Phone book management System

Software requirement specification

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Submitted To:

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Table of Contents...

1. Introduction

- 1.1 Purpose
- 1.2 Scope
- 1.3 Definitions, Acronyms and Abbreviations
- 1.4 References
- 1.5 Technologies to be used
- 1.6 Overview

2. Overall Description

- 2.1 Product function
- 2.2 User characteristics
- 2.3 Constraints
- 2.4 Use Case Model Survey

3. External Interface Requirements

- 3.1 User Interface
- 3.2 Hardware Interface
- 3.3 Software Interface

4. Other Functional Requirements

- 4.1 Performance Requirement
- 4.2 Safety Requirements
- 4.3 Security Requirement
- 4.4 Software Quality attributes

1. INTRODUCTION

1.1 PURPOSE

To provide a comprehensive solution for phone book management system. As we all know People have been relying on the phonebook from many years to get basic info such as Phone no, address etc of the people they need to contact. However this method is not so efficient since users may not get the desired results. This call for a better design of a system where in people can easily retrieve info without wasting much of their time.

"Phone Book Management System" has been designed to overcome this problem.

1.2 Scope

- ➤ Users with Average info about computers can make use of this system.
- ➤ They can make use of different facilities offered by telephone systems like Internet Plans etc.
- ➤ Users can view their Monthly Telephone Bill instantly.
- > Search results will be fast as compared to manual search.
- ➤ Different Privileges are provided as per whether the user is a normal user or an Officer.

1.3 Document Conventions

- ➤ ADMINISTRATAOR: A unique system user who manages the system.
- ➤ User: A Person who uses the Software.
- ➤ Officer: A person who provides various facilities' to the normal user.
- > FAQ: Frequently Asked Question's
- ➤ Feedback: Details provide by the User as per their experience of using the Software.

1.4 References

- ➤ IEEE SRS Format
- ➤ Google.com
- ➤ Phone Book
- ➤ Problem Statement

1.5 Technologies to Be Used

- > JAVA
- > FILE SYSTEM FOR BACKEND

1.6 Overview

- ➤ Overall description: Describes the major components of the system, system architecture, the interconnection along with assumptions and dependencies.
- ➤ Specific Requirements: Describes the features of actors, their roles in systems and constraints.

2. OVERALL DESCRIPTION

2.1 PRODUCT FUNCTION

- ➤ Maintain User Information: All the user information of the user is maintained.
- ➤ Product & Service Details: It contains the information of the products and services available for the user.
- ➤ Request for viewing of Monthly Telephone Bills is done quickly unless there is Server Problem.
- ➤ Users can at any point of time contact respective Officer if they face any problems. This can be done in form of Registering Complaints.

2.2 USER CHARACTERISTICS

- > Every user should be comfortable of working with computer.
- ➤ He must have basic knowledge of English too.

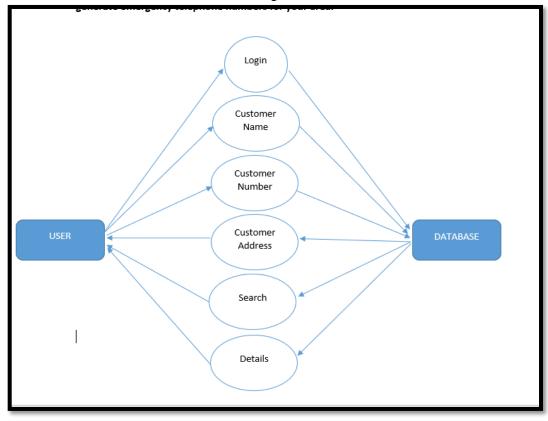
2.3 Constraints

- ➤ GUI is only in English.
- Login and password is used for identification of customer and there is no facility for guest.
- There is no maintainability of back up so availability will get affected.

