A

PROJECT REPORT

ON

MUSIC ONLINE

Submitted in Partial Fulfillment of the

Requirements for the Award of the Degree of

Master of Computer Applications

SYNOPSIS

In today's scenario computer is an important part day-to-day life. Every individual right from a college student to a business tycoon utilizes the computer to browse the internet to send email, chat, buy products via net etc.

This is inspired and encourage us to develop application software for every individual.

Our project entitle **"ONLINE MUSIC STORE"** is designed that the Client's requirement deals with opening an online music store that will enable the client to mobilize its business through buying the different music related items in the website. It will enable a customer to have access to online shopping that is the site should be dynamic and more customer centric business procedure thereby maximizing the profit of the organization.

"ONLINE MUSIC STORE" acts as a virtual showcase for a electronic music shop giving easy access to customers through login procedure, to interact with the **DATABASE**. The proposed solution will be developed using JSP for building the interfaces/Presentation Layer, EJB for business components/Logical Classes and Oracle8i as the database.

CONTENTS

1.1 ABOUT THE ORGANIZATION

Times Technologies Pvt Ltd (**TT**) is the leading information technology consulting, services, and business organization that envisioned and pioneered the adoption of the flexible business practices that today enable companies to operate more efficiently and produce more value. We achieved this by creating and perfecting the deployment and delivery of high quality, high value services and product in IT consulting that have helped reshape business and delivery competitive advantage.

More than 75 percent of our customers reward our reliability, passion, creativity, and unique ability to handle the broadest range of their IT need by continually extending and deepening their partnership with us. With over thousand of the best IT consultants located in south India, we are uniquely positioned to deliver out flexible world-class services seamlessly. We believe that business and technology work hand-in-hand. A proper understanding of this synthesis motivates every engagement, enabling s to deliver technology solutions that give you a decisive competitive advantage.

At TT, internal motivation is a common denominator-each one of us believes we can create an outstanding institution; which is a leader in its areas of focus. We complement this motivation with world class training programs and one of the best working environments. The work force of TT is an enthusiastic and energetic bunch with a driving ambition to be the best in whatever they do. Our goal is to bee the most efficient and productive, to be best of breed. The workforce of TT is encouraged to excel and innovative in what we do for our clients and in what we stands for as a company.

1.2 PROJECT DESCRIPTION

This is portal based automation project, which provides communication between the various users for music items such as music CD's/Cassettes. User can purchase their needed music item anywhere, any time just clicking their mouse. This project increases the interest of purchasing. User can easily finished their shopping through this shopping cart.

Screen design/Graphical User Interface:-

Graphical User Interface (GUI) that is straightforward and easy to navigate has been designed. This GUI provide various screens with appropriate incorporate icons, hyperlinks etc. to facilitate screen navigation and data entry. The user can easily add items to their cart, and they can easily remove items form the cart if they needed. The user has the ability to return to home page from any location within the application.

The following GUI form for user interaction can be conferred in the **"Online Music Store"** system

The **"Online Music Store"** is divided into three modules:

- **Visitor module**
- **User module**
- **Administration module**

Visitor:-

If the client is a new user of the system then he performs the following tasks:

- ✔ New user can visit the home page of the online music site
- ✔ Search for a particular music item
- ✔ Cast his vote for a particular song
- ✔ View new releases
- ✔ For purchasing items, first the visitor has to click the register option in the client login area.
- ✔ The user must fill the registration form. The data are stored in to the database. It is not possible to leave any required data from the registration form.
- ✔ After that the visitor becomes a user and then he can enter into the shopping cart.
- ✔ View the Help page

Once the system authorizes the new client, then he can perform all the functions of the registered user.

User: -

If a registered user uses the following application then she/he has to perform the following tasks:

- ✔ First he/she has to login into the user interface which will help him/her to avail the services of the shopping cart.

✔ For the client to log in to the system it has to provide its username and password for authorization purpose.

✔ If the username and the password match with the entry in the database then the client enters the client shopping area. The client shopping area has three options to be utilized.

✔ The first option gives the client to search the list of music CD's/Cassettes offered by the shop where the client can select the required one.

✔ The second option gives the client to add items to shopping cart.

✔ The third option gives the client to give feedback.

✔ The third option gives the client to logout from the site.

Administrator:-

The administrator has the following privileges:

✔ Delete a particular user from the database

✔ Add particular item to the inventory list

✔ Modify the details regarding a particular music item

✔ View the report, which includes sales reports for a specified day, previous week, and previous month.

✔ View messages and feedback from the customers

FORMS:-

We have different types of forms available for different module. These forms are listed and explained below.

Visitor Module:

This module has the following pages:

- The Home Page
- The Chart Toppers Page
- The Search Page
- The Vote Page
- The New Release Page
- The Register Page
- The Login Page

Home Page:

The Home page of the music application will be the first page to be displayed when a person visits the music application. The page will display a welcome message and, in addition, it will display various menus to facilitate navigation through the application.

The Chart Toppers Page:

The Chart Toppers page will display a list of the most popular songs. The popularity of the song will be decided based on the voting at the Vote Page

The Search Page:

The Search Page will enable users to perform a search of songs based on the song categories like song name, singer name or album name.

The Vote Page:

The Vote page of the music application will enable the user to vote for his favorite song.

The Latest Releases Page:

The Latest Releases page of the music application will display a list of the latest songs released during the last month.

The Register Page:

The register page will be used by visitors to register with the application. Visitors will need to provide information such as username, password, address, credit card details during registration.

The Login Page:

To logon to the music application, visitors will provide logon information in the Login page. Whether the visitor is a user or administrator is determined based on the user name provided by the visitor. Respective home pages for the users and administrators are displayed.

User Interface Module:-

The user interface module contains the following pages:

- The User Home Page
- The Shopping Cart Page
- The Wish list Page

- The Feedback Page
- The Buy Page

The User Home Page:

The User Home page is displayed to a user when the user logon to the music application.

The Shopping Cart Page:

The Shopping Cart contains the items that a user has selected for buying. The Shopping cart page of the music application will display a list of CDs, Cassettes and other music items selected by the user. Users can add the items to their wish list by clicking the check box next to the items and then clicking on the Add to Wish list button. They can also specify the quantity of the items.

The Buy Page:

To purchase music item, a user needs to select songs based on a search criterion. A user can search for items based on song categories and select the songs to purchase on the Buy Page.

The Wish list Page:

A user can move the items in the shopping cart to a wish list for later purchase. For example, if the credit limit of a user is exhausted and the user has an item in the shopping cart that he has inclined to purchase, he can put the item on the wish list and purchase the item later. The music application allows the user to view his wish list.

The Feedback Page:

To enable users to send feedback to the eMusic World site, there is a feedback page.

Administrator Module:-

The administrator Module has the following pages:

- The Delete User Page
- The Add Item Page
- The Modify Item Page
- The Report Page
- The View Wish list Page
- The View Messages Page

The Delete User Page:

An administrator can delete a user by using the Delete User page.

The Add Item Page:

The add Item page enables administrator to add items to inventory.

The Modify Item Page:

This page enables the administrator to manage and modify item details in the inventory.

The Report Pages:

The Music application will allow the administrator to view sales reports. The sales reports can be created for the previous week, previous month or for any particular date selected by the administrator.

The Users Wish list Page:

This page enables the application developers to view the wish list of the users.

The View Messages Page:

The users can send feedback about the web site by using the Feedback Page The administrator need to be able to view these messages so that they can act on the user's suggestions. Therefore to enable administrators to view feedback from users, a View Message page has been created.

2. SYSTEM ANALYSIS

2.1 Existing system:-

Music and music items has become an inevitable part of our life. Music is one of the greatest so others and healers of an afflicted heart. Customers obtain these music items from music stores. An existing system is nothing but a manual Music store. A manually run Music store has so many drawbacks. In such systems the customer will go to such music shops and search for a specific music CD/Cassette. If the music CD/Cassette is available then only they will purchase the same. This system has its own drawbacks.

- Customer has to manually visit the music shop and need to purchase the music item they needed.

- The wastage of time for searching a particular venue and a particular shop.

- The wastage of money as transportation for searching a particular shop.

- Manual activities involve ground work, this involves more monetary terms.

2.2 Proposed system:-

The proposed system uses GUI framework. This system is highly user friendly because the entire programs are menu driven so that the new comer can use the software efficiently. It could be necessary to make corrections in the program depending on the changes in the system specification in future.

This product has been mainly designed to overcome some of the problems faced with the manual system. The main problem faced was unnecessary delay. The previous system in use was also expensive and time consuming. In order to avoid unnecessary delay and minimize

the flaws that existed in the previous system a follow up module for the existing system has been designed called the **'Online Music Store'**.

The main intention of the proposed and designed system is to automate the shopping channel between the company and the clients, and easy the user work. Through this an end user can easily purchase the needed thing from his home, or anywhere by just clicking the mouse. And it increases the mentality of shopping. This system is designed to avoid ineffective and inefficient customer service that has been recognized as the major area of focus.

2.3 Feature of proposed system:-

- The application will enable visitors to register with sites.
- The application will enable visitors to perform activities such as search for music items, vote for popular music and view latest releases and chart busters.
- The application will enable a registered user to select items such as CD's and Cassettes for purchase using the shopping cart.
- The application will have an administration page, which will enable administrator to maintain user detail and manage music items in inventory.
- The application will allow users to search for music based on multiple keywords such as album name, music category or singer name.

2.4 Advantages of proposed system:-

- Automate the communication between the users and the company.
- Save the time of customer.
- It provides 24 hours of facility.
- Everyone can access the system those who are living in any place.
- Easy the work of shopping.
- Increase the shopping interest.

- Decrease the time wastage.

2.5 FEASIBILITY STUDY

All projects are feasible when given unlimited resources and infinite time. Its both necessary and prudent to evaluate the feasibility of a project at the earliest possible time. The efforts and resources spent in developing the system will be a waste if the end solution does not offer timely and satisfactory solution to its users.

Feasibility study is a test of system proposed regarding workability, impact on the organization ability to meet user needs, and effective use of resources. Thus when a new application is proposed, it normally goes through a feasibility study before it is approved for development.

Feasibility and risk analysis are related in many ways. If project risk is great, the possibility of producing quality software is reduced.

2.6 REQUIREMENT SPECIFICATION

2.6.1 HARDWARE SPECIFICATION

Processor	:	Pentium-III
Memory	:	128MB
Hard Disk	:	20GB

Floppy Drive	:	1.44MB
Monitor	:	14” or above
Mouse	:	Standard Mouse
Key Board	:	104 keys

2.6.2 SOFTWARE SPECIFICATION

Operating System	:	WINDOWS 2000 Server
Programming Language	:	JAVA
Server Technologies	:	J2EE (JSP, SERVLETS, JDBC)
Application Server	:	Jakarta Tomcat 4.1
Database Support	:	ORACLE 8i

2.7 DEVELOPMENT ENVIORNMENT

An Over View of J2EE:-

By using **J2EE** technology the Internet banking facilitates to know account details, apply loan online, money transfer, balance enquiry-Pay and value added services.

- **J2EE** applications are made up of components. A *J2EE component* is a self-contained functional software unit that is assembled into a J2EE application with its related classes and files and that communicates with other components. The J2EE specification defines the following J2EE components:

- Application clients and applets are components that run on the client.

Introduction to HTML:-

This specification defines the HyperText Markup Language (HTML), the publishing language of the World Wide Web. This specification defines HTML 4.01, which is a subversion of HTML 4.

In addition to the text, multimedia, and hyperlink features of the previous versions of HTML. HTML 4 supports more multimedia options, scripting languages, style sheets, better printing facilities, and documents that are more accessible to users with disabilities. HTML 4 also takes great strides towards the internationalization of documents, with the goal of making the Web truly World Wide.

HTML essintials:

1) Web Browser

2) Tags

3) Web Browser Support

4) HTML version

Web Browser:

Microsoft Internet Explorer and Netscape Navigator is currently thae most popular web browser. Microsoft Internet Explorer is included with windows & windows 2000.

Tags:

Tags tell web browsers about the structure of web page. Each tag gives a specifc instruction and is surrounded by angle bracket <>. Most tags have an opening tag and closing tag.

Web Browser Support:

A web browser may not look the same when displayed in different web browsers. Not all web browsers support all the features of HTML and each browser may interpret HTML tags differently . some companies that make web browsers have also developeed their own tags that web browsers made by other companies may not be able to understand. If a web broser does not understand a tag the tag is usually ignored.

HTML Version:

There are several versions of HTML. HTML specification are constantly evolving and a new version of HTML is realeased in every 2 years. HTML version 4.01 is latest version of HTML.

Introduction to Java Script:-

JavaScript is a compact, object-based scripting language for developing client and server Internet applications. Netscape Navigator interprets JavaScript statements embedded in an HTML page, and Livewire enables you to create server-based applications similar to Common Gateway Interface (CGI) programs. This book describes the JavaScript language and its use in Navigator. For information on developing server-based JavaScript applications, see the *Livewire Developer's Guide.*

Client-side JavaScript statements embedded in an HTML page can respond to user events such as mouse-clicks, form input, and page navigation. For example, you can write a JavaScript function to verify that users enter valid information into a form requesting a telephone number or zip code. Without any network transmission, the HTML page with embedded JavaScript can check the entered data and alert the user with a dialog box if the input is invalid.

<SCRIPTLANGUAGE="*JavaScriptVersion*">
JavaScript*statements...*
</SCRIPT>

Since browsers typically ignore unknown tags, non-JavaScript-capable browsers will ignore the beginning and ending SCRIPT tags. All the script statements in between are enclosed in an HTML comment, so they are ignored too. Navigator properly interprets the SCRIPT tags and ignores the line in the script beginning with the double-slash (//).

Introduction to JSP:-

Java Server Pages (JSP) technology provides a simplified, fast way to create dynamic web content. JSP technology enables rapid development of web-based applications that are server- and platform-independent.

In Java 2 Platform, Enterprise Edition (J2EE) v1.4, JSP technology has simplified the page and extension development models with the introduction of a simple expression language, tag files, and a simpler tag extension API, among other features. This makes it easier than ever for you to build pages based on JSP technology.

