Client Management with Finger Printing and GPS

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ABSTRACT: The main theme of this paper lies in the analysis of existing Customer Relationship Model systems. Client Management System(CMS) is a web-based application that lets you manage your clients effectively. By implementing the latest in web design techniques, the system is designed to look and work perfectly across all operating systems and devices. Client Management System utilizes a modern and responsive design, which responds and is optimized for the device that it is being accessed from various aspects. Authentication and authorization are two of the most important security features for Client Management. In this paper, we propose a location-based authentication and authorization scheme for the Client Management System. The core of our design includes these parts such as location registration, authentication, and authorization as well as location verification, are described.

I. INTRODUCTION

This is an Online Client Management system software project that serves the functionality of client management. The client management system can be named by many different names such as Contact Database, Contact Management Systems, Customer Relationship Model (CRM), online database, and more. The primary goal of client management systems is to integrate and automate sales, marketing, and customer support by leading a perfect client database. Client Management systems today also work on a customer. This is a web-based application developed in flutter for the frontend and the backend of this project is run by node js as a server with MongoDB as a database. The project provides most of the basic functionality required for an event for a client meeting. The system allows the sales associate to work at a specified time of the event. all this data is logged in the database and the sales associate is given the specified event number. The event number is sent to the sales associate from the admin and they may interact with the client as per his requirements and his contact data stored in the database for future access.

II. SCOPE OF PROJECT

The client Management system streamlines customer interactions and services. CMS provides a solution of ease communicating with potential and current customers. As a survey tells, 59 percent of customers report that personalized communication with the company is very important in this modern age. Client Management helps sales associates to interact with customers. The development and maintenance of mutually beneficial long-term relationships with the client could be achieved through this model.

III. EXISING SYSTEM

- The present scenario offers manual data entry. Not only this, if a client is working on multiple projects, then multiple reports are generated.

- A lot of time is wasted in creating the reports as well as maintaining them.

- In case, if any query arises to get the information about the client, the whole report is re-typed or xeroxed.

- This seriously affects the authentication of the system. This Client Management System is totally outdated and involves high risk of ambiguity and redundancy.

IV. PROPOSED SYSTEM

- The proposed Client Management System is to have everything completely automated and computerized.

- The software is very easy to use and manages a perfect database. The redundancy and ambiguity could be removed by assigning every client a unique number.

- The Client Management System project will be categorized and subcategorized as well for ease of use as they will be allotted a unique identification number by the admin.

- In this application, all the information will be available only when the sales associate reaches the perfect location and will be opening through fingerprint access of the sales associate.

V. SYSEM ARCHITECTURE

In this system, the client location will be sent to the sales associate through the location in the database from the admin. The work of the sales associate is to go to the specified location and finish the task provided by the admin.
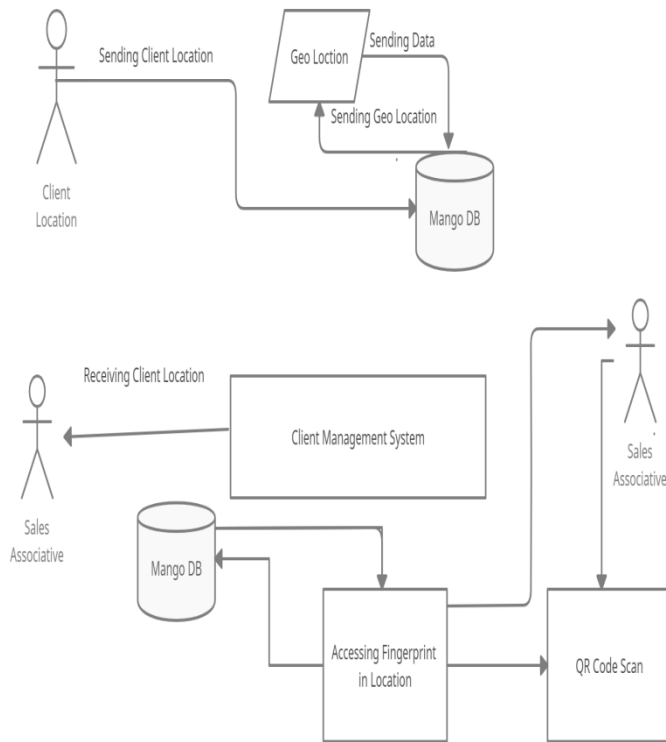

Figure:1 System Architecture

A. UML DIAGRAMS

Use case diagram

The data from the user are taken as inputs. Then the data is processed. Data is implemented in the trained module and are tested. After testing the data, the weather is predicted and executes the output.
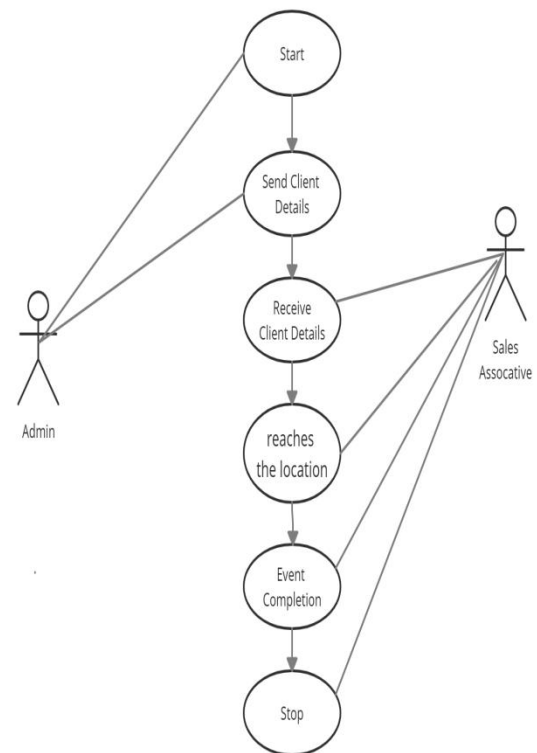

