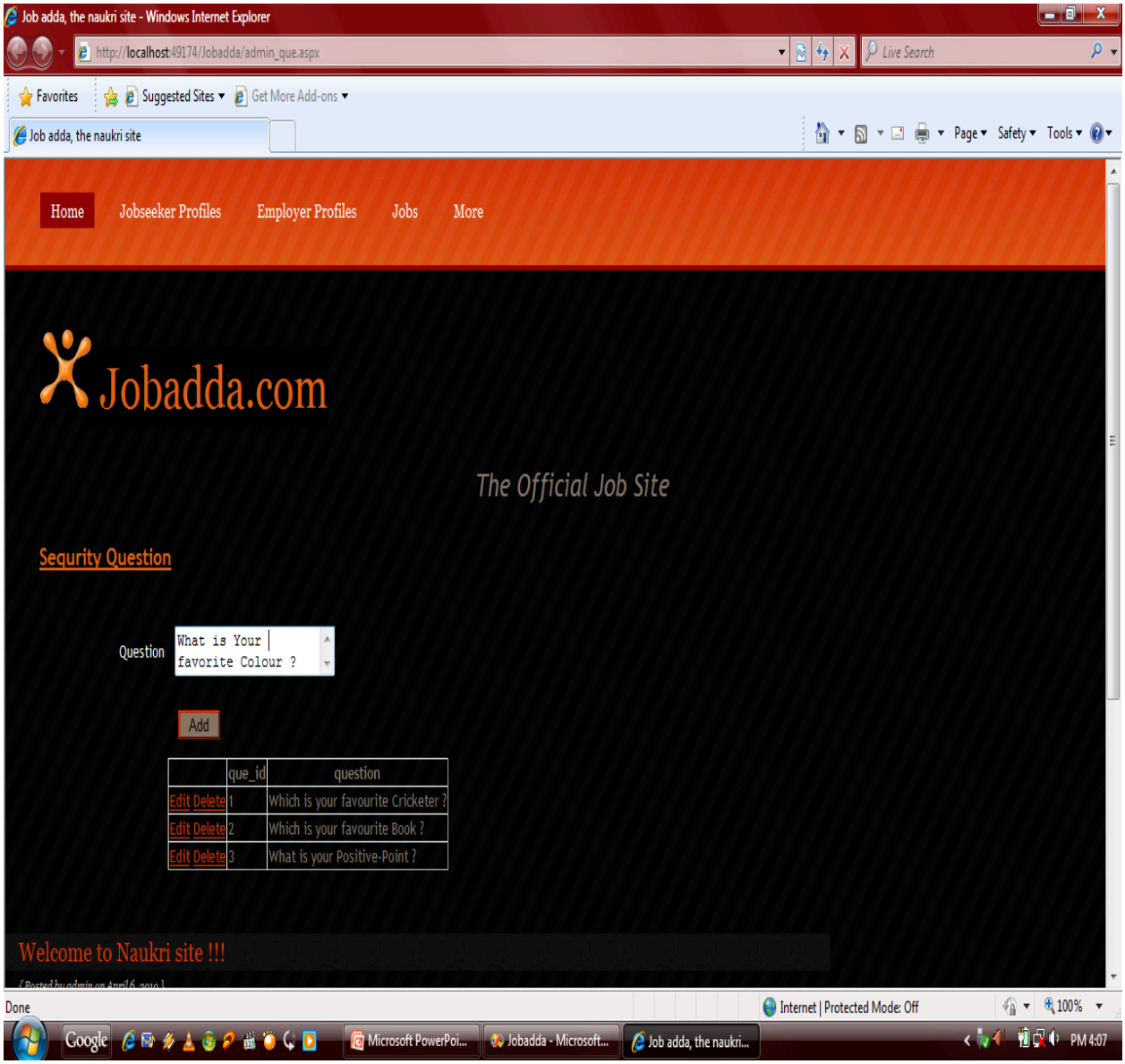
Security Question



Company Package

9. Limitation and Future Enhancement

- Limitations
- Future Enhancements

Limitations

- It can run only on windows servers. It is not compatible with LINUX servers.
- It is not cent percent safe from professional hackers.
- Only registered user can buy and sell their items using this website.

Future enhancements

- In future if we get a chance to work on the same project then we like to implement Improvement for advertisement.
- We also like to make our site more secure.

10. Conclusion & Discussion

- Conclusion
- Discussion

CONCLUSION AND DISCUSSION

CONCLUSION:

In making of this application, we have learnt that handling files and maps is becoming easy.

Using this application, a user gets a different information and a cost effective solution by visiting unknown place efficiently with all the necessary information regarding to various hotspots the user visits.

Also this application satisfies collaboration objective i.e. “I make it and you use it; u make it and I use it” which is the actual motive of this application.

DISCUSSION:

This application is made for all the users so that user can see the required information at the website also in his/her own hand. So, the main goal of portability and mobility gets achieved by this application.

Further, this application is made using Asp.net and c# which is leading Microsoft application programming technology. Hence, this application is also economic solution for the user.

Now, this is a user friendly website so, any user can use this website to buy and sell different products. Therefore, this application provides collaborative interface to the users.

11. Bibliography

- References

References

References Books

- C# 2.0 Complete Reference
- ProfessionalASP.NET 2.0
- ASP.NET in 21 days
- ASP.NET Complete Reference
- MSDN 2005
- System Analysis And Design

Internet Sources:

- Naukari.com

- Monster.com
- Shine.com
- www.thejobs4u.com

12. Work Experience

❖ Work Experiences

WORK EXPERIENCE

The past three months have proved to be a great learning experience and have made us aware of the hardships an organization has to deal with while building a software project. We also came across various methods and conventions that an organization follows in order to develop a project. Our project guide was always eager to lend a helping hand during the course of developing our project but made sure that we try solving our difficulties by ourselves first and then only ask her for her help thereby made us self-reliant. she also made sure that we understood every single aspect of the project. We would conclude this by saying that we gained a lot from this training and this knowledge surely will help us in the coming future.