JSP technology is focused on simplifying the generation of dynamic web content. The JSP 2.0 specification (JSR-152) substantially extended the technology by integrating a simple yet powerful expression language, simplifying the tag extension API, and enhancing the pure XML syntax, among other important enhancements. These enhancements greatly reduced the learning curve of the technology, warranting a major version number upgrade.

The scope of JSP 2.1 is much narrower and focuses on better alignment with the next release of Java Server Faces. Java Server Faces 1.0 (JSR-127) defines a standard framework for building User Interface components, and builds on top of JSP 1.2 technology. Because JSP 1.2 technology does not have an integrated expression language and because the JSP 2.0 EL does not meet all of the needs of JSF, a new expression language was developed for JSF 1.0. The JSF EG attempted to make the language as compatible with JSP 2.0 as possible but some differences were necessary. The JSF EG agreed that the JSF 1.0 EL will be phased out in the next release of the JSF specification in favor of the JSP 2.1 expression language. It is a goal, therefore, of JSP 2.1 to enhance the expression language to meet the needs of JSF technology. Many of these enhancements are likely to be useful in other contexts as well.

Advantages of JSP over other Server Side Technologies:

- **Vs. Active Server Pages (ASP).** ASP is a similar technology from Microsoft. The advantages of JSP are twofold. First, the dynamic part is written in Java, not Visual Basic or other MS-specific language, so it is more powerful and easier to use. Second, it is portable to other operating systems and non-Microsoft Web servers.

- **Vs. Pure Servlets.** JSP doesn't give you anything that you couldn't in principle do with a servlet. But it is more convenient to write (and to modify!) regular HTML than to have a zillion println statements that generate the HTML. Plus, by separating the look from the content you can put different people on different tasks: your Web page design experts can build the HTML, leaving places for your servlet programmers to insert the dynamic content.

- **Vs. Server-Side Includes (SSI).** SSI is a widely-supported technology for including externally-defined pieces into a static Web page. JSP is better because it lets you use servlets instead of a separate program to generate that dynamic part. Besides, SSI is really only intended for simple inclusions, not for "real" programs that use form data, make database connections, and the like.

- **Vs. JavaScript.** JavaScript can generate HTML dynamically on the client. This is a useful capability, but only handles situations where the dynamic information is based on the client's environment. With the exception of cookies, HTTP and form submission data is not

available to JavaScript. And, since it runs on the client, JavaScript can't access server-side resources like databases, catalogs, pricing information, and the like.

- **Vs. Static HTML.** Regular HTML, of course, cannot contain dynamic information. JSP is so easy and convenient that it is quite feasible to augment HTML pages that only benefit marginally by the insertion of small amounts of dynamic data. Previously, the cost of using dynamic data would preclude its use in all but the most valuable instances.

Introduction to Servlet:-

Java Servlet technology provides Web developers with a simple, consistent mechanism for extending the functionality of a Web server and for accessing existing business systems. A servlet can almost be thought of as an applet that runs on the server side--without a face. Java servlets make many Web applications possible.

Java servlets are more efficient, easier to use, more powerful, more portable, and cheaper than traditional CGI and than many alternative CGI-like technologies. (More importantly, servlet developers get paid more than Perl programmers :-).

- **Efficient:** With traditional CGI, a new process is started for each HTTP request. If the CGI program does a relatively fast operation, the overhead of starting the process can dominate the execution time. With servlets, the Java Virtual Machine stays up, and each request is handled by a lightweight Java thread, not a heavyweight operating system process. Similarly, in traditional CGI, if there are *N* simultaneous request to the same CGI program, then the code for the CGI program is loaded into memory N times. With servlets, however, there are *N* threads but only a single copy of the servlet class. Servlets also have more alternatives than do

regular CGI programs for optimizations such as caching previous computations, keeping database connections open, and the like.

- **Convenient:** Hey, you already know Java. Why learn Perl too? Besides the convenience of being able to use a familiar language, servlets have an extensive infrastructure for automatically parsing and decoding HTML form data, reading and setting HTTP headers, handling cookies, tracking sessions, and many other such utilities.

- **Powerful:** Java servlets let you easily do several things that are difficult or impossible with regular CGI. For one thing, servlets can talk directly to the Web server (regular CGI programs can't). This simplifies operations that need to look up images and other data stored in standard places. Servlets can also share data among each other, making useful things like database connection pools easy to implement. They can also maintain information from request to request, simplifying things like session tracking and caching of previous computations.

- **Portable:** Servlets are written in Java and follow a well-standardized API. Consequently, servlets written for, say I-Planet Enterprise Server can run virtually unchanged on Apache, Microsoft IIS, or Web Star. Servlets are supported directly or via a plug in on almost every major Web server.

- **Inexpensive:** There are a number of free or very inexpensive Web servers available that are good for "personal" use or low-volume Web sites. However, with the major exception of Apache, which is free, most commercial-quality Web servers are relatively expensive. Nevertheless, once you have a Web server, no matter the cost of that server, adding servlet support to it (if it doesn't come preconfigured to support servlets) is generally free or cheap.

Introduction to JDBC:-

JDBC technology is an API (included in both J2SE and J2EE releases) that provides cross-DBMS connectivity to a wide range of SQL databases and access to other tabular data sources, such as spreadsheets or flat files. With a JDBC technology-enabled driver, you can connect all corporate data even in a heterogeneous environment

JDBC™ was designed to keep simple things simple. This means that the JDBC API makes everyday database tasks, like simple SELECT statements, very easy. This trail will walk you through examples of using JDBC to execute common SQL statements, letting you see for yourself how easy it is to use the basic JDBC API.

The first thing you need to do is establish a connection with the DBMS you want to use. This involves two steps: (1) loading the driver and (2) making the connection.

Loading Drivers:

Loading the driver or drivers you want to use is very simple and involves just one line of code. If, for example, you want to use the JDBC-ODBC Bridge driver, the following code will load it:

Class. For Name ("sun.jdbc.odbc.JdbcOdbcDriver");

The second step in establishing a connection is to have the appropriate driver connect to the DBMS. The following line of code illustrates the general idea:

Connection con = DriverManager.getConnection (url, "my Login", "my Password")

Introduction to Oracle:-

With Oracle Database, the first relational database designed for Grid Computing, your information is securely consolidated and always available. Oracle Database 10*g* has the lowest total cost of ownership by making the most efficient use of hardware and IT resources. Oracle is the best choice for large enterprises, small and midsize businesses, and departments alike.

Globalization, Simplification, Standardization, Automation, Innovation. These five principles underlies very thing we dot Oracle. Oracle Services help you get the most from your technology investment. Working with you every step of the way, Oracle provides a variety of services that span the complete solution life cycle. Whether you need consulting, financing, outsourcing, support or education, you can get it from the experts who know Oracle best.

Connecting the Database we have follow the following steps:

1) Loading the Driver

Class. For Name (“sun.jdbc.odbc.JdbcOdbcDriver”);

2) Create the Connection object.

Connection con = Driver Manager.GetConnection(“jdbc:odbc:dsn”);

3) Create Statement object

Statement stmt = con.createStatement();

4) Execute the SQL query

ResultSet rs=Stmt.executeQuery(“select * from login”);

5) Navigate through the records

While rs.next()

6) Close the Connections

Con.close();

Introduction to Web server:-

Tomcat is the servlet container that is used in the official Reference Implementation for the Java Servlet and Java Server Pages technologies. The Java Servlet and Java Server Pages specifications are developed by Sun under the Java Community Process.

Tomcat is developed in an open and participatory environment and released under the Apache Software License. Tomcat is intended to be a collaboration of the best-of-breed

developers from around the world. We invite you to participate in this open development project. To learn more about getting involved.

Tomcat 4.1 Tomcat 4.1 is the current focus of development. While it supports the same Servlet and JSP Specification versions as Tomcat 4.1, there are significant changes in many areas under the hood, resulting in improved performance, stability, and total cost of ownership. Please refer to the Tomcat 4.1 Change log for details.

3. SYSTEM DESIGN

3.1 Design Technique:

Design is a multi steps process that focuses on data structure, software, software architecture, external details and interface between the modules. The design processes also translate the requirements into representation of software that can be accessed for quality before coding begins.

Computer software designs changes continually as new methods, better analysis and broader understanding evolve. Software design is at a relatively early stage in its revolution. Therefore, software design methodology locks the depth, flexibility and quantitative nature that are normally associated with more classical engineering disciplines.

How ever techniques for software design do exist, criteria for design qualities are available and design notation can be applied. Once software requirements have been analysed and specified, software design is the first of three activities- Design, code, test, that are required to build and verify software.

Each activities transform information in a manner that ultimately results in a validation of computer software. The importance software design can be started with a single word quality. Design is the place where quality fostered in software development. Design provides us with the representations of the software that can be accessed for quality.

Design the only way that we can accurately translate a customer's requirement into a finished software product or system. Without design, risk of building an unstable system exists-one that will fail when small changes are made one that may be difficult to test.

3.1.1 Internal design

The input design is the link between the information system and the users. It comprises the directing specification and procedures for data preparations and those steps that are necessary to put transaction data into a usable form for processing data entry.

The designs of inputs focuses on controlling the amount of inputs required, controlling errors, avoiding delay, avoiding extra steps and keeping the process simple.
System analyst decides the following input designs details:

- Why data to input?
- What medium to use?
- How the data should be arranged or coded?
- The dialogue to guide users in providing input.
- Methods for performing input validation and steps to follow when error occurs.

Several activities have to be carried out as part of the overall input process. They include some or all of the following stages

- Data recording (that is, collection of data at its source);
- Data transcription (that is, transfer of data to an input form);
- Data conversion (that is, checking the conversion);
- Data control (that is, checking the accuracy and controlling the flow of the data to the computer);
- Data transmission (that is, transmitting or transporting the data to the computer);
- Data validation (that is, checking the input data by program when it enters the computer system);
- Data correction (that is, correcting the errors that are found at any of the earlier stages).

3.1.2 External design

Designing computer output should proceed in an organized, well thought out manner. The term output applies to any information produced by an information system whether printed or displayed. When analyst designs computer output, they identified the specific output is needed to meet the information requirements.

Computer output is the most important and direct source of information to the user. Output design is a process that involves designing necessary outputs that have to be various users according to their requirements.

Efficient intelligent output design should improve the systems relationship with the users and help in decision-making. Since the reports are directly required by the management for taking decisions and to draw conclusions, they must be designed with utmost care and the details in the records must be simple, descriptive and clear to the user.

The options for the outputs and reports are given in the systems menu. When designing output, system analyst must accomplish the following:

- Determine the information to present.
- Decide whether to display or print the information and select the output medium.
- Arrange the present of information acceptable format.
- Decide how to distribute the output to intended receipts.

3.1.3 Architectural design

Architectural design begins with recognition that the screen is composed of different areas. Layout tools assist the analyst in specifying the content of the single and multiple design formats. All screens have been provided with menus, push buttons facilities, icons and control buttons such as add/delete/edit/find/clear /exit etc.

The main screen consists of main menu from which we can move to another forms or screens.

In designing output screens we need area for:

- Heading and titles.
- The content of display.
- Message and instruction.
- Sometimes explanations for information in the reports

3.1.4 Procedural Design

The procedural design transforms structural component in to a procedural description of the software. Source is generated and testing is conducted to integrate and validate to software. The design of input and output screen comes under the procedural design input/output design is according to needs of the user.

The input and output design are related to each other in sense that the accuracy data depends on the accuracy of the input data and processing of input data. Thus for this proposed system the input and output design are in the form of forms. In the forms based interface design the user give the input by filling the blanks of the screen.

3.1.5 Database design

Database files are the key source of information into the system. It is the process of designing database files which are the key source of information to the system. The files should be properly designed and planned for collection, accumulation, editing the required information.

The objectives of the file design are to provide effective auxiliary storage and to contribute to the overall the efficiency of the computer program component of the system. In concepts of database design, there are two types of data – physical data and logical data.

Physical data is that which is written on those pieces of paper. Logical data are those, which are calculated based on some of the retrieved data in a certain sequence in summary form. In a computer-based data processing system, separation of physical and logical data provides the same advantages.

