

WIPRO NGA Program – Java FSD Angular

Capstone Project Presentation – 23rd Sept 2024

Project Title – Daily Bank (Online Banking)

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CAPSTONE PROJECT

DAILY BANK ONLINE BANKING SYSTEM

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INTRODUCTION

- The Project aims to design an Online Banking System application which enables the customers to perform a variety of banking activities, including Account management , Fund Transfers, Transaction Monitoring, all from the comfort of their devices.
- Daily Bank is a web-Application which provides a user friendly interface and an easy efficient way to banking.
- Feature of this system will be similar to an Online Banking System. As a user can-
- Open Account
- Register for Internet Banking
- Check Account Details, Account Statement, Account Summary , Transaction Details
- Add Payee, Get Payee Details
- Fund Transfer

AIM OF THE PROJECT

- **User can open new Account & Register for Internet Banking**
- **Admin can also Credit and Debit Amount in users account by their static Credentials.**
- **Customers can check Account details, Account Summary, Account statement, Transactions once they logged in.**
- **Customer can change existing password.**
- **Provide Online Banking Facility to Customers such as Account Transaction Operation like Fund Transfer using NEFT from one account to another existing account of bank.**

OBJECTIVE OF THE PROJECT

- **Enhance User Convenience:**
 - Provide a seamless and easy-to-navigate interface that allows customers to perform transactions anytime, anywhere.
- **Digitize Banking Operations:**
 - Shift traditional banking tasks like balance inquiries and fund transfers to a secure online platform.
- **Customer and Administrator both can interact with Frontend.**
- **Administrator are allowed to do Credit and Debit Transactions by provide the credential each transaction.**

SYSTEM REQUIREMENTS

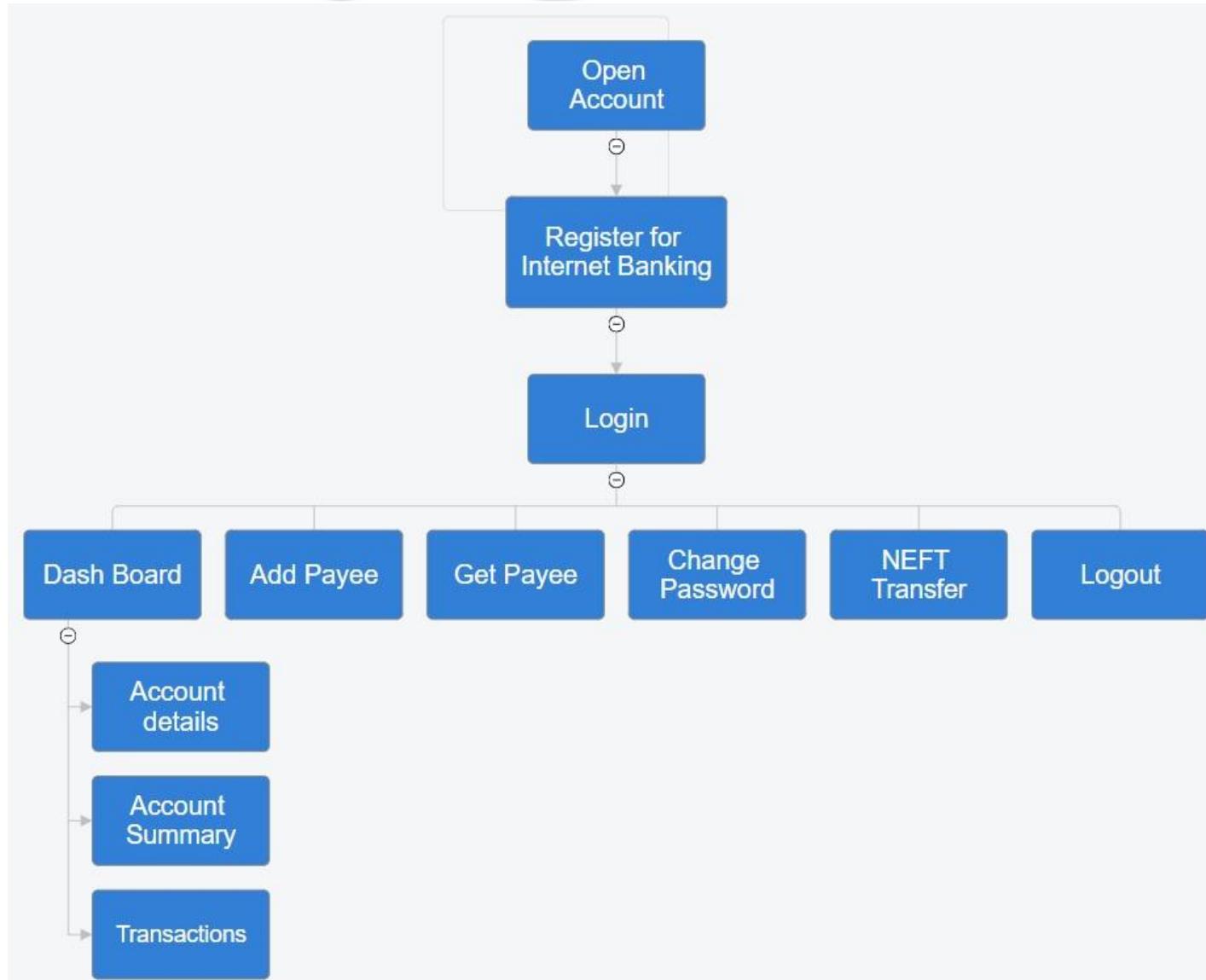
✓ Hardware Requirements:

- Processor:** Quad-core processor (at least 2.5 GHz)
- RAM:** 16 GB (minimum), 32 GB (recommended)
- Storage:** 512 GB SSD (minimum), 1 TB SSD (recommended)
- Operating System:** Windows

✓ Software Requirements:

- Java Development Kit (JDK) 17 or later**
- STS(for Backend Development)**
- Postman - REST API Testing Tool**
- Swagger 2.0.2 - REST API Documentation Tool**
- Node.js (for Angular development)**
- npm (package manager for Node.js)**
- Angular CLI (for Angular development)**
- Visual Studio Code - Editor**

Activity Diagram for Users



Technology Used

- **Spring Boot 3.3**
- **Angular 18**
- **MongoDB 4.4 or later**
- **Bootstrap 5**
- **Hibernate 6**
- **JPA 3.3**
- **Git (for source code management)**

Project Module

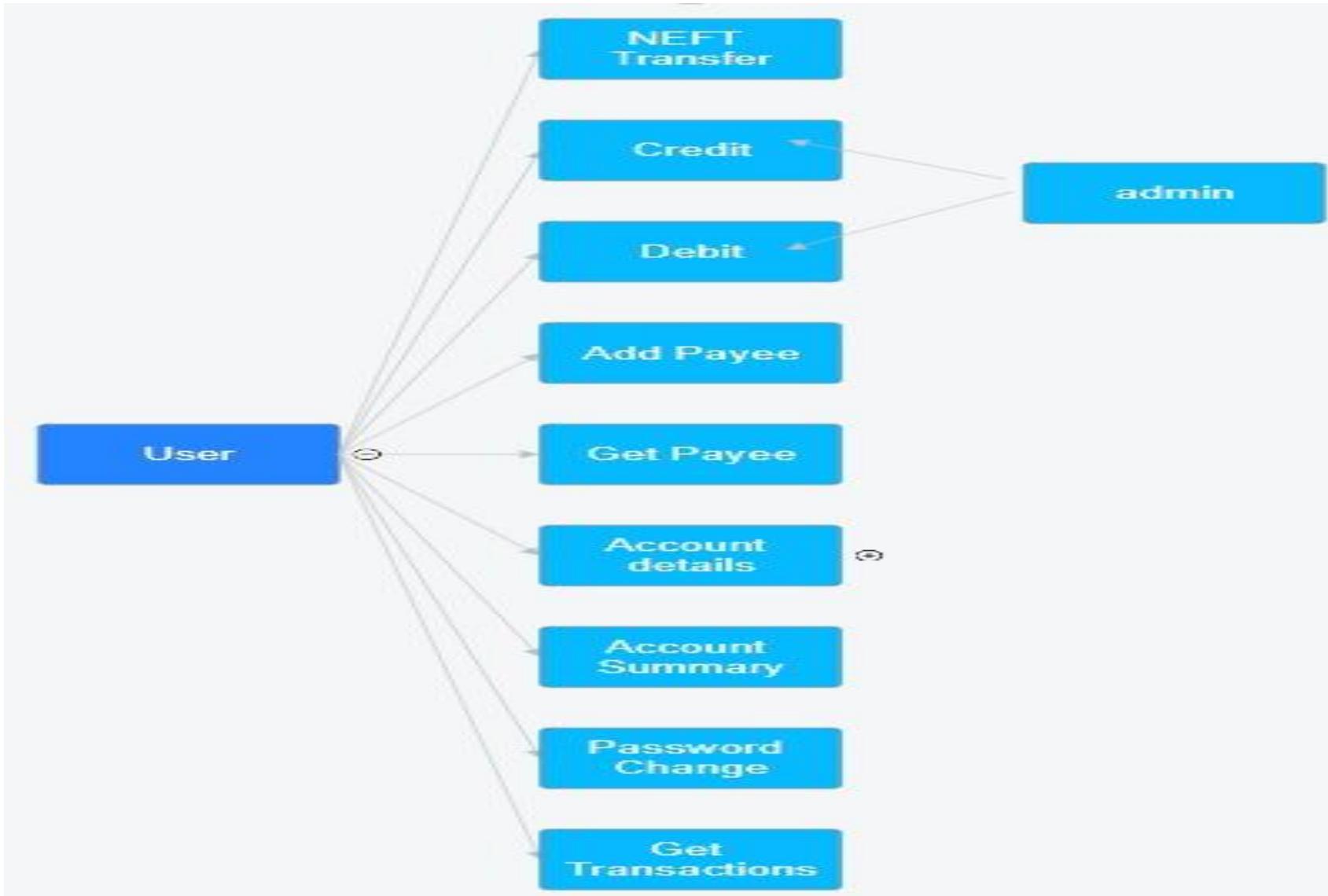
ADMIN MODULE:

- Credit
- Debit

USER MODULE:

- Open Account
- Register For Internet Banking
- Login
- Dashboard
 - Account Details Page
 - Account Summary Page
 - Account Transaction
- Add Payee
- Get Payees
- Change Password
- Fund Transfer
- Logout

USE CASE DIAGRAM



PROBLEM STATEMENT

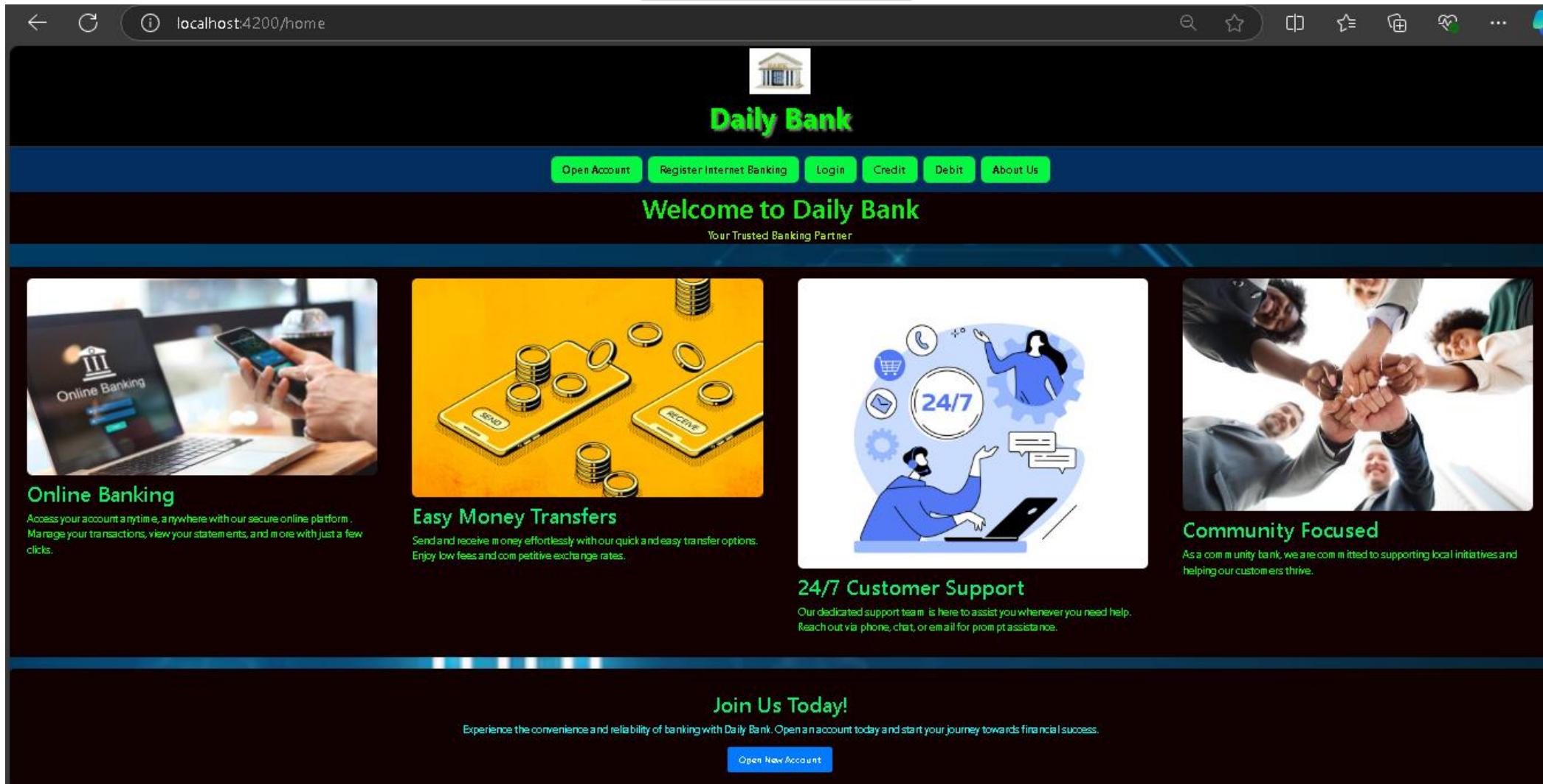
- Today's most of the online banking websites are lagging in some areas like, some are not providing proper UI which could be user friendly, while some are slow in processing pages or are not dynamic.
- Software must be developed for online banking system to be responsive.

SOLUTION

- Many people used online banking as means of money transaction so that they can transfer money from one user to another without visiting to respective branch.
- Users can transfer money within a short period of time and verify recent transactions.
- Users can view their account profile whenever they want.
- Information is saved, and the corresponding Update take place in database.