2.4User Case Model Survey

- **1. Administrator:** Responsible for changing the passwords, block and unblock the accounts, view and manage the user's profile.
 - ➤ Change password: If user forgets his/her password, administrator can give him/her a new password
 - ➤ Block account: Administrator has the authority to block an existing account.
 - ➤ Unblock account: If the account gets blocked due to wrong entry of password thrice in succession, or any other reason for that matter, only administrator has the privilege to unblock that account.
 - ➤ View user's profile: Administrator can view the profile of any user.
- **2. User:** A valid user can make use of the system in following ways,
 - Register: Users need to register before using the service.

- ➤ Login: Users need to login every time before viewing their profile and other services.
- ➤ View profile: Users can view the profile, and different services offered.
- ➤ Feedback: Feedback can be given by the user on how the software can be further improved.
- **3. Officer:** The Officer is responsible for changing the passwords, answering FAQ's, view and manage the user's profile and solve the problems of User's.
 - ➤ Change password: If a User forgets his/her password, the Officer can provide him/her a new password.
 - ➤ Answer FAQ's: The Officer has to provide answers for frequently asked questions.
 - ➤ Change Plans: The Officer has power to change plans if there is any such request by the user.
 - ➤ Issue Bills: Can issue the telephone bills.



3. Interface Requirements

3.1 User Interfaces

- ➤ "Windows Application Form" is a inbuilt feature in java which helps to create better front end interface.
- ➤ User interface may differ as for
 - 1. Users: Username and Password enabled Login, View search results, FAQ's etc.
 - 2. Admin: Login/Logout procedure, create reports, Change password, view user profiles etc.
 - 3. Officer: Login/Logout, change plans, maintain user Activity, change password, receives complaints etc.

3.2 HARDWARE INTERFACES CLENT SIDE:

Processor: intel IV or Dual Core

RAM: 512 MB

BROWSER: Internet Explorer 6.0 or higher, Firefox

Higher, Opera 8.0 DISC SPACE: 1 GB

SERVER SIDE:

APPLICATION SERVER:

Processor: Pentium IV or Dual Core

RAM: 512 MB

DISC SPACE: 1 GB or 2GB DATA BASE SERVER:

Processor: intel IV or Dual Core at 2.8GHz

RAM: 512 MB or 1GB

DISC SPACE: Minimum is 4GB, can be increased to store more data

3.3 SOFTWARE INTERFACE

- ➤ Intranet: Client Software, Web Browser, Operating System (Windows or Linux).
- ➤ Database(Back End): file system
- > Front End: JAVA, VISUAL STUDIO.

4: Other Non Functional Requirements

4.1 Performance Requirements.

- ➤ Depends on how the system is designed, the users who use the products may not have knowledge about how the software is designed; hence we need a user friendly and very efficient system.
- ➤ The constraints such as accessibility, safety and security should be resolved such that they do not affect the performance of the system.
- ➤ So using good front end programming languages will help in increasing the efficiency of the system, leading to efficient performance.

4.2 Safety Requirements

➤ When privacy issues are considered, that is if some bad element of the society gets to know the personal information of any person, the application can be used for an ethical purpose. So very strong safety levels of accessing must be used.

4.3 Security Requirements

- ➤ The designed application when used, is open to all possible threats, such as misuse of the application, or tried to modify.
- ➤ In these cases, a good user interface to access data should be used, such as the user must provide data to access information from the database.
- Any user wants to access his profile has to give his ID number so that fraudsters can be prevented from getting access to the data.

4.4 Software Quality Attributes

➤ Additional quality characteristics for the product that will be important to either the customer or the developer, such as reliability, maintainability.

Reliability:

- > Users use the application to view information.
- ➤ It is important that the information that is viewed is valid.
- ➤ Under some circumstances if a address or phone number of a person changes, and that change is not made in the database it may eventually lead to database inconsistency
- ➤ Hence the application has to be more reliable, which can be achieved using data logs.

Maintainability:

➤ It is possible that there may be a time for improving or upgrading the application, at that instance the code must be very flexible i.e., changing the code shouldn't result in degrading the application.