The User Info Table

Column Name	Data Type	Size

Request ID	**Int**	**4**
User name	**Varchar**	**20**
First name	**Varchar**	**20**
Middle name	**Varchar**	**20**
Last name	**Varchar**	**20**
Date of Birth	**Date time**	**10**
E-mail	**Varchar**	**25**
Address_line1	**Varchar**	**50**
Address_line2	**Varchar**	**50**
City	**Varchar**	**25**
State	**Varchar**	**25**
Credit card	**Char**	**16**
Credit card Type	**Char**	**25**

The Feedback Master Table

Column Name	Data Type	Size
User name	Var char	20
Message	Var char	50
Msg date	Date time	8

The Item Master Table

Column name	Data Type	Size
Item Code	Char	8
Title	Varchar	50
Rate	Float	50
Item Desc	Varchar	50
Singer	Varchar	50
Qty on hand	Int	50
Type	Varchar	50

Release Date	**Date time**	**8**

The Login Info Table

Column Name	Data Type	Size
User name	**Varchar**	**20**
Password	**Varchar**	**20**
Secret Question	**Varchar**	**20**
Secret Answer	**Varchar**	**20**
Role	**Char**	**10**

The Reply Info Table

Column Name	Data Type	Size
Reply date	**Date time**	**8**
Reply msg	**Varchar**	**50**
Reply user name	**Varchar**	**20**

The Sales Master Table

Column Name	Data Type	Size
Sale Date	Date time	8
Item Code	Char	8
Sale qty	Int	4
Rate	Money	8
User name	Varchar	20

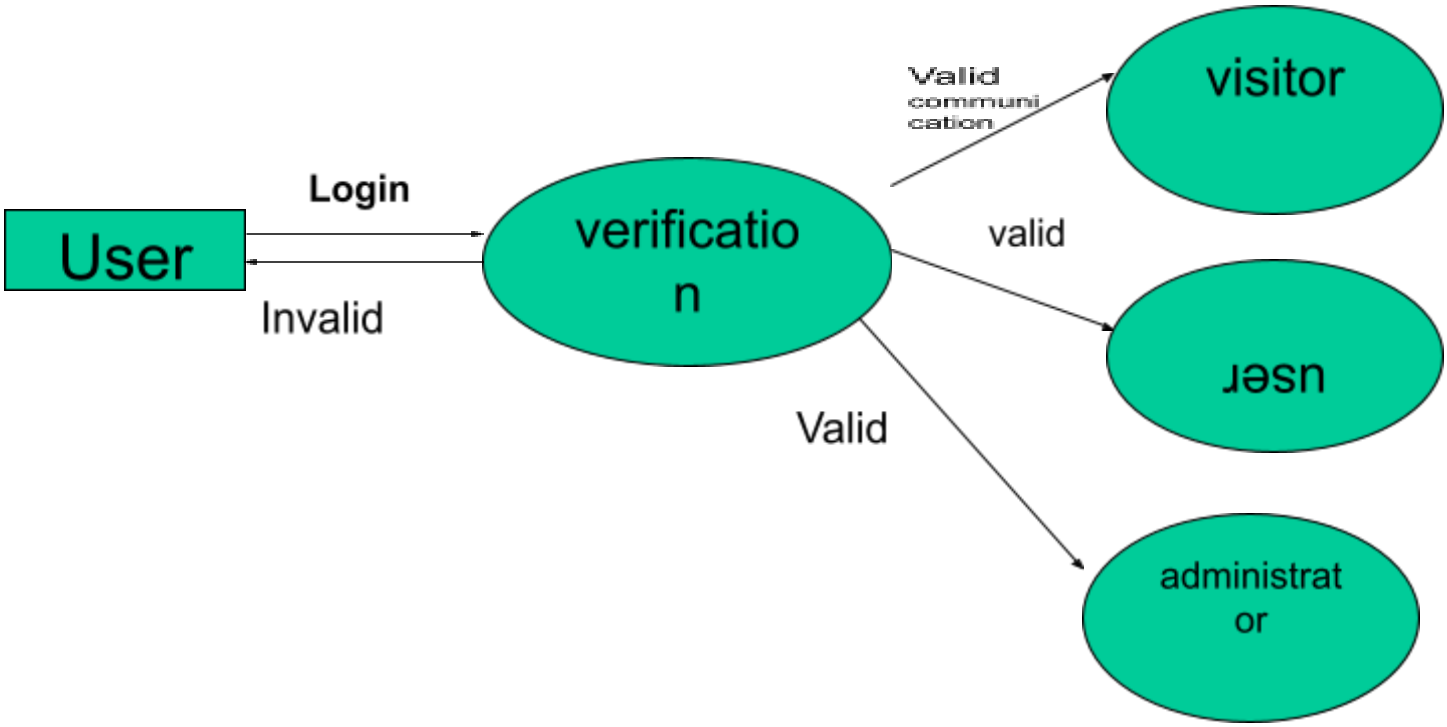
The Vote Info Table

Column Name	Data Type	Size
Item Code	Char	8
Number votes	Int	4

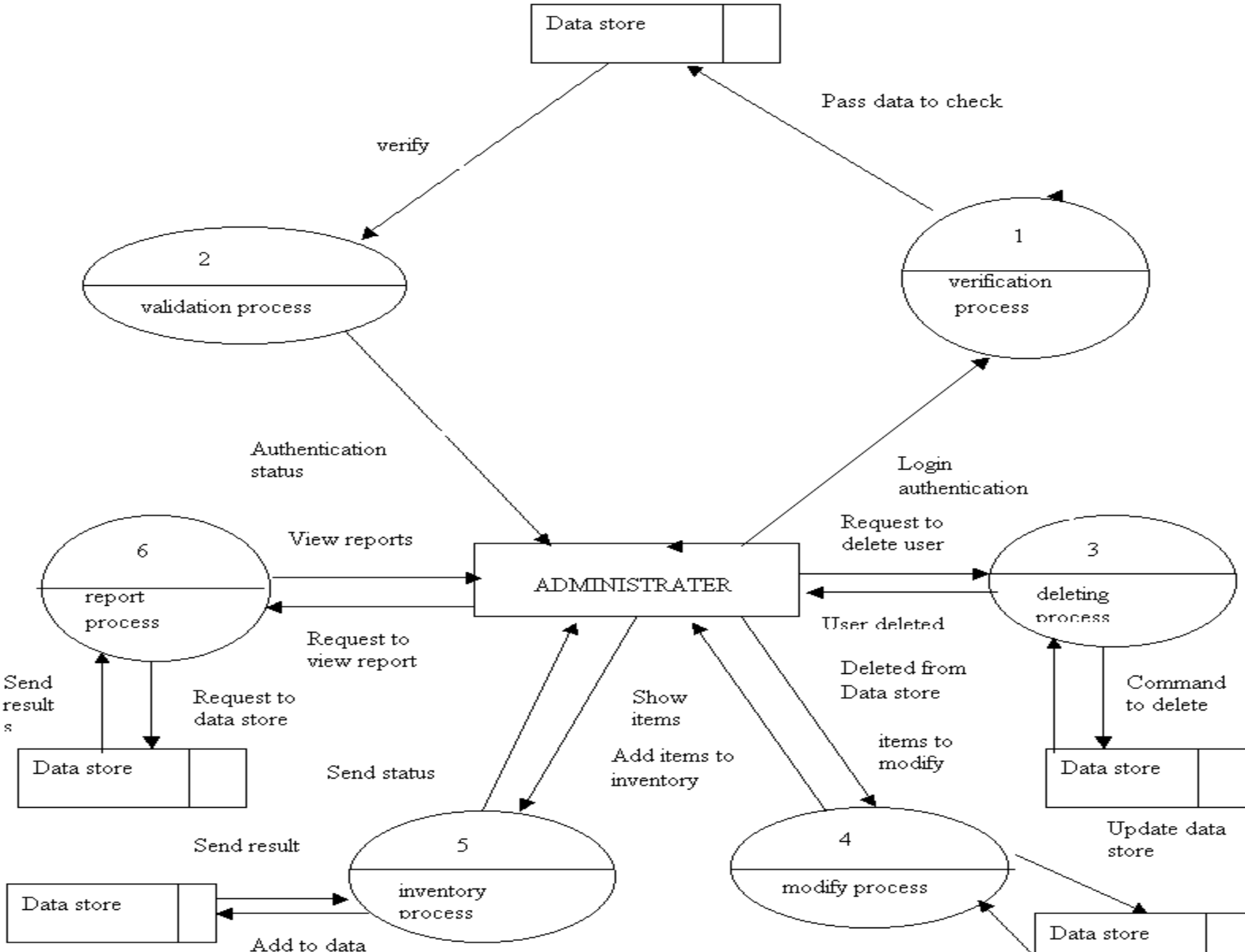
DATA FLOW DIAGRAM

Context Level Diagram

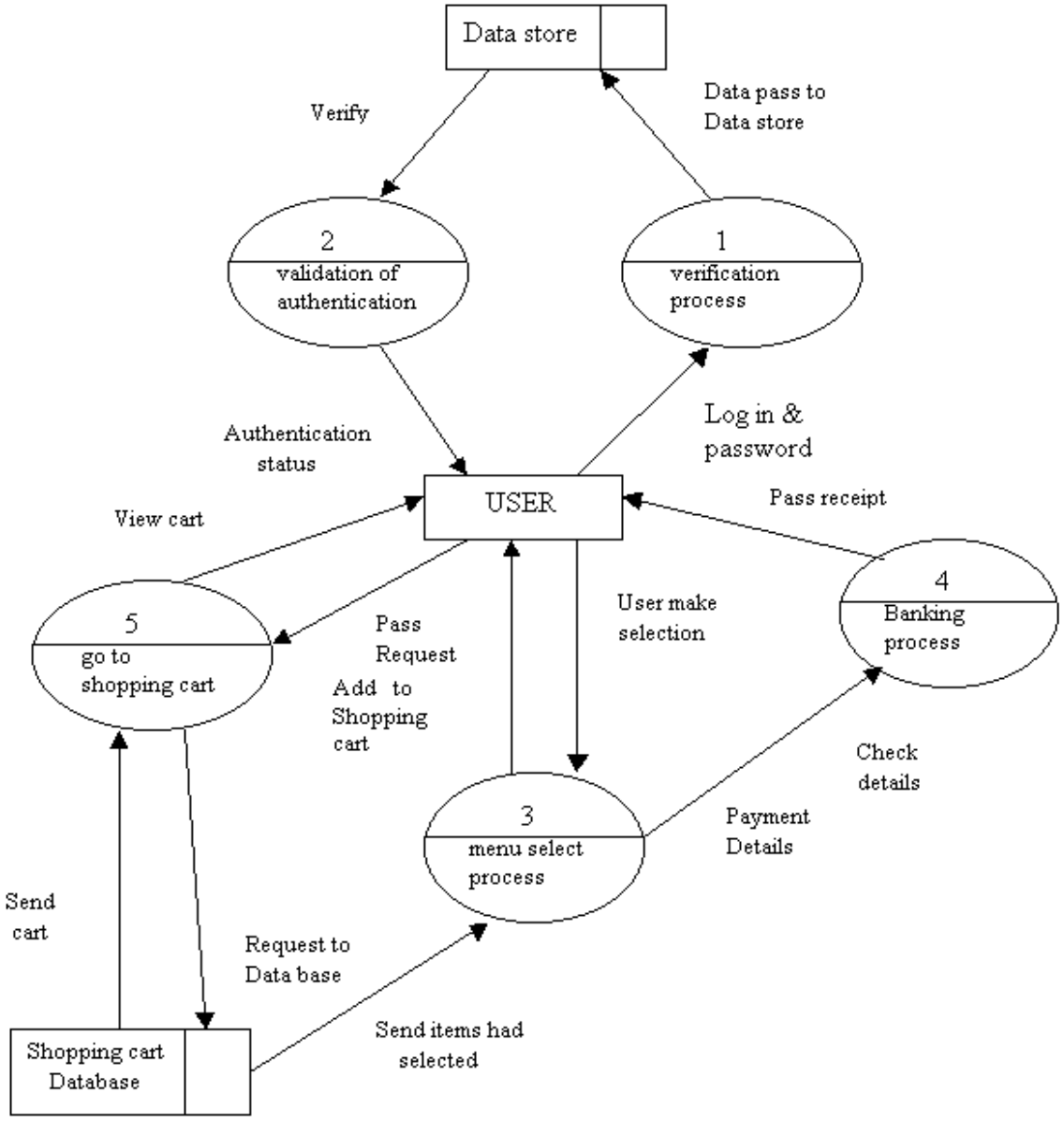
First Level Diagram



DFD-FOR ADMINISTRATER



DFD FOR USER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Verify
Data pass to
Data store
2
validation of
authentication
1
verification
process
Authentication
status
Log in &
password
USER
View cart
Pass receipt
5
go to
shopping cart
Pass
Request
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cart
User make
selection
4
Banking
process
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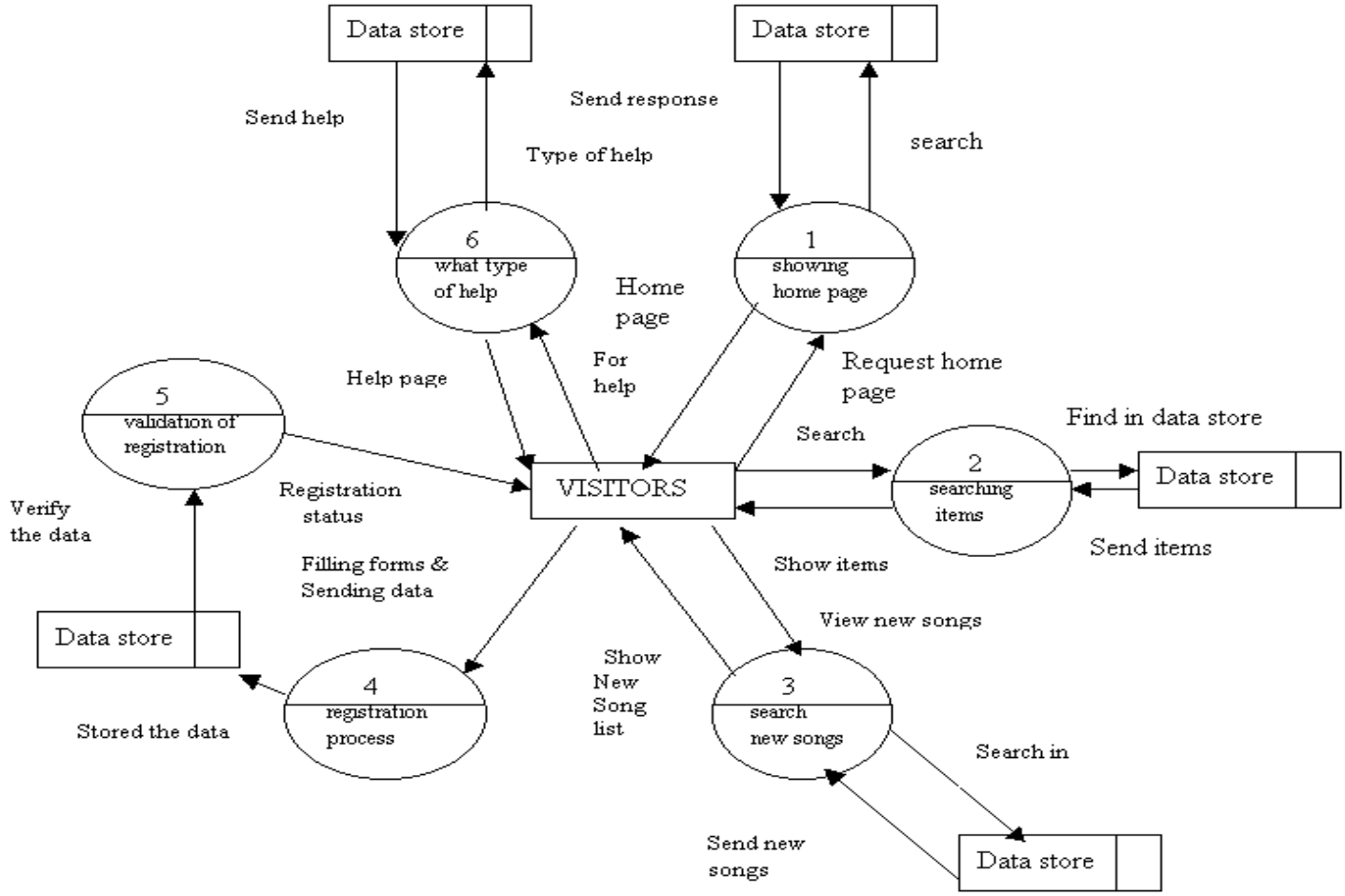
Payment
Details
Send
cart
Request to
Data base
Send items had
selected
Shopping cart
Database

DFD for visitors



4. System Testing

Quality assurance is an important step in software engineering. This overlaps with all the phases of development right from the requirement analysis. This quality requirement of the software system must be clearly extracted during the requirement analysis and all the subsequent phases should be made biased to that, the final testing will become trivial and less expensive.