SCREENSHOTS OF THE PROJECT

HOME PAGE



The screenshot shows a web browser window for 'localhost:4200/home'. The title bar displays the URL. The main content area features a dark blue header with the 'Daily Bank' logo and a building icon. Below the header is a navigation bar with buttons for 'Open Account', 'Register Internet Banking', 'Login', 'Credit', 'Debit', and 'About Us'. The main heading 'Welcome to Daily Bank' is centered above the subtext 'Your Trusted Banking Partner'. The page is divided into four main sections: 'Online Banking' (image of a laptop and smartphone, text about secure access), 'Easy Money Transfers' (image of phones with 'SEND' and 'RECEIVE' buttons, text about low fees and exchange rates), '24/7 Customer Support' (image of two people at a computer, text about dedicated support via phone, chat, or email), and 'Community Focused' (image of diverse people holding hands, text about supporting local initiatives). At the bottom, there's a call-to-action 'Join Us Today!' with a subtext about convenience and reliability, and a 'Open New Account' button.

localhost:4200/home

Daily Bank

Welcome to Daily Bank
Your Trusted Banking Partner

Online Banking

Access your account anytime, anywhere with our secure online platform. Manage your transactions, view your statements, and more with just a few clicks.

Easy Money Transfers

Send and receive money effortlessly with our quick and easy transfer options. Enjoy low fees and competitive exchange rates.

24/7 Customer Support

Our dedicated support team is here to assist you whenever you need help. Reach out via phone, chat, or email for prompt assistance.

Community Focused

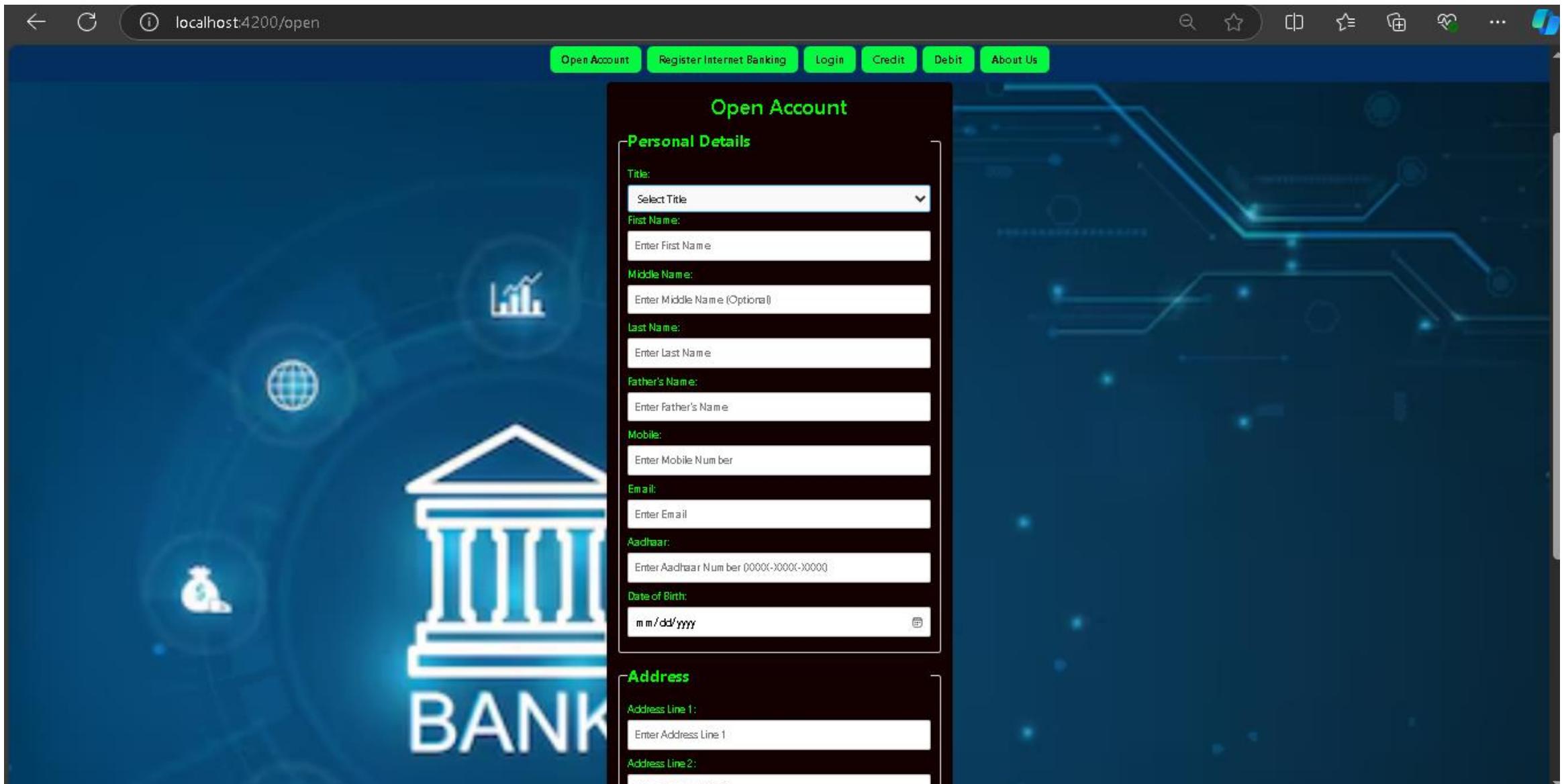
As a community bank, we are committed to supporting local initiatives and helping our customers thrive.

