

High Level Design & Low Level Design

**CUSTOMER SERVICE MANAGEMENT SYSTEM**

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| --- | --- | --- | --- | --- |
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| October 20,2022 | 1.0 | Sai prasanna Bhuvaneswari Gayathri  Ajay Kumar Hrishikesh |  |  |
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| --- | --- | --- |
|  | **Index** |  |
| 1. Introduction |  | ------------------------------------------------ 4 |
| 1.1 Intended audience |  | ------------------------------------------------ 4 |
| 1.2 Project purpose |  | ------------------------------------------------ 4 |
| 1.3 Key project objective |  | ------------------------------------------------ 4 |
| 1.4 Project scope |  | ------------------------------------------------ 4 |
| 2. Design overview |  | ------------------------------------------------ 5 |
| 2.1 Design objective |  | ------------------------------------------------ 6 |
| 2.2 Design alternative |  | ------------------------------------------------ 6 |
| 2.3 User interface paradigms |  | ------------------------------------------------ 6 |
| 2.4 Validations |  | ------------------------------------------------6 |
| 3. Detailed System Design |  | ------------------------------------------------ 8 |
| 4. Environmental Description |  | ------------------------------------------------10 |
| 4.1 Time zone support |  | ------------------------------------------------10 |
| 4.2 Language support |  | -----------------------------------------------10 |
| 4.3 User desktop requirement |  | ------------------------------------------------10 |
| 4.4 Deployment Consideration |  | ------------------------------------------------10 |
| 4.4.1 Integration Requirements |  | -----------------------------------------------10 |
| 4.4.2 Network |  | -----------------------------------------------10 |
| 4.5 Configuration |  | ------------------------------------------------10 |
| 4..5.1 Operating System |  | -----------------------------------------------10 |

# List of Figures

|  |  |
| --- | --- |
| 3.1 | Overall Flow of the System 8 |
| 3.2 | Flow chart for Main menu of the application 9 |

1. **Introducton:**

The introduction of the software requirement specification provides an overview of the entire software. The entire SRS with overview description purpose, scope, tools used and basic description. The aim of this document is to gather, analyze and give an in-depth insight into the Customer Service Management System by defining the problem statement in detail. The detailed requirement of the Customer Service Management System is provided in this document.

## Purpose

The purpose of this document is to show the requirements for the Customer Service Management System, these systems allows the CRM to add new customers, update the customer details and delete the customer detail and each customer can raise request for service, demo and complaints.

## Intended Audience

This document is intended to be read by, Client.

## Key Objectives of the Project

1. The Customer Relationship Manager (CRM) can enter into the system by using password.
2. The CRM can insert, modify or delete the details of the customer.
3. The customer can enter into the system by using their customer ID.
4. Allow customer to register the complaints, service request or demo request.
5. The CRM can add, update or delete the customer request.

## Project Scope

This project aims to create the development of a Customer Service Management System. Which takes the customer information such as customer ID Name, Address, phone number, type of customer specifies whether the customer is an existing/new to the customer list and adds it to the database. By using the system, Customer Relation Manager can maintain a list that consists of ; Which customers are raised the request and which request they raised? , Whether the customer request is successfully resolved or not? , Is there any pending request is in the list? . These will be help the system to be up to date and well-being of the company too.

# Design Overview

## Customer Service Management System comprises of the following modules to maintain customer database:

|  |  |
| --- | --- |
| Name of the Module | Add Module |
| Handled by | Sai prasanna |
| Description | The CRM adds the record in the database |

|  |  |
| --- | --- |
| Name of the Module | Delete Module |
| Handled by | Ajay kumar |
| Description | The CRM deletes a record from database |

|  |  |
| --- | --- |
| Name of the Module | Update Module |
| Handled by | Hrishikesh |
| Description | The CRM updates the record from database |

|  |  |
| --- | --- |
| Name of the Module | Display Module |
| Handled by | Gayathri |
| Description | The CRM can view the record in the database |