There are number of quality parameters like correctness, accuracy, reliability, robustness, efficiency, effectiveness, reusability, maintainability etc.. The state of requirement of each of these parameters will vary depending upon the name and domain of the application. The testing should be done at the end of all development steps. Even though the final testing and verification are inevitable for better life and functionality of the software.

The different software testing approaches and methods like white box testing and black box testing. The major phases in testing are design of test plan, setting up test case and test candidate and test procedure, testing and correction. This is a cycle process and the software will circulate through all the steps till it attends the required quality. The testing is carried in the following steps.

4.1 Unit testing

Unit testing focuses verification effort on the smallest unit of software design the module. Using the details design description as a guide, important control paths are tested to uncover errors within boundary of the boundary of the module. The relative complexity of tests and the errors detected as a result is limited by the constrained scope established for unit testing.

Unit testing is normally considered an adjacent to coding steps. After source level code has been developed, reviewed, and verified for correct syntax, unit test case design begins. A review of design information provides guidance for establishing test cases that are likely to uncover error in each case of the categories discussed above. Each test case should be coupled with a set of expected results.

4.3 Integration testing

Integration testing is systematic technique for constructing the program structure while at the same time conducting test to uncover error associated with interfacing .The objective is to take unit tested modules and build a program structure that has been dictated by design.

There is often a tendency to attempt no incremental integration; that is to construct the program using a “big bang “approach. The entire modules are combined in advance. The entire program is tested as whole and chaoses usually result! A set of error is encountered. Correction is difficult because the isolation of cause is complicated by the vast expanse of entire program. Once errors are corrected, new ones appear and process continues in a seemingly endless loop.

5. System Implementation

As specified in the software and hardware specification section in the beginning, since this system is built on the client server architecture, a central web server computer is required to manage the user requester services made operational. Since the web server is used Apache with Tomcat the system requirements listed by Apache with Tomcat holds good in this case also. Apart from the standard requirements of 128MB of RAM,1.7GB of hard disk space and a fast processor, a modem is required to set it up for the internet

A client on the other hand requires only a low end computer, even with 32 to 64 MB RAM and 1GB hard disk. Here too, the requirement of a modem is indispensable.

5.1 Maintenance

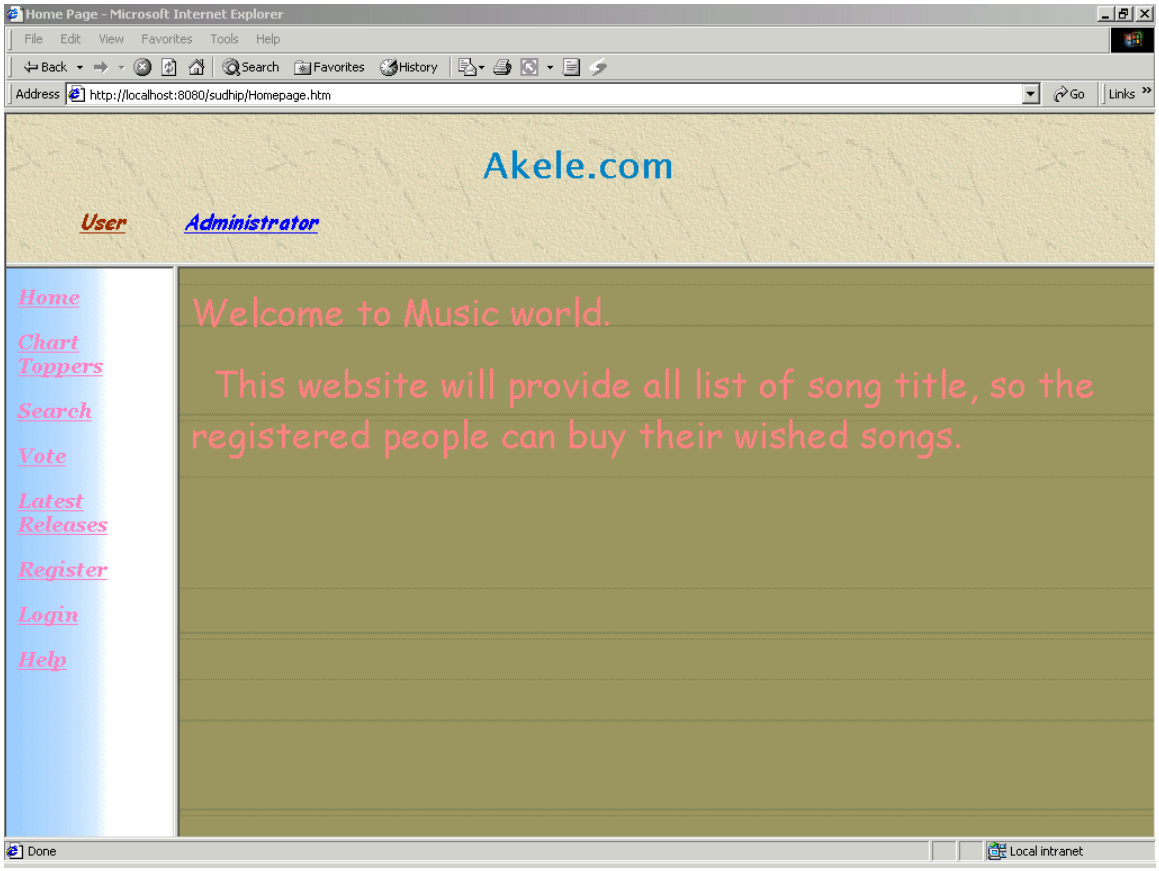
Software maintenance is the process of modifying a software system or component after its delivery in order to correct faults, improve the performance and other attributes, or to adapt to the changed environment.

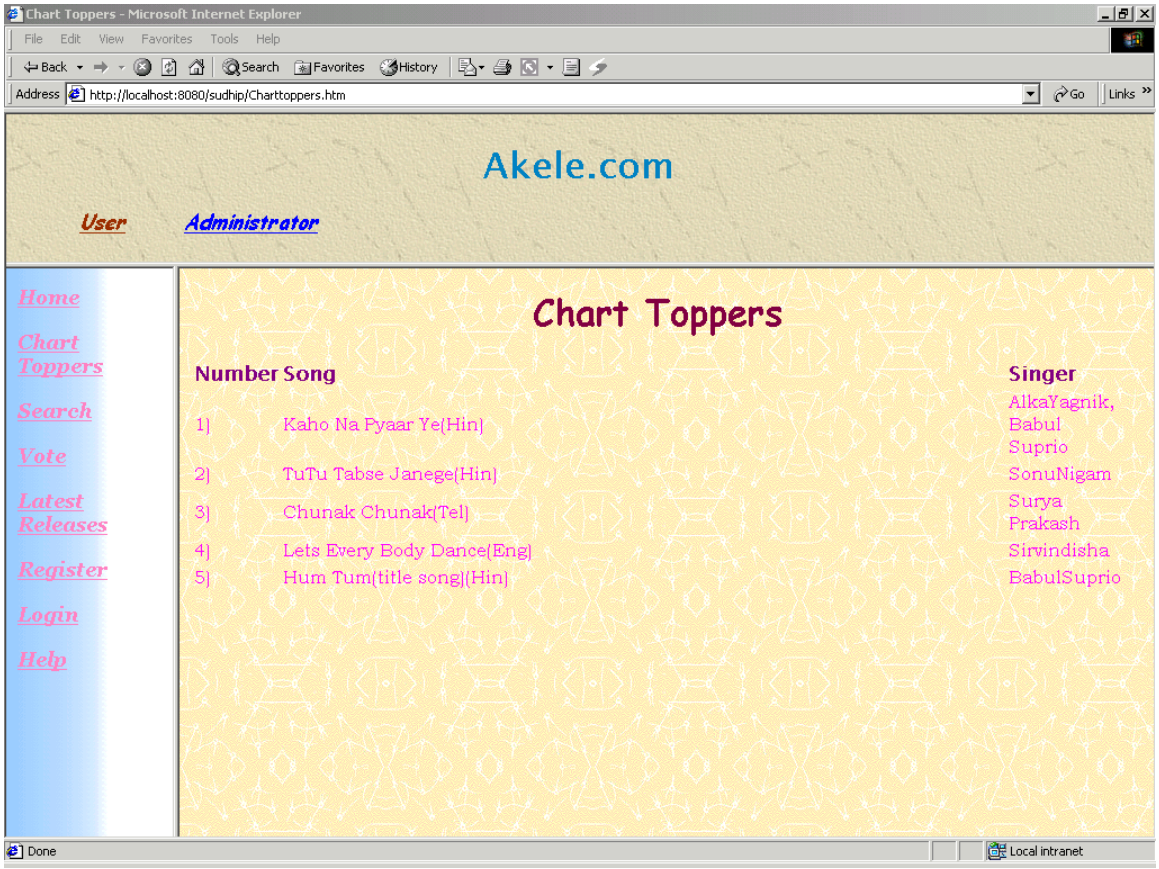
Maintenance covers a wide range of activities including correcting the code and design errors, updating the documentation and test data, and upgrading the user support. There

is an aging process that calls for periodic maintenance of hardware and software. Maintenance is always necessary to keep the system into its standards.

