**Secure Banking Application**

**High Level Design**

**Document Control:**

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| **Secure Banking Application:** | | | | | | | | |
| Guided by - Sikander |  |  | |  |  |  |  |  |
| **Date** | **Version** | **Author** | **Brief Description of Changes** | | | | **Approver Signature** | |
| 05-11-2022 | 1.0 | Swetha, Bhargavi, Rohitha, Saranya, Jyosna | Chat history modifications | | | |  | |
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**Introduction**

**1.Purpose:**

The purpose of this project is to provide secure online banking web application developed for individual customers, merchants and employees of bank. This application is developed with major focus on the security of the application.

**1.1 Intended Audience**:

There is no such specific audience, it could be a customer.

**1.2 Acronyms/Abbreviations:**

|  |  |
| --- | --- |
| Customer | To access the services |

**1.3 Project Purpose:**

Now a days, banking system has been more accessible than ever to perform essential duties like online transfer, changing account and the main purpose of the project is to design such banking application securely according to the design guidelines set in the course as well perform security testing.

**1.4 Key Project Objectives:**

* Allow customer registrations.
* Allow users to login.
* Validates personal data (example: Aadhar number, name).
* Allow users to credit or debit services.

**1.5 Project Scope and Limitations:**

The customers can be able to register on the application then only they can login to the portal to access the primaries.

**1.5.1 In Scope:**

The system also provides interface for the internal users; regular employees to process all the customer transactions and requests. Individual customers, merchants, regular employees can use this application each type of user have their own functionalities to perform.

**1.6 Functional Overview:**

The following Functions are included in the program:

1. void register\_customer():

Customer registration function takes the input from the user such as name, Aadhar\_no, number, password.

1. Void\_login():

Customer has to login with name and password, if the password is correct he/she can processed further .

**2. Design Overview:**

|  |  |
| --- | --- |
| Name of the Module | Customer Registration and Login |
| Handled by | Saranya, Swetha |
| Description | Registration: Aadhar no, name, phone, password details store in file.  Login: search the given input in details file and allow login if details match.  After completing registration, she can successfully enter into the portal. |

**2.1 Design Objective:**

In secure banking application there are two objectives namely primary and secondary.

**Primary:**

To access the services provided by the application the customer need to register with their personal details(Aadhar number, name, phone number) and the customer should login with a valid user name and password.

**Secondary:**

The customer who are logged in can be able to access the services.

**2.1.2 User Interface Paradigms:**

The customer is to login with username and password. The details of the customers are stored in the server.

**2.1.3 Error Detection:**

The customer should register or else the customer should not access the primaries in the application. The registered user have to login with valid credentials otherwise, they will get invalid username and password.

**2.1.4 Performance:**

The application will work on the server. The performance depends on the server dependency.

**2.1.5 Maintainance:**

To make the application more secure the SSL protocol is used for encryption of data transmitted between client and server. The authentication is setup for individual customers or registered into the application. The factor is by supplying username and password.

**3.Environment Description:**

**3.1 Time Zone Support:** IST-Kolkata

**3.2 Language Support:** English

**3.3 User Desktop Requirements:**

a. 64-bit processor, 1GHz or faster

b. At least 2 GB free hard drive space

c. At least 1 GB RAM

**3.4 Server-Side Requirements:**

a. 64-bit processor, 1 GHz or faster

b. At least 1 GB free hard drive space

c. At least 1 GB RAM

**3.4.1 Deployment Considerations:**

System is easy to deploy

**3.4.2 Integration Requirements:**

1. Language: C

2. Tools: Valgrind,Makefile,splint

3. Complier: gcc, vi editor

4. Linux

**3.4.3 Network:** End to End.

**3.5 Operating System:** Linux.