Join Us Today!

Experience the convenience and reliability of banking with Daily Bank. Open an account today and start your journey towards financial success.

Open New Account

OPEN ACCOUNT



The image shows a web browser window with a dark blue background featuring a stylized bank building icon and a globe icon. The URL bar at the top left shows "localhost:4200/open". The top navigation bar includes links for "Open Account", "Register Internet Banking", "Login", "Credit", "Debit", and "About Us". A search icon and other browser controls are visible on the right. A central modal window titled "Open Account" contains a "Personal Details" section with the following fields:

Title:	Select Title
First Name:	Enter First Name
Middle Name:	Enter Middle Name (Optional)
Last Name:	Enter Last Name
Father's Name:	Enter Father's Name
Mobile:	Enter Mobile Number
Email:	Enter Email
Aadhaar:	Enter Aadhaar Number (0000-0000-0000)
Date of Birth:	mm/dd/yyyy

Below this, there is a "Address" section with fields for "Address Line 1" and "Address Line 2".

REGISTER FOR INTERNET BANKING



localhost:4200/register

Open Account Register Internet Banking Login Credit Debit About Us

Account Number:
1246160923

User ID:
Raj123

Login Password:
[Redacted]
Invalid login password. Please enter at least 8 characters, including uppercase, lowercase, numbers, and special characters.

Confirm Login Password:
[Redacted]
Invalid confirm login password. Please enter at least 8 characters, including uppercase, lowercase, numbers, and special characters.

Transaction Password:
[Redacted]
Invalid transaction password. Please enter at least 8 characters, including uppercase, lowercase, numbers, and special characters.

Confirm Transaction Password:
[Redacted]
Invalid confirm transaction password. Please enter at least 8 characters, including uppercase, lowercase, numbers, and special characters.