Screen Shots

Home Page

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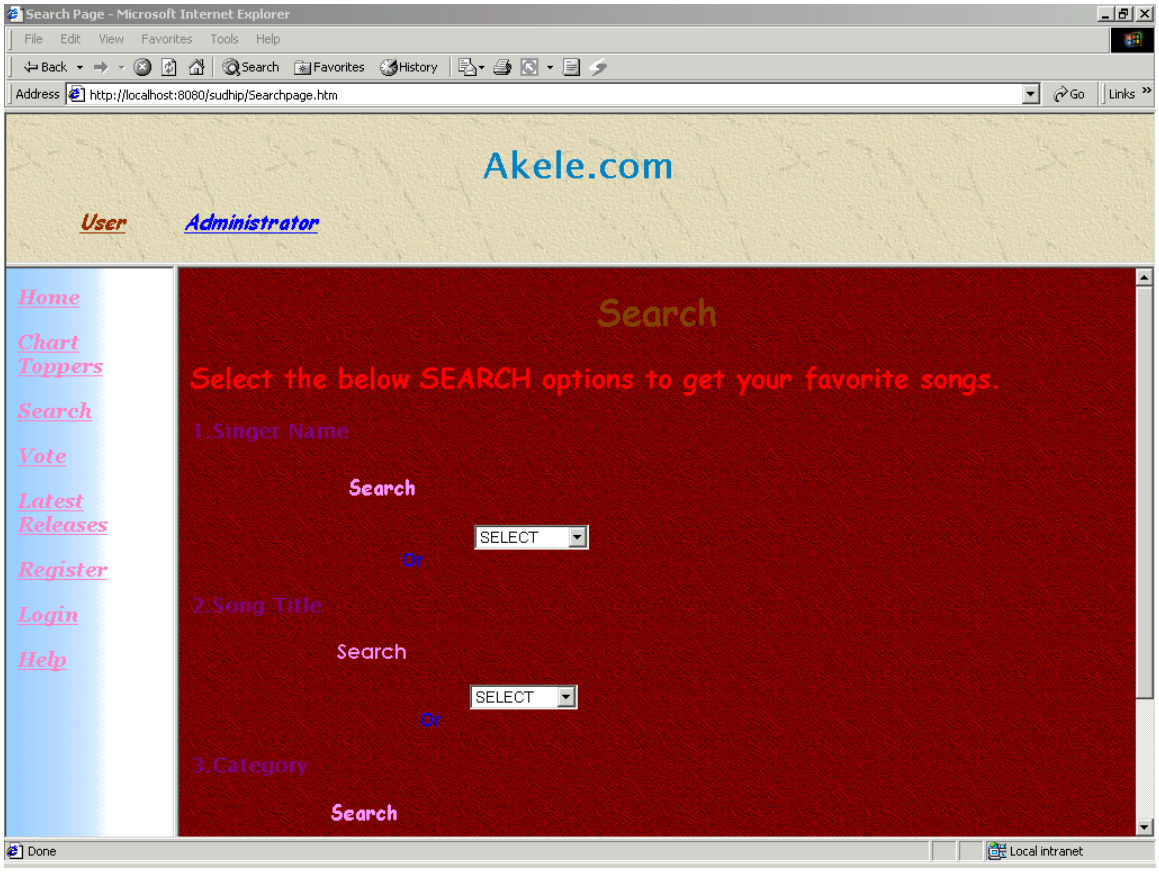
Go Links
Akele.com
User
Administrator
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Chart Toppers
Number Song
Singer
1] Kaho Na Pyaar Ye(Hin) AlkaYagnik, Babul Suprio
2] TuTu Tabse Janege(Hin) SonuNigam
3] Chunak Chunak(Tel) Surya Prakash
4] Lets Every Body Dance(Eng) Sirvindisha
5] Hum Tum(title song)(Hin) BabulSuprio
Done
Local intranet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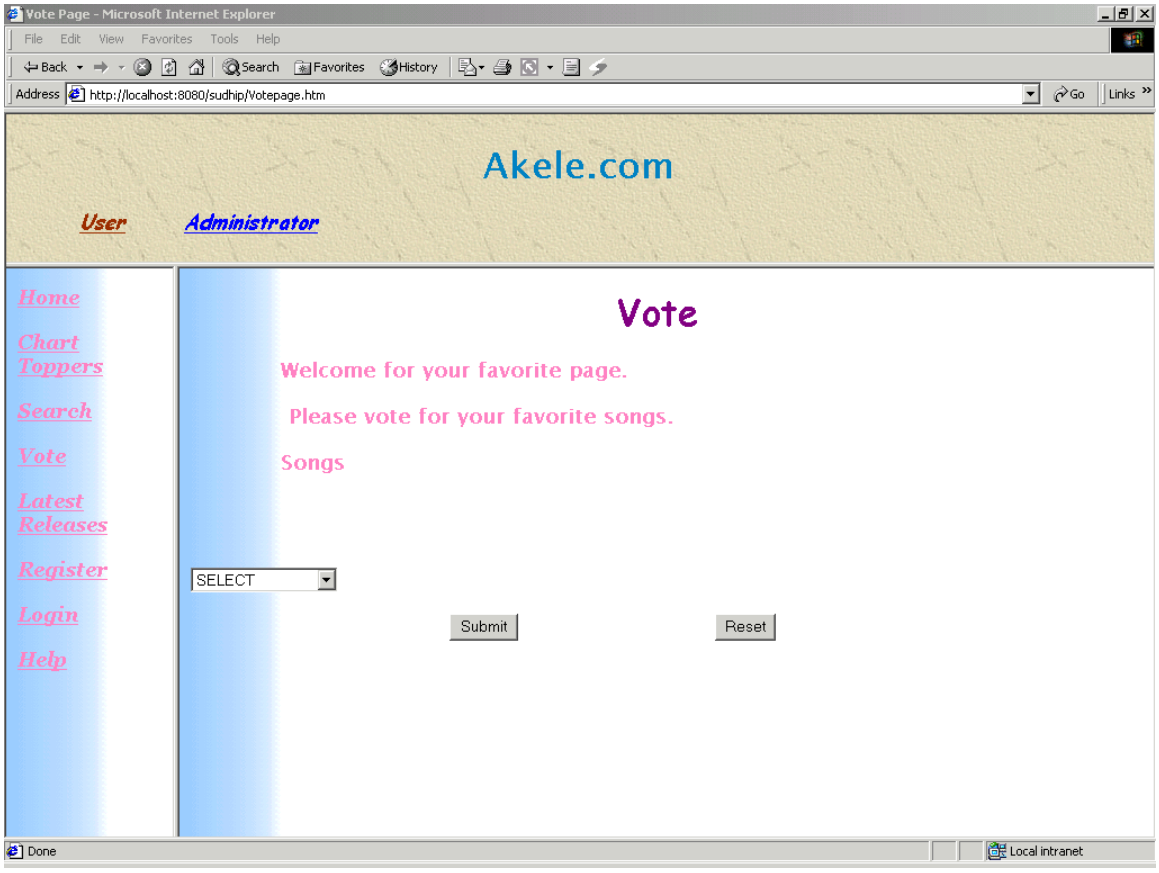
Administrator
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Search
Select the below SEARCH options to get your favorite songs.
1.Singer Name
Search
SELECT
Or
2.Song Title
Search
SELECT
Or
3.Category
Search
Done
Local intranet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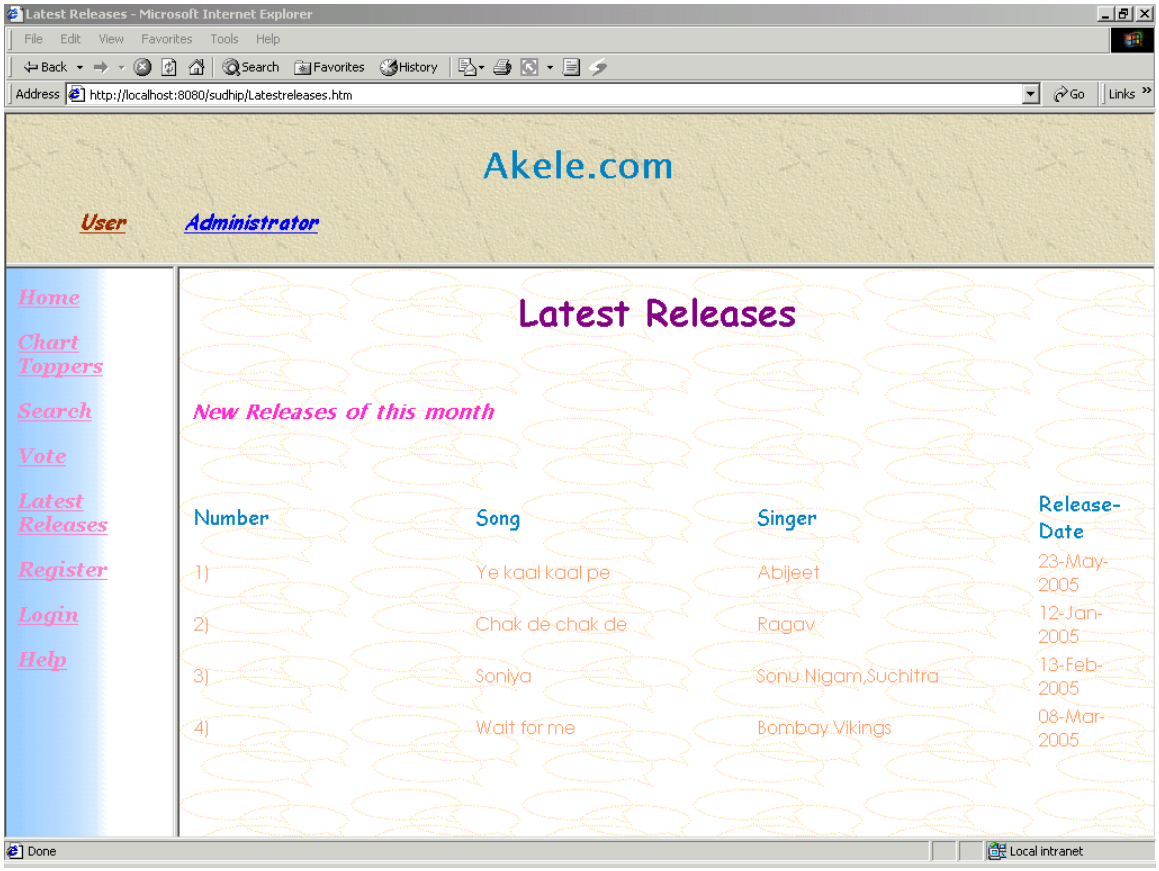
Administrator
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Vote
Welcome for your favorite page.
Please vote for your favorite songs.
Songs
SELECT
Submit
Reset
Done
Local intranet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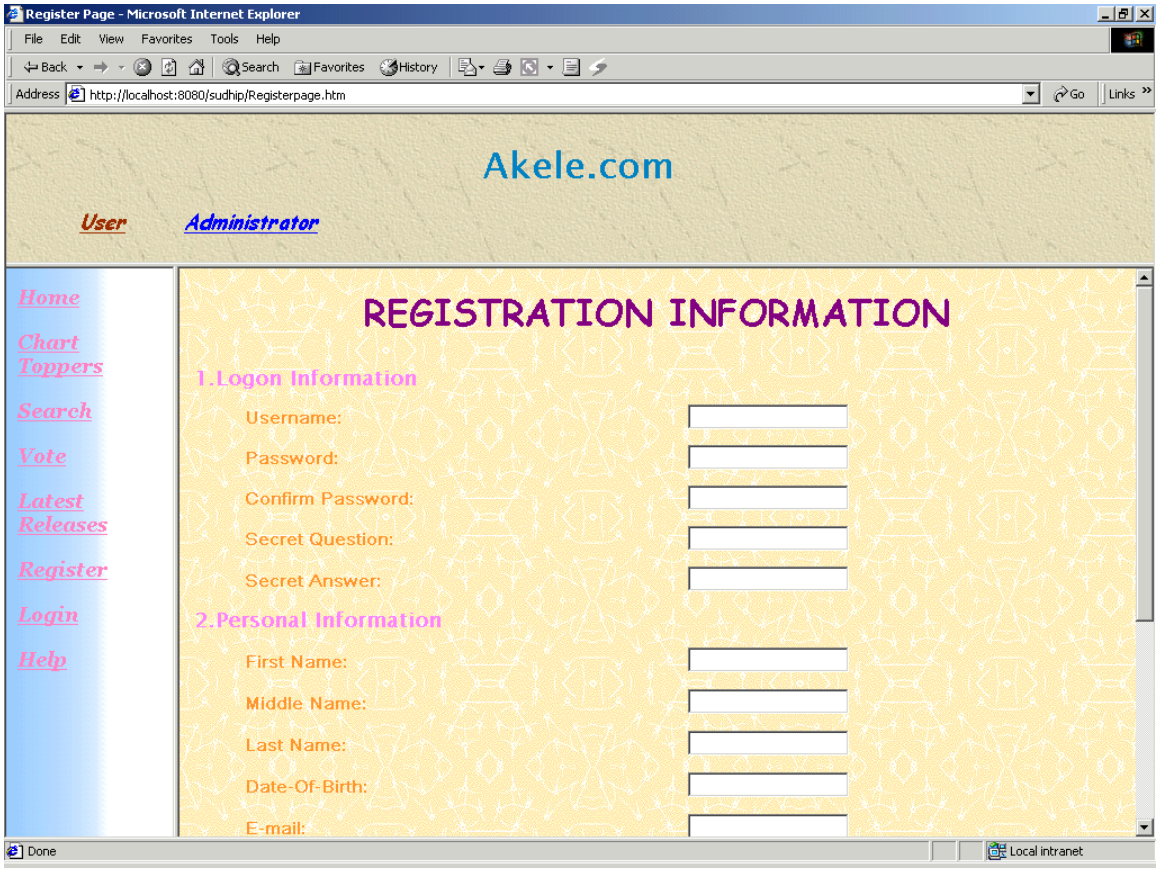
Administrator
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Latest Releases
New Releases of this month
Number
Song
Singer
Release-Date
1)
Ye kaal kaal pe
Abijeet
23-May-2005
2)
Chak de chak de
Ragav
12-Jan-2005
3)
Soniya
Sonu Nigam,Suchitra
13-Feb-2005
4)
Wait for me
Bombay Vikings
08-Mar-2005
Done
Local intranet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Akele.com
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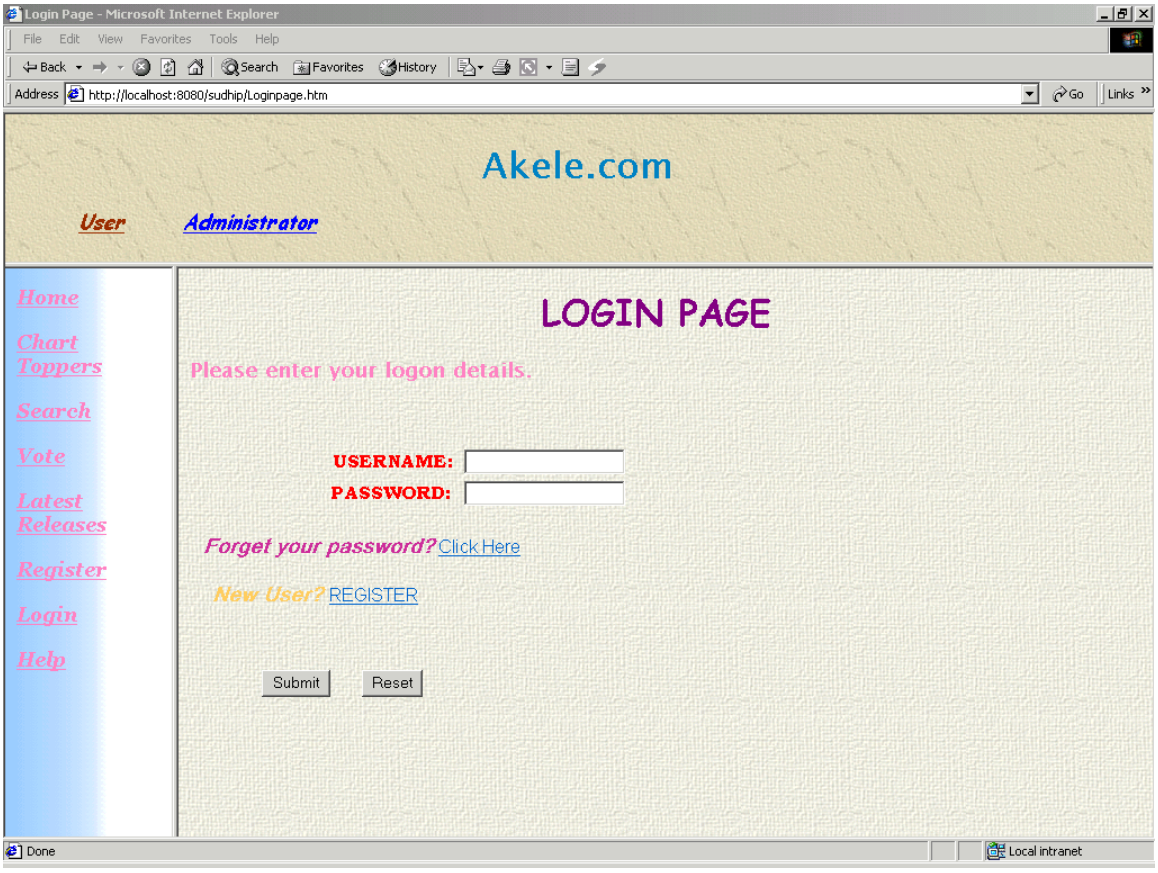
Administrator
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
REGISTRATION INFORMATION
1.Logon Information
Username:
Password:
Confirm Password:
Secret Question:
Secret Answer:
2.Personal Information
First Name:
Middle Name:
Last Name:
Date-Of-Birth:
E-mail:
Done
Local intranet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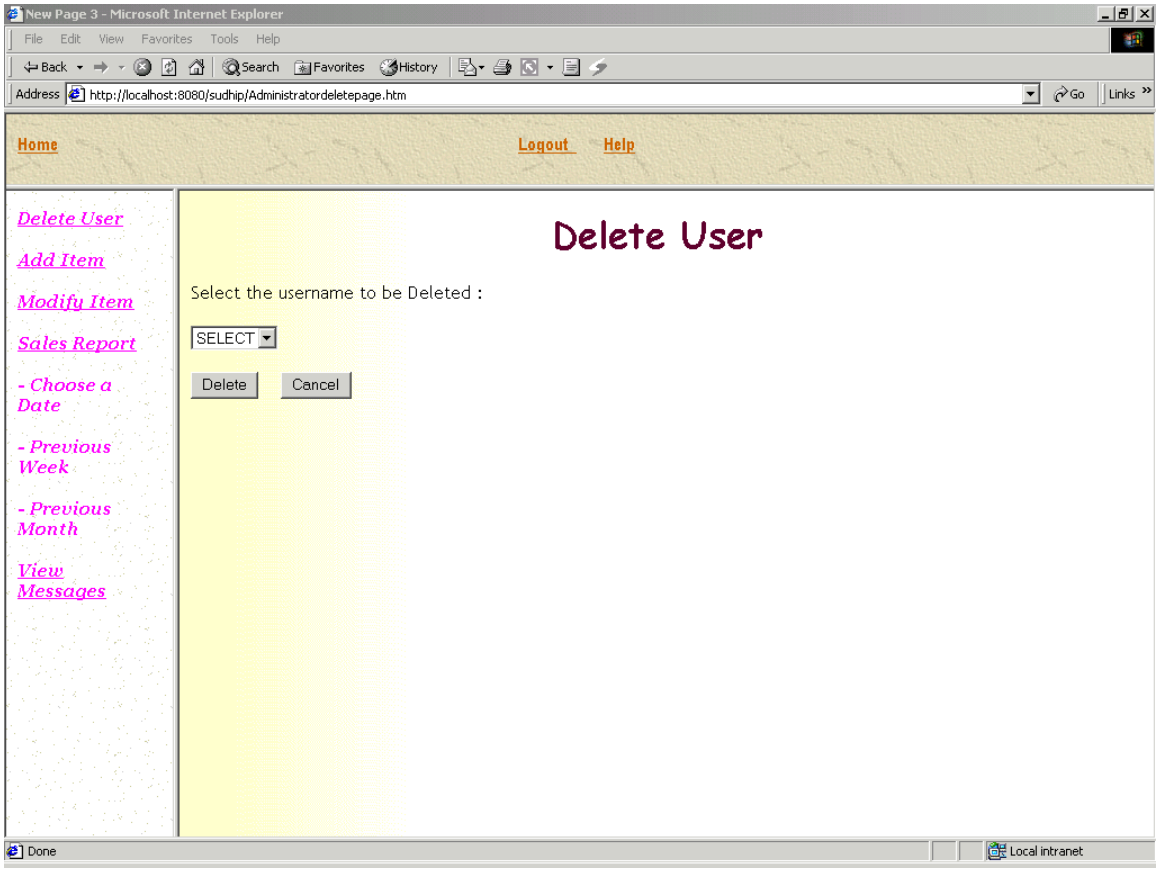
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
LOGIN PAGE
Please enter your logon details.
USERNAME:
