**DESCRIPTION**

**Project objective:-**

ICIN is one of the top banking firms that accepts deposits from the public for the purpose of lending loans to the public. It also invests an amount in securities.

Recently, the business analysts noticed a drop in the number of customers of the bank. They found out that online banking systems of banks like AXIS and American Express are gaining more profits by eliminating middlemen from the equation. As a result, the team decided to hire a Full Stack developer who can develop an online banking web application with a rich and user-friendly interface.

You are hired as one of the Full Stack Java developers and have been asked to develop the web application. The management team has provided you the requirements and their business model so that you can easily arrange different components of the application.

The admin portal deals with all the backend data generation and product information. The admin user should be able to:

* Authorize the roles and guidelines for the user.
* Grant access to the user regarding money transfer, deposits, and withdrawal.
* Block the user account in case of any threat.
* Authorize the cheque book requests.

The user portal with the user activities. The end-user should be able to:

* Register or log in to the application to maintain a record of activities.
* Deposit and withdraw money from the account.
* View transactions and balance in the primary and savings account.
* Transfer funds between different accounts and add recipients.
* Request cheque books for different accounts.

**Technologies and Tools Used:-**

* Java: To build the server and handle the core logic of the application.
* Spring: To build the core of the web application following the Model-View-Controller design pattern.
* JDBC: To connect the website to the database.
* Eclipse IDE: To Write the code.
* HTML 5: To make the structure of website.
* CSS 3: To format the contents of the website.
* JavaScript: To handle the presentation of the structure and various elements of the website.
* TypeScript: To handle the logic of the website and ensure consistency of Angular.
* Angular: To beautify and arrange the website’s various components for the end-user.
* Docker: To be able to run the project as a docker image or through the command-line interface.

**Project Users Stories:-**

The project is planned to be completed in 4 sprints. Tasks assumed to be completed in the sprint are:

* Creating the flow of the application.
* Initializing git repository to track changes as development progresses.
* Writing the software of the application using the requisite languages to fulfil the requirements of the project.
* Testing the application with different kinds of inputs and edge cases.
* Pushing code to GitHub.

The following sprints were carried out to complete the application:

Sprint 1

* Create the basic outline and architectural flow of the web application.
* Create the basic structure of the website along with the home page.
* Allow the users to register and login on the website.

Sprint 2

* Create a home page for the login of the user and the administrator.
* Create a page where the users post logging in can view the balance of their accounts. Show the users option to deposit or withdraw money from their specific bank account.
* Make a separate gateway page where the users can carry out the transactions related to the accounts. Allow multiple transactions to take place in a single session.

Sprint 3

* Create a page specifically dedicated for the administrator to carry out their activities.
* Allow the administrator to set the banking policies, terms, and conditions to be accepted by the user. Also allow them to block certain users violating the bank policies.
* Allow the admin to modify the details of the bank accounts such as transaction history or available balance.
* Allows the users to request cheque book or modify their personal details.

Sprint 4

* Add the various assets to the application such as pictures and JARs.
* Complete the configurations of the various elements of the website.
* Test and debug the application.
* Push the final set of code to GitHub.