Register **Cancel**

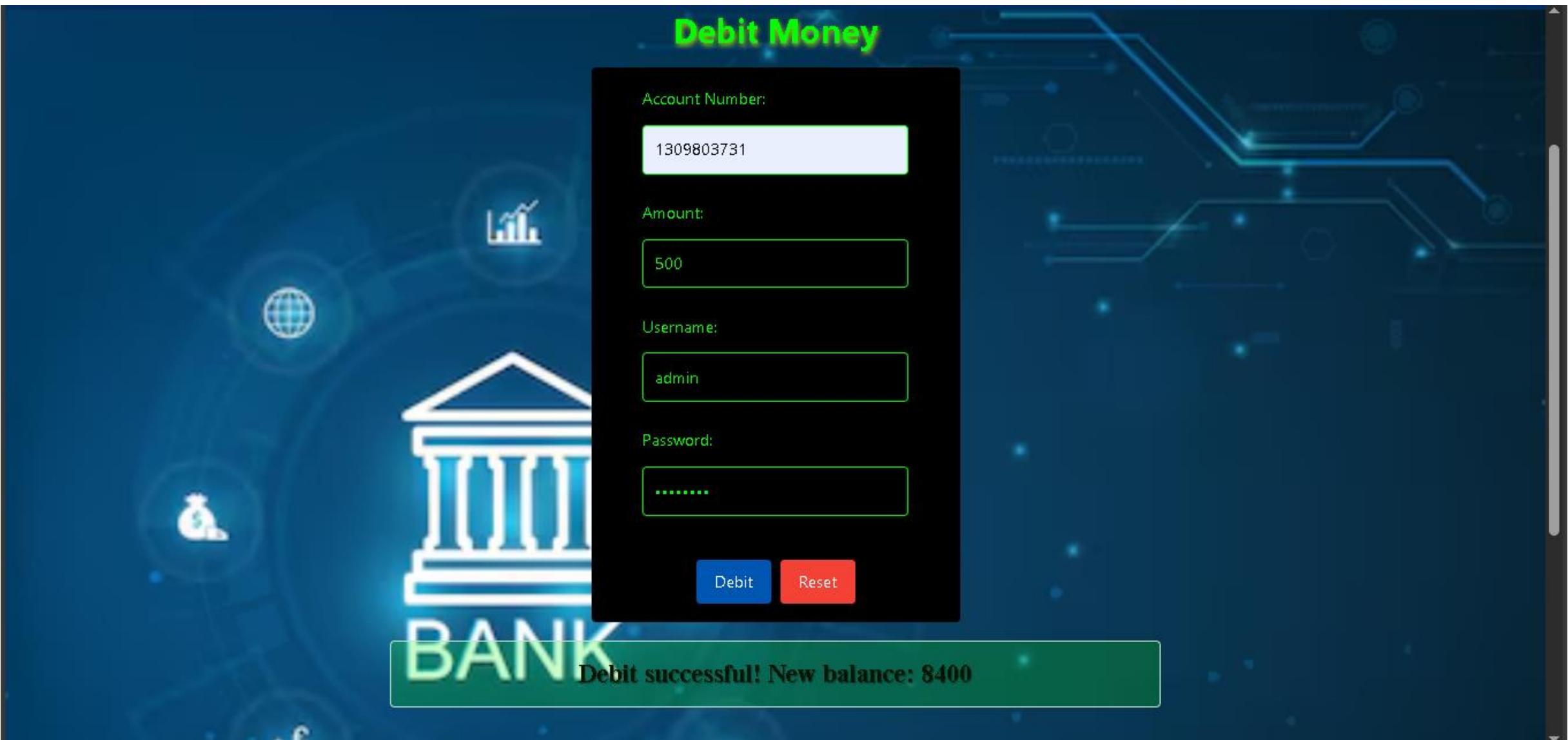
CREDIT

The screenshot shows a web browser window with the URL `localhost:4200/credit`. The page title is "CREDIT". The main content is a "Credit Money" form from "Daily Bank". The form fields are:

- Account Number: 1309803731
- Amount: 1200
- Username: adm in
- Password: (redacted)

Below the form is a green success message: "Credit successful! New balance: \$200". The background features a blue-themed design with icons of a bank building, a globe, a chart, a bag of money, and a Wi-Fi signal.

DEBIT



LOGIN

localhost:4200/login

BANK

Daily Bank

Open Account Register Internet Banking Login Credit Debit About Us

Login Form

UserId:

Login Password:

Login

ABOUT US

[Open Account](#)[Register Internet Banking](#)[Login](#)[Credit](#)[Debit](#)[About Us](#)

About Us

At Daily Bank, we are committed to providing exceptional banking services to our community. Our team is dedicated to understanding your financial needs and helping you achieve your goals. With a rich history and a focus on innovation, we strive to offer solutions that empower our customers.



Our Mission

Our mission is to deliver comprehensive financial solutions tailored to each customer's unique needs. We aim to foster a trustworthy environment where our clients can thrive and achieve financial stability through personalized support and innovative products.



Our Values

Integrity, excellence, and customer focus are at the core of our values. We believe in transparency and are committed to building lasting relationships with our clients. Our team works tirelessly to ensure that we provide the best products and services to help you succeed financially.

DASHBOARD

The screenshot shows a web browser window with the URL `localhost:4200/dashboard` in the address bar. The page title is **DAILY BANK**. At the top center is a small bank building icon. Below the title is a navigation bar with rounded corners containing the following buttons: Home, Dashboard, Add Payee, Get Payees, Change Password, Neft Transfer, Logout, and a welcome message "Welcome: Abhinav123". The main content area has a dark blue background with a circuit board pattern. A large button labeled "Dashboard" is centered at the top of this area. Below it are three smaller buttons: "Details", "Account Summary", and "Transactions". To the left of the "Details" button is a chart icon, and to the right of the "Transactions" button is a hand holding a gear icon. The bottom of the screen features a stylized white house outline against a dark blue background.

ACCOUNT DETAILS

localhost:4200/dashboard

Details Account Summary Transactions

Account Details

Account Number	1213332563
Title	Mr
First Name	Abhinav
Middle Name	Kumar
Last Name	Kanishka
Father Name	Kamal Kishore Bishwas
Email	abhinav@gmail.com
Mobile	8340128591
Adhar	448356406462
Date of Birth	2000-10-09
Address	Sautha , Sarochia, Garhbanaili, Rajnagar, Bihar - 854325

ACCOUNT SUMMARY

The screenshot shows a web browser window with the URL `localhost:4200/dashboard`. The page title is "Daily Bank". The top navigation bar includes links for Home, Dashboard, Add Payee, Get Payees, Change Password, Neft Transfer, Logout, and a welcome message for "Abhinav123". Below the navigation is a main menu with tabs for Details, Account Summary, and Transactions, where "Account Summary" is selected. The central content area displays an "Account Summary" card with the following details:

Account Holder Name	Abhinav Kanishka
Balance	15500
Recent Transactions	<ul style="list-style-type: none">Transaction: CREDIT Amount: 5000.0Transaction: NEFT DEBIT Amount: 500.0Transaction: NEFT DEBIT Amount: 1000.0Transaction: NEFT CREDIT Amount: 1000.0Transaction: NEFT CREDIT Amount: 5000.0

The background features a blue digital circuit board design with icons of a globe and a money bag.

TRANSACTION

The screenshot shows a web browser window for 'localhost:4200/dashboard'. The title bar reads 'localhost:4200/dashboard'. The main header 'Daily Bank' is displayed in large green letters. Below it is a navigation bar with green buttons: Home, Dashboard, Add Payee, Get Payees, Change Password, Neft Transfer, Logout, and a welcome message 'Welcome: Abhinav123'. A large black banner with the word 'Dashboard' in yellow is centered above a row of three buttons: Details, Account Summary, and Transactions. Another black banner below it displays the word 'Transactions' in yellow. A table with a white border and black header row is shown, listing six transactions. The table columns are: From Account, To Account, Amount, Type, Date, and Remark.