PASSWORD:
Forget your password? Click Here
New User? REGISTER
Submit
Reset
Done
Local intranet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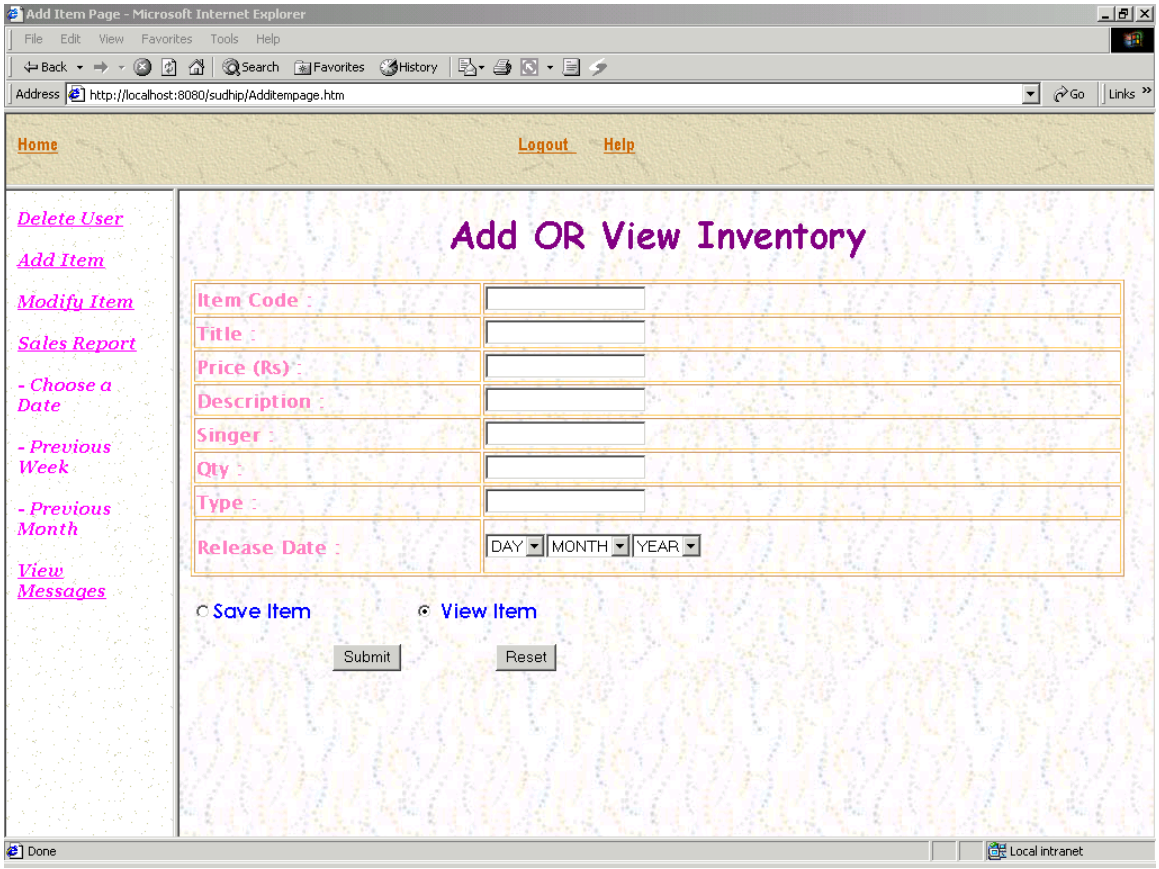
Home
Logout Help
Delete User
Add Item
Modify Item
Sales Report
- Choose a Date
- Previous Week
- Previous Month
View Messages
Delete User
Select the username to be Deleted :
SELECT
Delete Cancel
Done
Local intranet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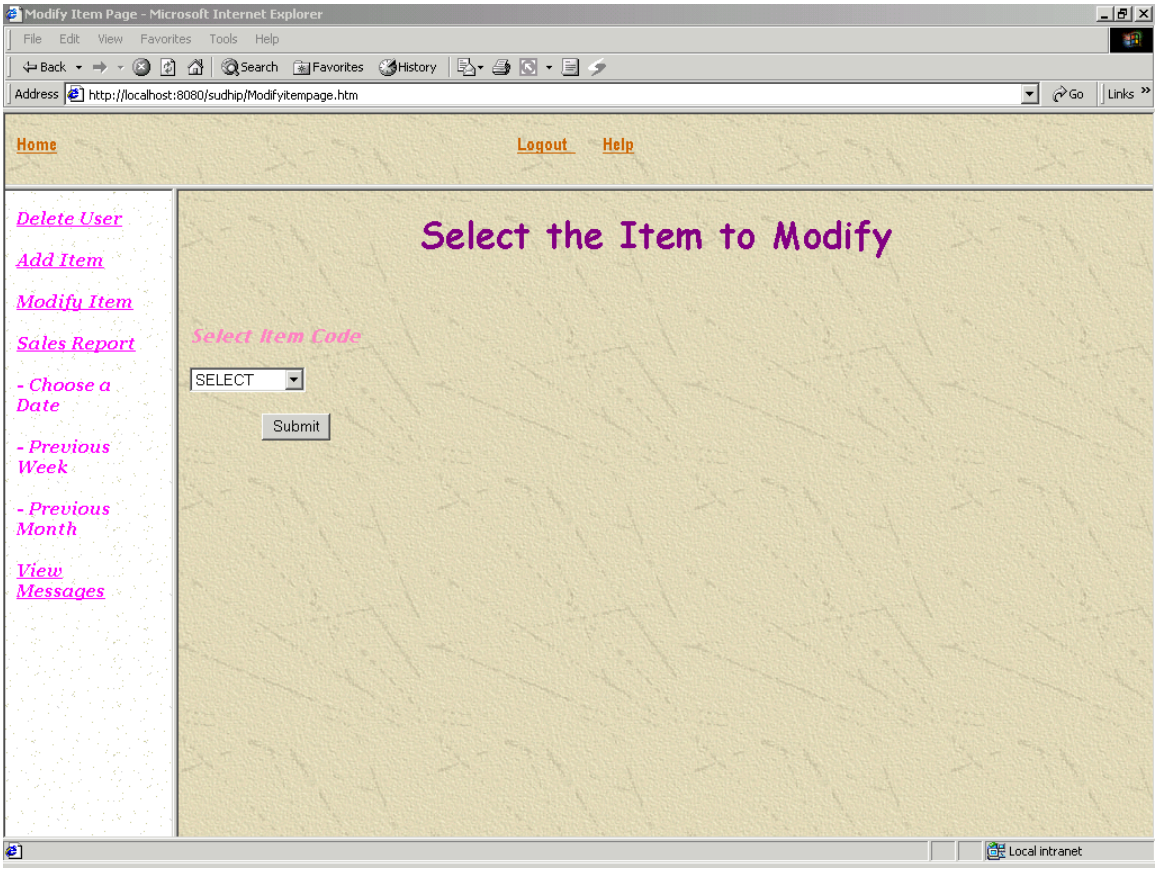
Go Links
Home
Logout Help
Delete User
Add Item
Modify Item
Sales Report
- Choose a Date
- Previous Week
- Previous Month
View Messages
Add OR View Inventory
Item Code :
Title :
Price (Rs) :
Description :
Singer :
Qty :
Type :
Release Date :
DAY MONTH YEAR
Save Item
View Item
Submit
Reset
Done
Local intranet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Logout Help
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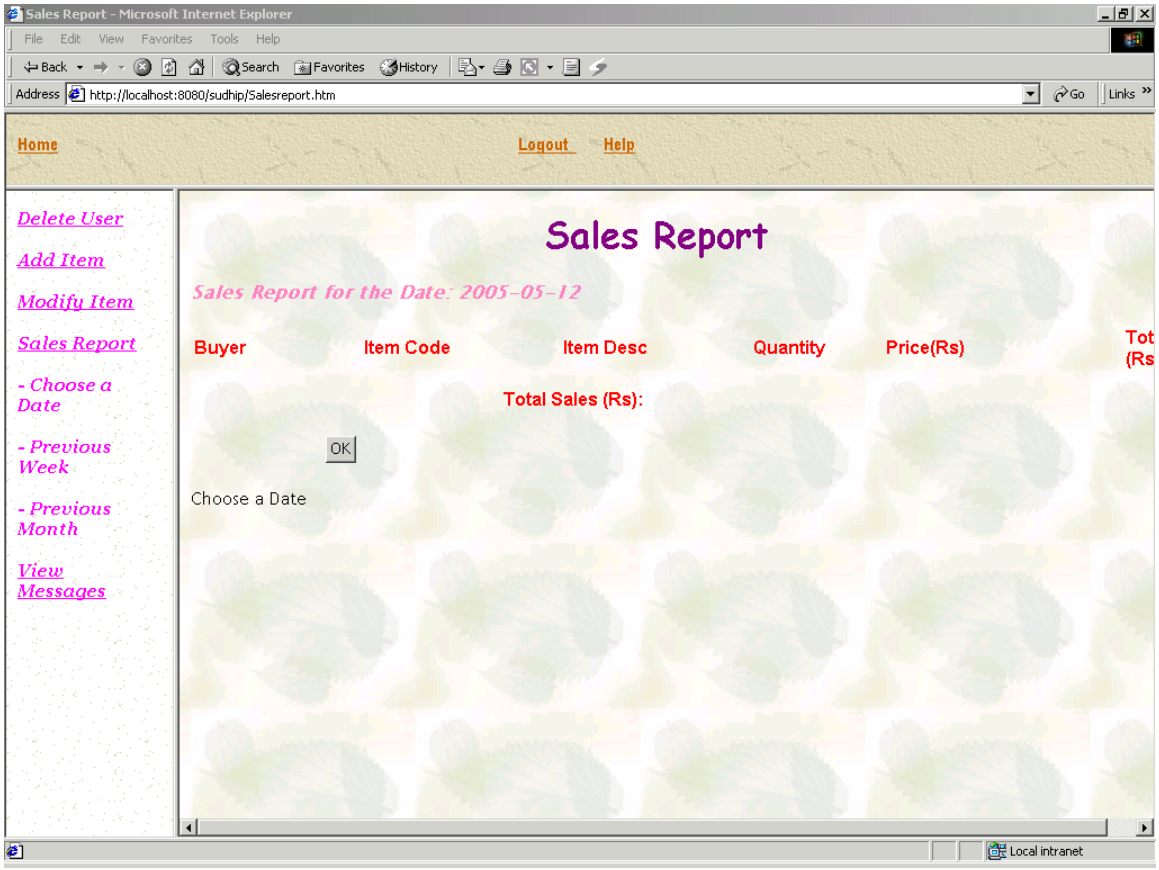
- Choose a Date
- Previous Week
- Previous Month
View Messages
Select the Item to Modify
Select Item Code
SELECT
Submit
Local intranet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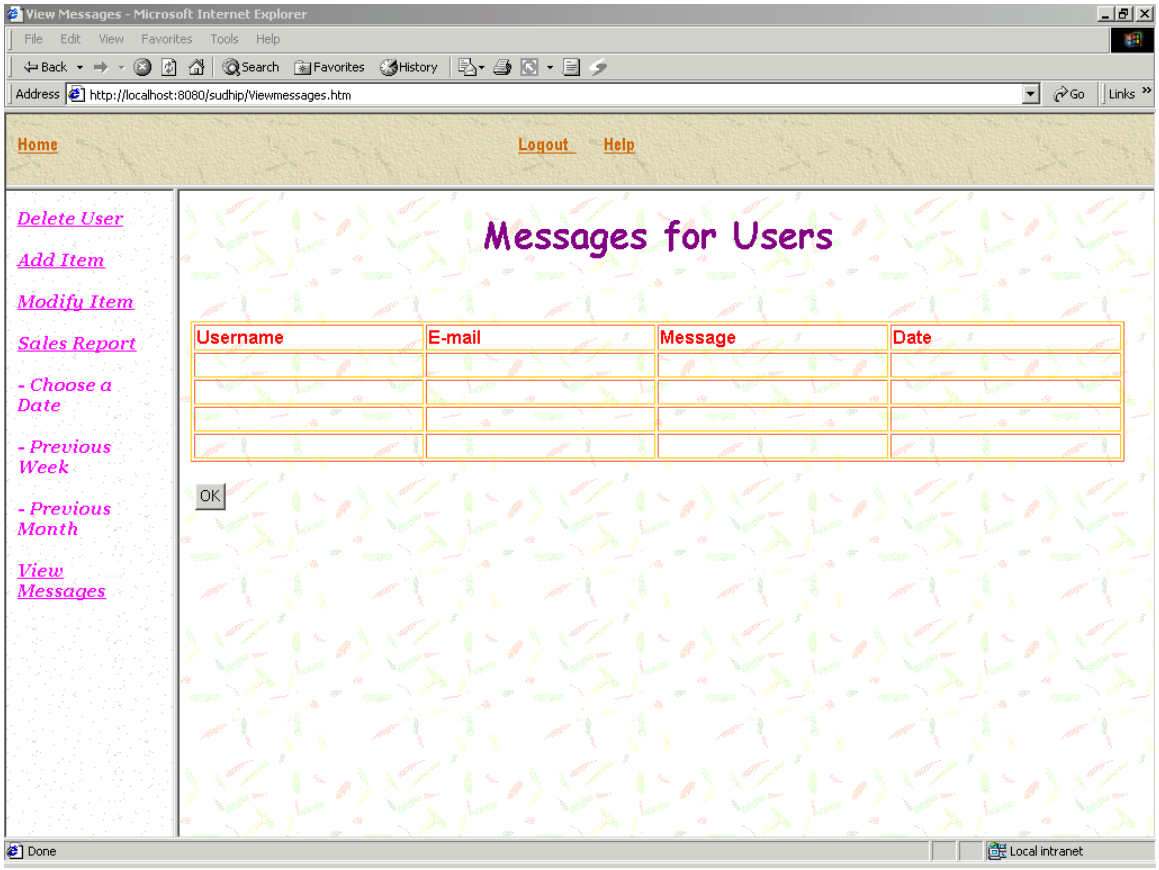
Add Item
Modify Item
Sales Report
- Choose a Date
- Previous Week
- Previous Month
View Messages
Sales Report
Sales Report for the Date: 2005-05-12
Buyer Item Code Item Desc Quantity Price(Rs) Tot (Rs
Total Sales (Rs):
OK
Choose a Date
Local intranet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- Previous Week
- Previous Month
View Messages
Messages for Users
Username E-mail Message Date
OK
Done
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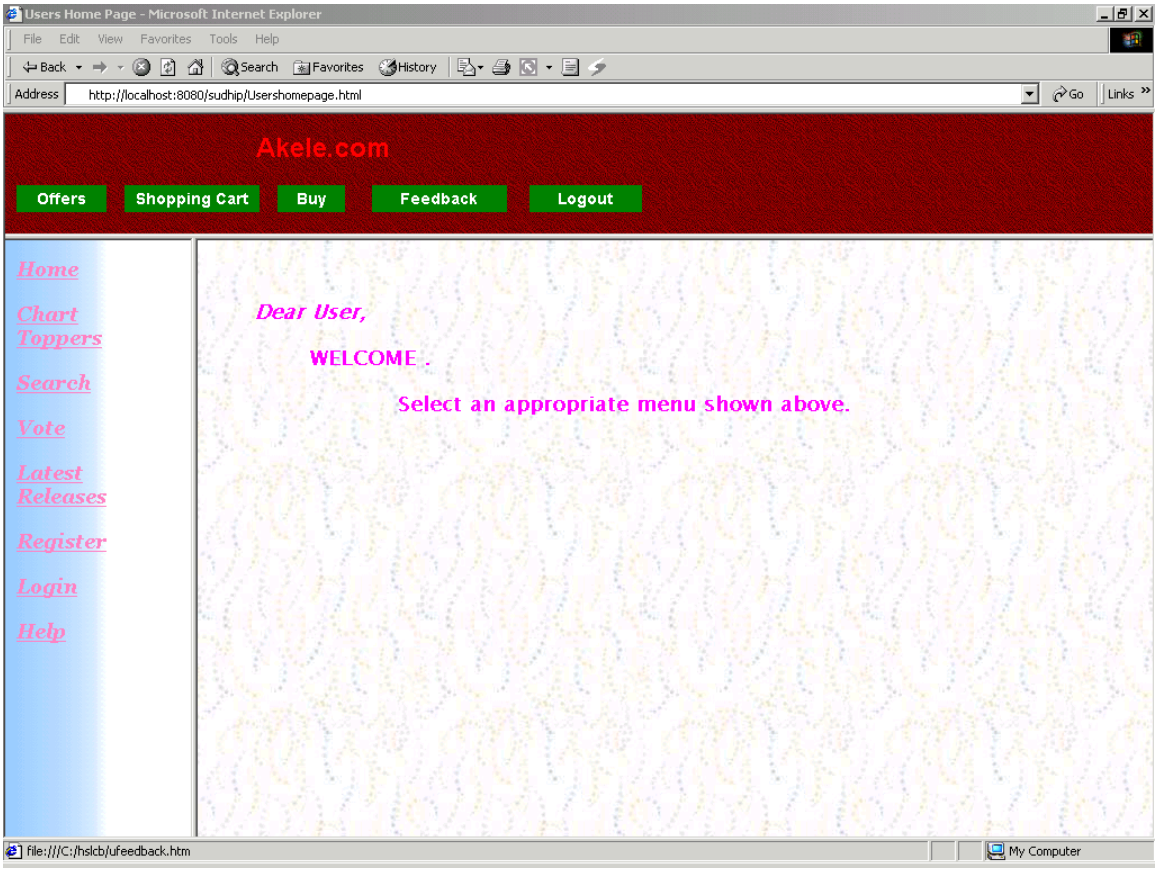
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Offers
Shopping Cart
Buy
Feedback
Logout
Home
Chart Toppers
Search
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Latest Releases
Register
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Help
Dear User,
WELCOME .
Select an appropriate menu shown above.
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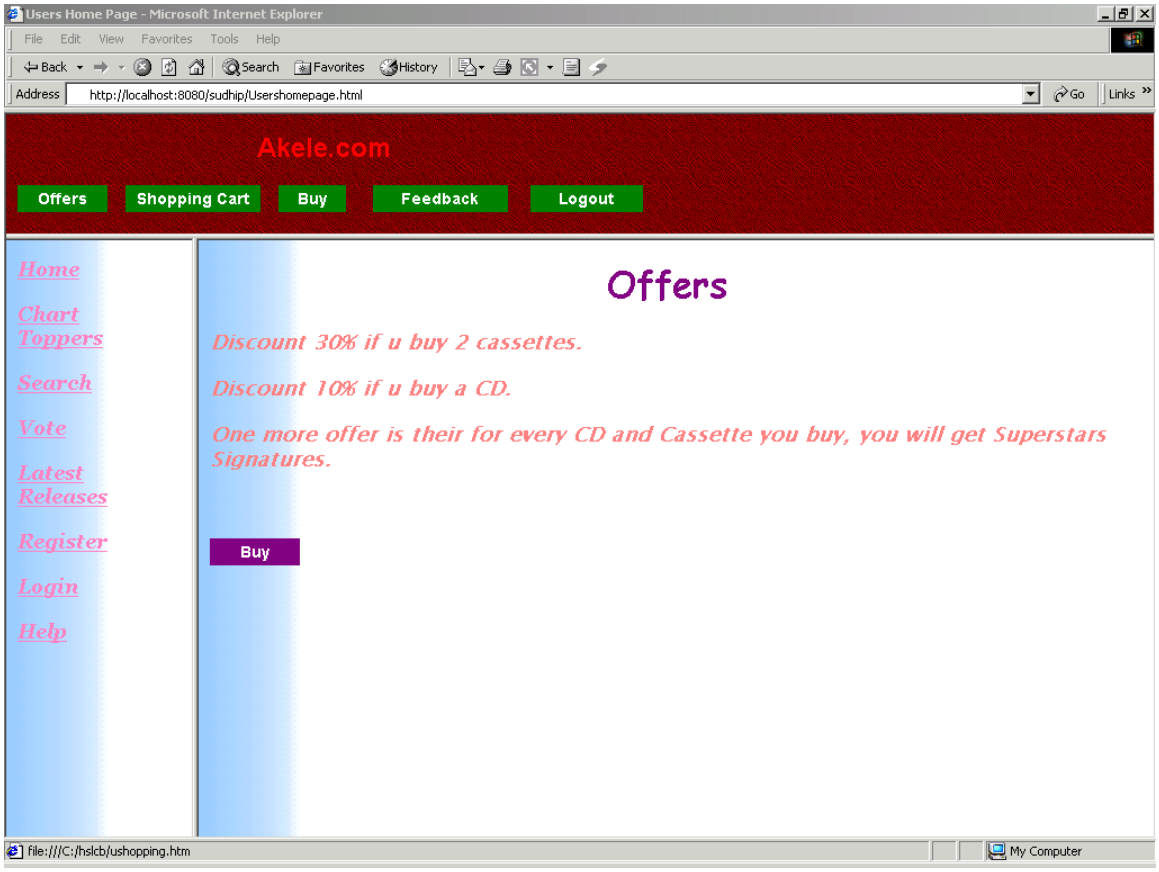
