

Practical 1: Preparing Software Requirements Specifications

Problem statement :

Nowadays people don't have much time to spend in canteen by just there and waiting for the waiter to take their order. Many customer visits the canteen in their lunch break and recess so they have limited time to eat and return to their respective office and colleges. So this software helps them to save time and order food whenever they want without calling the waiter again and again.

Canteen Automation System is to automate the existing manual system by the help of Smart device with full-fledged application , fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and manipulation of the same.

Hardware Reequipments

The minimum requirements are:

- Minimum of 20 GB HDD space
- 256 MB RAM
- Internet connection
- Input devices: Keyboard, mouse
- Output device: Monitor

SoftwareInterfaces

Operating system required is Windows XP and above. Chrome or any other browser of preference can be used to access theapp. Any android or iOS phone can access the app.

Categorization of Requirements

Based on the target audience or subject matter, requirements can be classified into different types, as stated below:

- **User requirements:** They are written in natural language so that both customers can verify their requirements have been correctly

identified

- **System requirements:** They are written involving technical terms and/or specifications, and are meant for the development or testing teams

Requirements can be classified into two groups based on what they describe:

- **Functional requirements (FRs):** These describe the functionality of a system -- how a system should react to a particular set of inputs and what should be the corresponding output.
- **Non-functional requirements (NFRs):** They are not directly related what functionalities are expected from the system. However, NFRs could typically define how the system should behave under certain situations. For example, a NFR could say that the system should work with 128MB RAM. Under such condition, a NFR could be more critical than a FR.

Functional Requirements

The basic features available in the system are as follows:

- Admin can search any details of old records easily.
- Admin can view various reports based on different criteria.
- Manages the payment details.

Non-Functional Requirements

Following is a list of non-functional requirements:

- **Performance:** This system should remain accessible 24x7. At least 100 users should be able to access the system altogether at any given time.
- **Security:** The database of system should not store any password in plain text rather the cease cipher text has to be stored.
- **Reliability:** It can be accessed by the end users 24*7 as an when needed hence is highly reliable for end users.
- **Availability:** Internet connection for the nodes with the database server is ensured and hence the application will be available any time for access.
- **Portability:** The developed application is portable as it can be accessed from any operation system regardless Windows, Mac, Linux provided they have a browser to access Internet.