From Account	To Account	Amount	Type	Date	Remark
NA	NA	5000	CREDIT	9/22/24, 12:44 PM	ADMIN
1213332563	1123303745	500	NEFT DEBIT	9/22/24, 10:57 AM	From Abhinav To Gaurav
1213332563	1123303745	1000	NEFT DEBIT	9/22/24, 10:52 AM	From Abhinav To Gaurav
1123303745	1213332563	1000	NEFT CREDIT	9/22/24, 10:34 AM	From Gaurav To Abhinav
1123303745	1213332563	5000	NEFT CREDIT	9/22/24, 10:25 AM	From Gaurav To Abhinav
1213332563	1123303745	1000	NEFT DEBIT	9/22/24, 10:19 AM	From Abhinav To Gaurav

ADD PAYEE

localhost:4200/add-payee

Daily Bank

Home Dashboard Add Payee Get Payees Change Password Neft Transfer Logout Welcome: Abhinav123

Add Payee

Beneficiary Name:

Account Number:

Confirm Account Number:

Nickname:

Add Payee Reset

A screenshot of a web application titled "Add Payee". The page has a dark blue header with navigation links: Home, Dashboard, Add Payee (highlighted in green), Get Payees, Change Password, Neft Transfer, and Logout. A welcome message "Welcome: Abhinav123" is displayed next to a user icon. The main content area has a black background with white text labels for "Beneficiary Name", "Account Number", "Confirm Account Number", and "Nickname", each followed by a text input field. At the bottom are two buttons: "Add Payee" (grey) and "Reset" (green). The background features faint icons of a globe, a money bag, and a circuit board.

GET PAYEES

The screenshot shows a web browser window with the URL `localhost:4200/get-payees`. The page title is **Daily Bank**. The top navigation bar includes links for Home, Dashboard, Add Payee, Get Payees, Change Password, Neft Transfer, Logout, and a welcome message for the user **Abhinav123**. The main content area is titled **Payees** and displays a table with three rows of data:

S.No	Beneficiary Name	Account Number	Nickname
1	Gaurav	1123303745	Gaurava
2	Raj	1246160923	Raju
3	Nitin Lal	1754237133	Nitu

The background features a blue-themed design with bank-related icons like a globe, hands holding a gear, and a stylized building.

CHANGE PASSWORD

The screenshot shows a web browser window for the URL `localhost:4200/set-new-password`. The title bar includes standard icons for back, forward, search, and refresh. The main header features a bank building icon and the text "Daily Bank". Below the header is a navigation bar with green rounded rectangular buttons: "Home", "Dashboard", "Add Payee", "Get Payees", "Change Password" (which is highlighted in blue), "Neft Transfer", and "Logout". To the right of the navigation bar is a welcome message: "Welcome: Abhinav123" with a user icon. The central content area has a dark blue background with a faint bank building and chart icon. A black rectangular box contains the heading "Change Password". Below it is a form with five input fields and one button:

User ID:	<input type="text"/>
Old Password:	<input type="password"/>
New Password:	<input type="password"/>
Confirm New Password:	<input type="password"/>
Update Password	

NEFT TRANSFER

localhost:4200/neft

Daily Bank

Home Dashboard Add Payee Get Payees Change Password Neft Transfer Logout Welcome: Abhinav123