My Computer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Search
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Register
Login
Help
Offers
Discount 30% if u buy 2 cassettes.
Discount 10% if u buy a CD.
One more offer is their for every CD and Cassette you buy, you will get Superstars Signatures.
Buy
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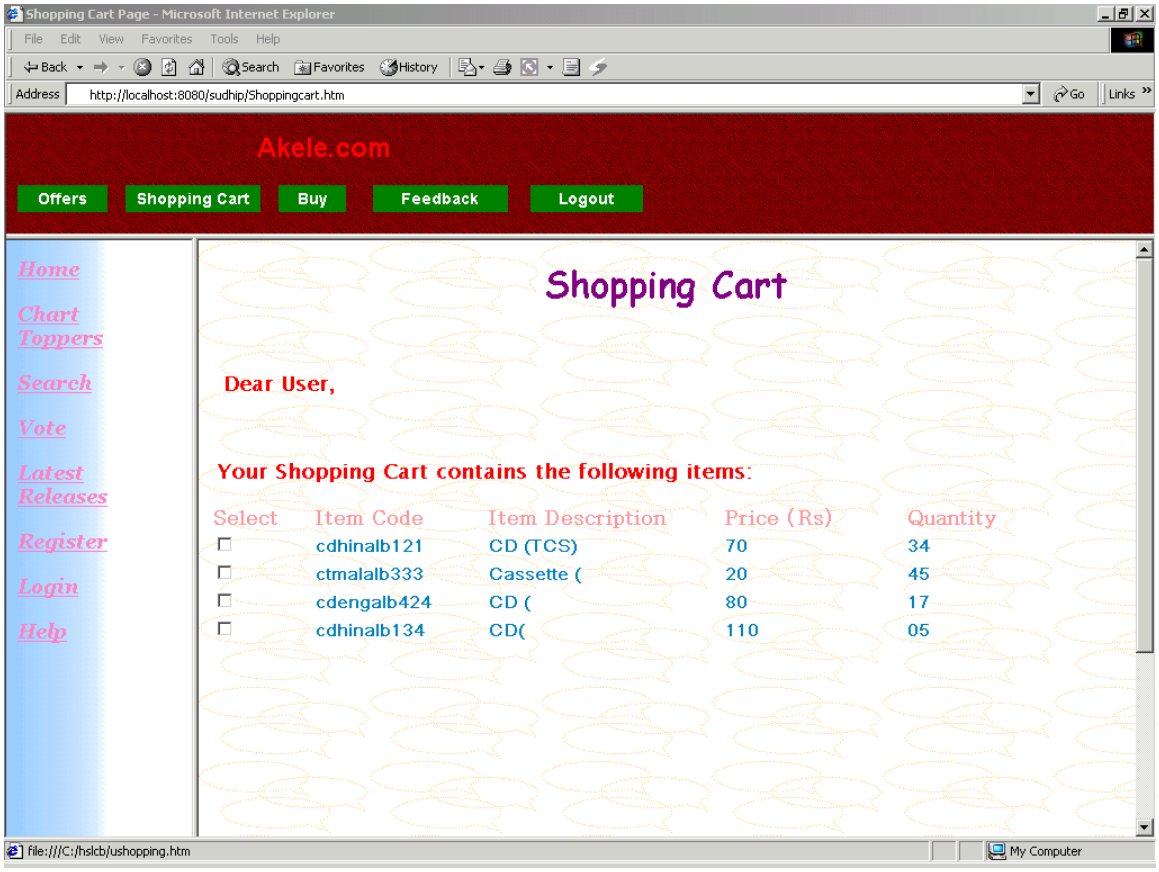
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Offers
Shopping Cart
Buy
Feedback
Logout
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Shopping Cart
Dear User,
Your Shopping Cart contains the following items:
Select Item Code Item Description Price (Rs) Quantity
cdhinalb121 CD (TCS) 70 34
ctmalalb333 Cassette (20 45
cdengalb424 CD (80 17
cdhinalb134 CD(110 05
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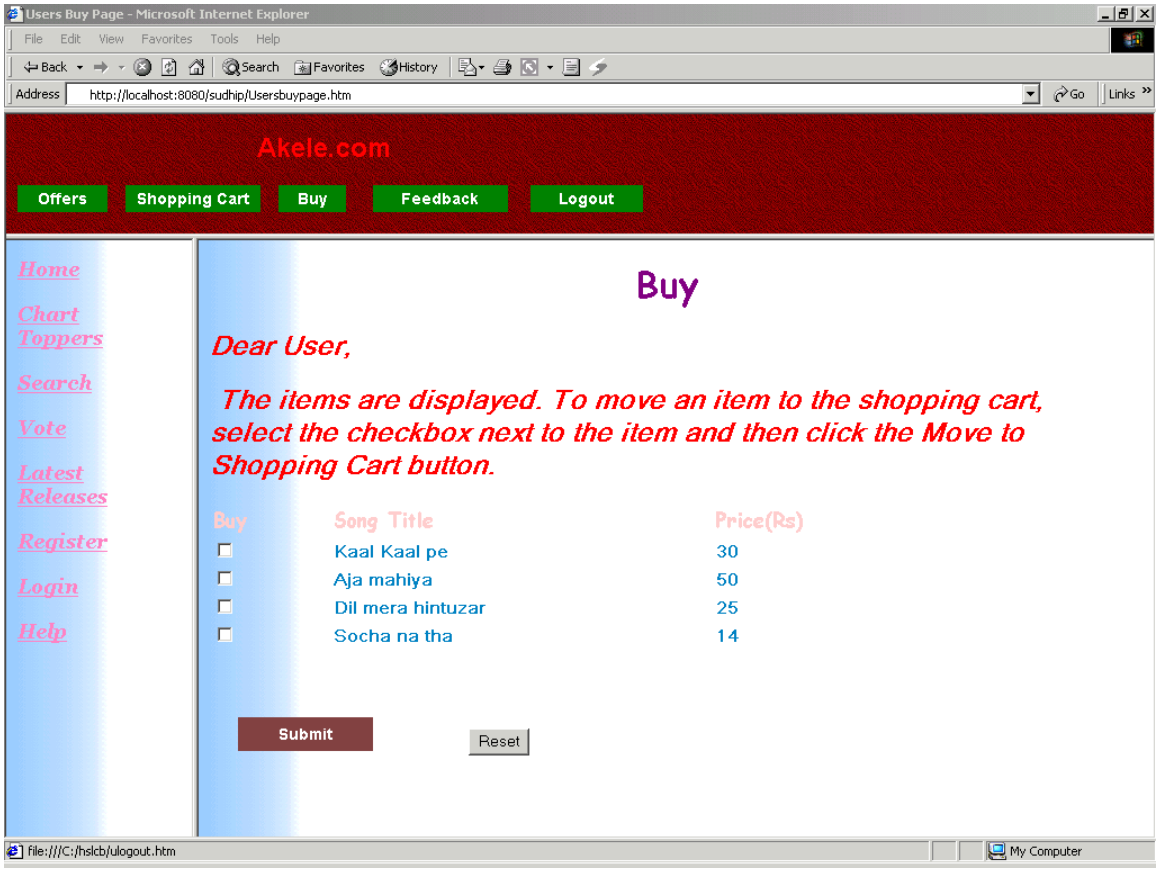
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Offers
Shopping Cart
Buy
Feedback
Logout
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Buy
Dear User,
The items are displayed. To move an item to the shopping cart, select the checkbox next to the item and then click the Move to Shopping Cart button.
Buy
Song Title
Price(Rs)
Kaal Kaal pe
30
Aja mahiya
50
Dil mera hintuzar
25
Socha na tha
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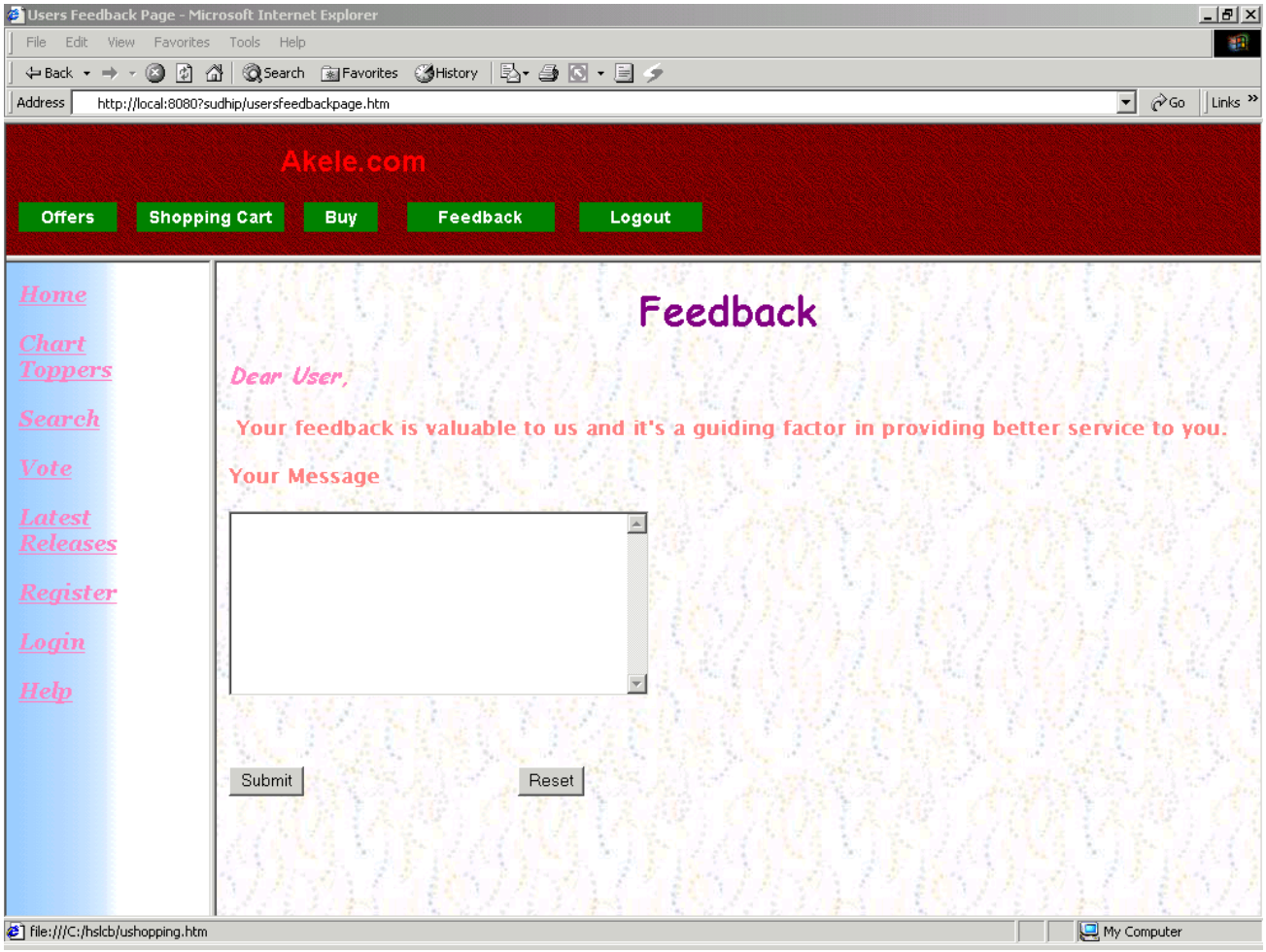
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Offers
Shopping Cart
Buy
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Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
Feedback
Dear User,
Your feedback is valuable to us and it's a guiding factor in providing better service to you.
Your Message
Submit
Reset
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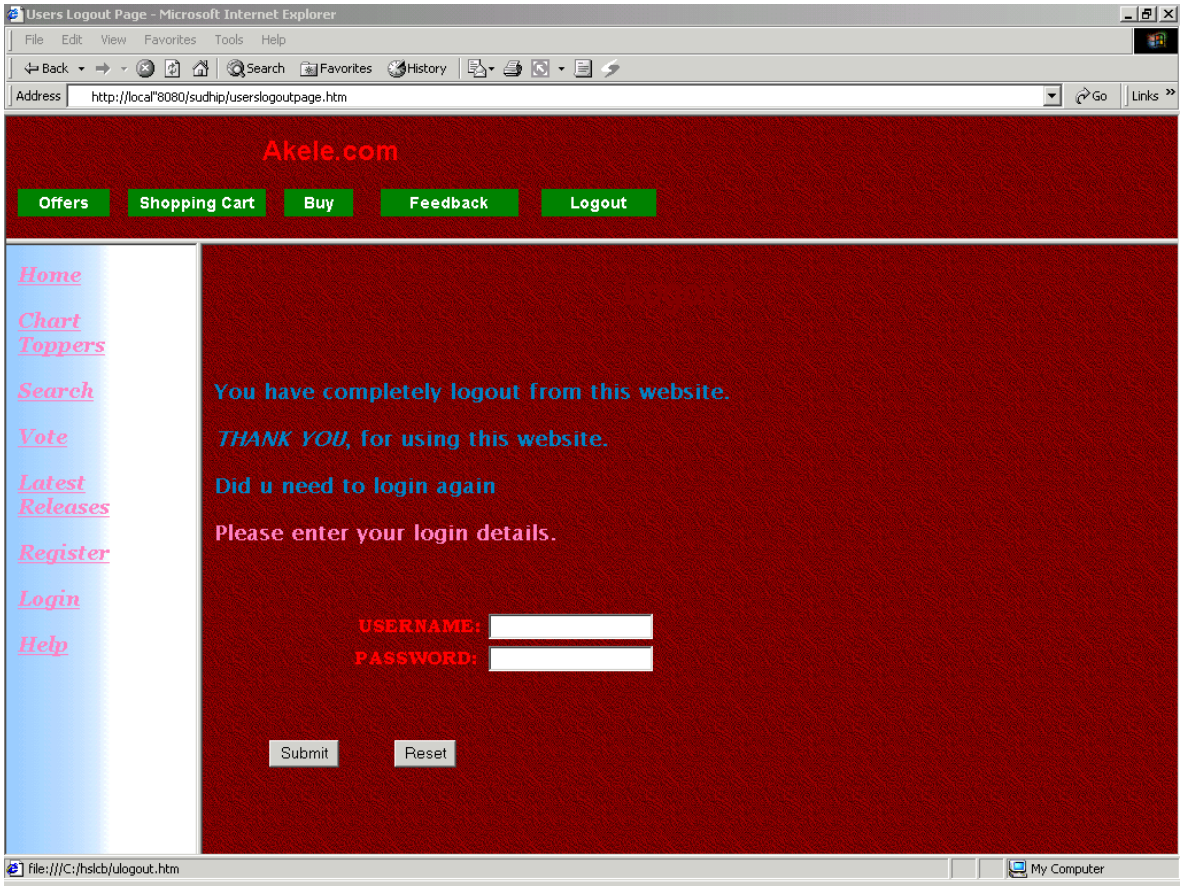
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Offers
Shopping Cart
Buy
Feedback
Logout
Home
Chart Toppers
Search
Vote
Latest Releases
Register
Login
Help
You have completely logout from this website.
THANK YOU, for using this website.
Did u need to login again
Please enter your login details.
USERNAME:
PASSWORD:
Submit
Reset
file:///C:/hslcb/ulogout.htm
My Computer