* + **Customer Service Management System comprises of the following modules in registering complaint or requests:**

|  |  |
| --- | --- |
| Name of the Module | Complaint Register Module |
| Handled by | Bhuvaneswari |
| Description | Customer can register the complaint using  his/her customer ID. |

|  |  |
| --- | --- |
| Name of the Module | Service Request Module |
| Handled by | Hrishikesh |
| Description | Customer can request for any service using  his/her customer ID. |

|  |  |
| --- | --- |
| Name of the Module | Demo Request Module |
| Handled by | Sai prasanna |
| Description | Customer can request for  any demo using his/her customer ID. |

|  |  |
| --- | --- |
| Name of the Module | Add/update/delete Complaint Register Module |
| Handled by | Gayathri |
| Description | The CRM can add/update/delete the complaint register raised by the customer as per the status  of the request. |

|  |  |
| --- | --- |
| Name of the Module | Add/update/delete Service Request Module |
| Handled by | Sai prasanna |
| Description | The CRM can add/update/delete the service  request raised by the customer as per the status of the request. |

|  |  |
| --- | --- |
| Name of the Module | Add/update/delete Demo Request Module |
| Handled by | Ajay Kumar |
| Description | The CRM can add/update/delete the demo  request raised by the customer as per the status of the request. |

## Customer Service Management System comprises of the following modules in show reports:

|  |  |
| --- | --- |
| Name of the Module | View request Reports |
| Handled by | Ajay kumar |
| Description | The CRM menu will view request report. |

|  |  |
| --- | --- |
| Name of the Module | Request Report |
| Handled by | Hrishikesk |
| Description | The CRM menu to knowth |

* 1. **Design Objectives**
     1. Add different customer details to the records.
     2. Modify/Update the customer details.
     3. Updating the requests from each customer.
     4. Displays all The details of the customer.
     5. Add/Update/Delete the customer complaints/service/demo requests.

## Design Alternatives

We have used dynamic linked lists because dynamic linked lists are faster then accessing direct files.

## User Module

Customer Relationship Management (CRM) plays a crucial role in defining your company’s growth and enhancing customer relationships. Different CRM Modules constitute this capability.

These modules work together to ensure seamless sales and marketing operations. Along with this, it produces a workflow that is applauded by both customers as well as critics.

## Validation

* Customer Id should be equal to the Customer Id which is allocated for the customer.
* The phone number should be of 10 digits is valid.
* The Customer name should be of alphabets, others are considered as invalid.
* The password should be same as the previous password.

# Detailed System Design

Manage Request

Add Request

View Request Report

Add Customer

Manage Customer

CRM menu

Customer Menu

Main

Update Customer

Remove Customer

|  |  |  |  |
| --- | --- | --- | --- |
| Delete Request | | | Update Request |
|  | |  | |
|  | Request Description | | |

Figure 3.1: Overall Flow of the System

Demo

Services

Complaints

Start

Main Menu

CRM Menu

View Report

Exit

Customer Menu

Figure 3.2: Flow chart for Main menu of the application

1. **Environment Description:**
   1. **Time Zone Support:** IST- Kolkata
   2. **Language Support**: English
   3. **User Desktop Requirements:**
      1. 64-bit processor, 1 GHz or faster
      2. At least 2 GB free hard drive space
      3. At least 1 GB RAM

## Deployment Considerations:

1. Easy setup: no session storage daemon, use tmpfs and memory caching to enhance performance.
2. Local storage is used
3. No network latency to consider.
4. To scale buy a bigger CPU, more memory, larger hard drive, or additional hardware
   * 1. **Integration Requirements:**
5. Language: C
6. Tools: GDB , Valgrind, Makefile, Splint ,vi editor
7. Compiler: GCC
8. Environment: Linux

## Network:

End to End

## Configuration:

**4.5.1 Operating System:-** Linux environment