NEFT Transaction

From Account:
1213332563

To Account:
1309803731

Amount:
500

Remark:
FROM ABHINAV TO ANIL

Submit

TRANSFER SUCCESSFUL

localhost:4200/neft

NEFT Transaction

NEFT Transaction Successfull

Transaction Successfull

From Account: 1213332563

To Account: 1309803731

Amount: 500

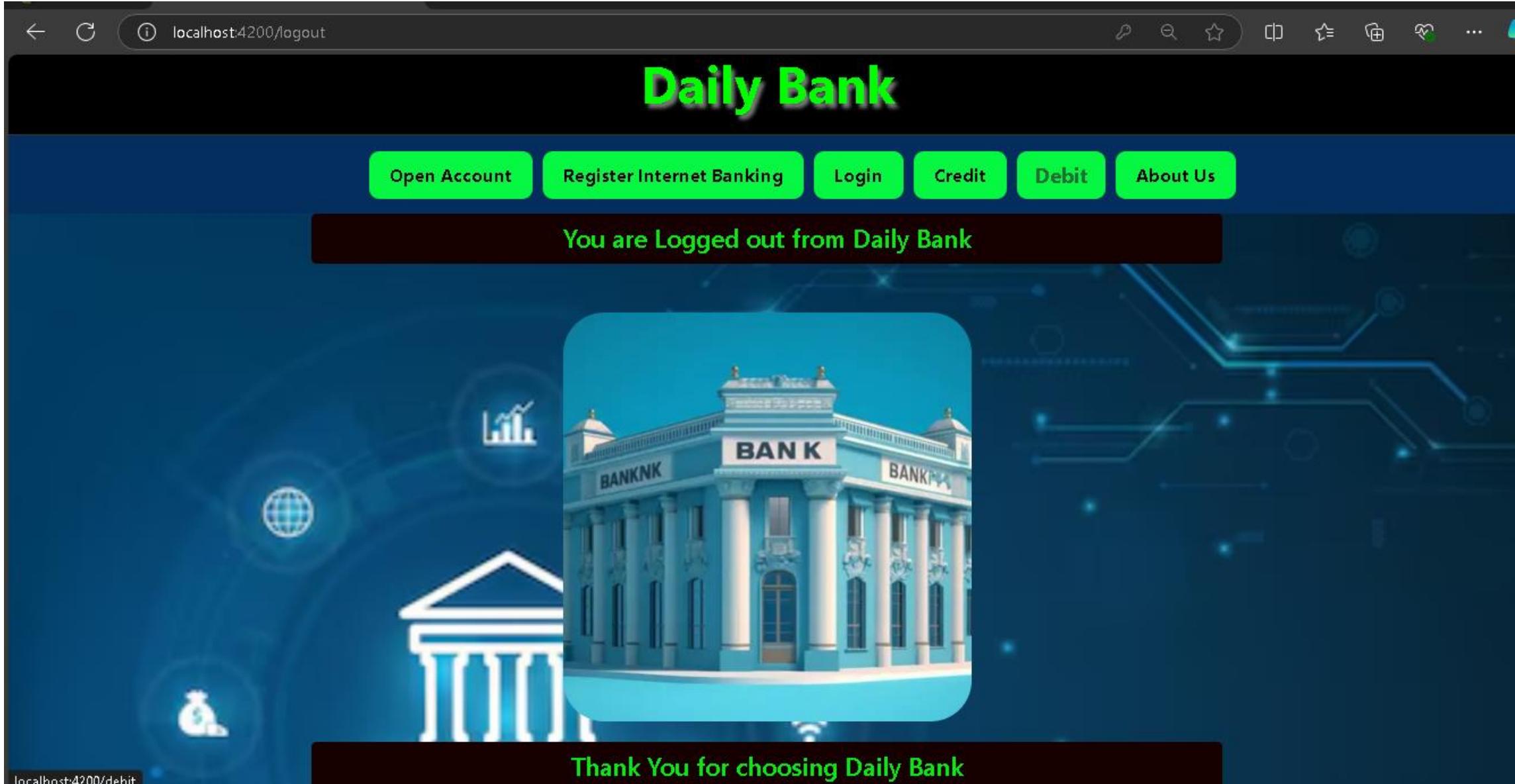
Type: NEFT DEBIT

Transaction Date: Sep 22, 2024, 10:39:46 PM

Remark: FROM ABHINAV TO ANIL

LOGOUT

localhost:4200/logout



The image shows a web browser window with the URL "localhost:4200/logout" in the address bar. The page title is "Daily Bank". A navigation bar at the top includes "Open Account", "Register Internet Banking", "Login", "Credit", "Debit", and "About Us". A central message box displays "You are Logged out from Daily Bank". Below this, there is a large image of a classical bank building with four columns and a pediment. The word "BANK" is visible on the building's facade. The background features abstract blue circular patterns and glowing circuit board lines. At the bottom, another message box says "Thank You for choosing Daily Bank". The footer of the page shows the URL "localhost:4200/debit".

Daily Bank

Open Account Register Internet Banking Login Credit Debit About Us

You are Logged out from Daily Bank

BANK

Thank You for choosing Daily Bank

localhost:4200/debit

SWAGGER

The screenshot shows the Swagger UI interface running at `localhost:8085/swagger-ui/index.html`. The interface is organized into sections corresponding to different controller classes:

- admin-controller**: Contains two POST methods:
 - `POST /api/admin/debit`
 - `POST /api/admin/credit`
- payee-controller**: Contains two methods:
 - `POST /api/account/{accountNumber}/payee`
 - `GET /api/account/{accountNumber}/payees`
- authentication-controller**: Contains two POST methods:
 - `POST /api/account/setNewPassword`
 - `POST /api/account/login`
- account-controller**: Contains four methods:
 - `POST /api/account/register`
 - `POST /api/account/open`
 - `GET /api/account/{accountNumber}`
 - `GET /api/account/summary/{accountNumber}`
- transaction-controller**: Contains three methods:
 - `POST /api/account/neft`
 - `GET /api/account/{accountNumber}/transactions`
 - `GET /api/account/recent-transaction/{accountNumber}`

ENG 9:46 AM

CONCLUSION

- This project is designed to meet the requirements of an online banking system.
- We have designed the project to provide the user with an easy way to view his account profile do online transactions and other actions.
- In this project user is provided with a website that can be used for online banking.
- To implement this we have used SpringBoot as backend and Angular as Frontend.
- This website allows users to open, register for internet banking, login, view account details, account summary, statement, payees details, NEFT transfer.
- Admin is doing credit and debit transaction.

FUTURE SCOPE

- This project can be upgraded by using phone OTP for user authentication.
- We can add different modes of money transfer.
- Application can be upgraded by improving performance as per user feedback.
- There is a scope of adding more security.

THANK YOU