6.2 Conclusion

The software 'Online music store' reduces the considerable drawbacks like burden of human labor, portable defect and errors. This software saves time and provides 24 hour accessibility even from a remote place. Programs are menu driven which help even a newcomer to use the system with little training. Testing has been done with actual data and system is much better than the existing one. GUI makes the interface very much user friendly.

The system is highly user friendly and is well efficient to ease interactions with the users of the system. Reports generate with live data are proved to be informative and also helpful in making important decisions. The system is tested and implemented with high degree of accuracy.

The system is done with an insight into the necessary modification that may require in the future. Hence the system can be maintained successfully, without much rework.

6.3 Scope for Future Enhancement

As changes are always necessary in future it applies to software development also but these changes should be appreciable in nature. These appreciable changes will make the software to fight for its survival in the competitive market. Hence it is necessary to think about the future enhancements at present.

The system 'Online Music Store' will fulfill the entire requirement of the clients. The system is developed according to the present requirements of the company. The system is developed as easy as possible for the sake of end users.

One drawback of my system is that the client cannot view, search and purchase music according to a particular language option .By the next time I would like to add this facility.

By the next time I would like to add two more modules: Purchase Module and Accounting Module. Purchase Module deals with purchasing activities of music related items. Accounting Module deals with all accounting activities such as billing, ledger preparation, balance sheet preparation, profit and loss account preparation etc.

In the present system transaction is through a particular bank or through money orders. In future I would like to make it through credit cards. Credit card validation techniques are needed for that.

The developed software for the organization is flexible and it can be made to run on all kinds of platforms. The system is error free and highly portable. It can be implemented

in any servers in the Internet providing an easy access to the clients. It also has more options of the future developments.

Bibliography

Serial No.	Title
1.	Servlet Programming
2.	Java Server Programming
3.	Java Server Pages
4.	Oracle8i

A. Online Resources

- **http://www.google.com**
- **http://oracle.com**
- **http://Redbooks.IBM.com**
- **http://javaguru.com**
- **http://www.sun.com**