Figure 2: UML Diagram

Data flow diagram

The data flow diagram that represents the flow of data process and generates the report.
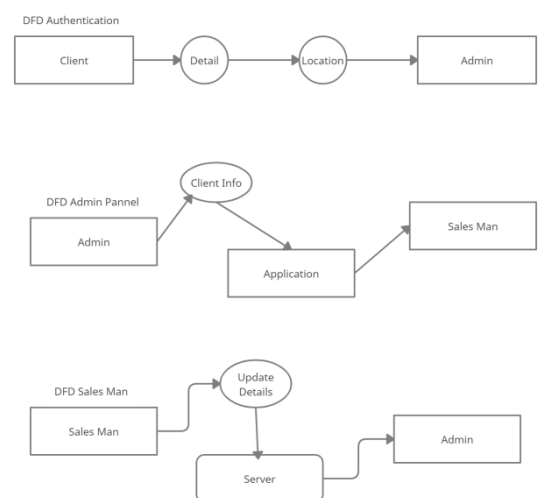

Figure 3 :Data Flow Diagram

ER diagram

ER diagram abbreviated as Entity-relationship model outlines the structures of the database. An ER model is usually a blueprint or design which is later applied to database.
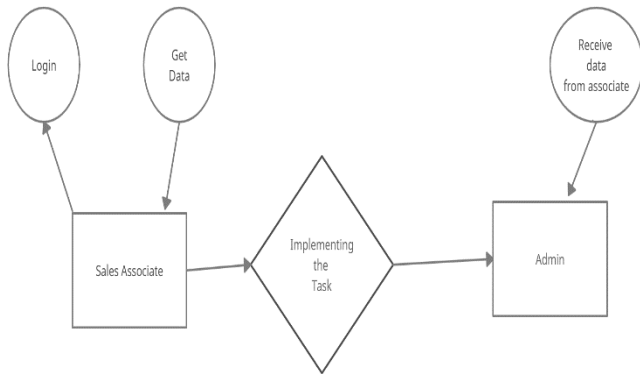

Figure 4: ER Diagram

Flow chart

A flowchart is a representation of the process using diagrams. It is also defined as a diagrammatical representation of algorithms or step by step process of solving tasks.
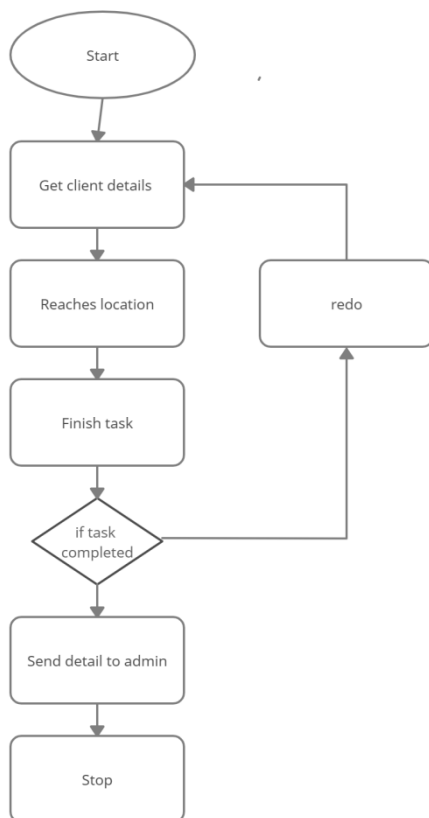

Figure 5 : Flow Chart

VI. MODULES

- Authentication Module
- Display Module
- QR Module
- GPS Module

Authentication Module:

The Authentication Module is the starting part of this application. It gets the email and password of both the manager and salesman then it leads to the homepage based on the user.

Display Module

The manager's homepage contains the ability to create events and also see a chart regarding the data obtained from the salesman's page. The salesman's homepage contains the page which displays the information of all the clients with their location

QR Module

Every client has a QR provided by the manager who is the admin. And the salesman after reaching the location of the clients and finished their work has to scan the QR code provided by the manager to authenticate their work completion.

GPS Module

While providing the details of the client, the location of the client can also be viewed on a map. This module displays a map while clicking on the location details of the client. It redirects to an inbuilt map page and the location of the client marked on the map.

VII.   CONCLUSION

It is proposed by a scheme using GPS and QR to increase the accuracy of WLAN localization. The navigation system selects the WLAN or GPS using their predicted accuracy. This contribution proposed WLAN Finger Print Navigation employing Flutter with MongoDB. A Principle and experimental result of Finger Print using Flutter – Local Auth is described. This contribution shows concepts of the proposed techniques. The detailed designs and overall experiments are further studies.

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