

GENESIS - Learning Outcome & Mini-project Summary Report



LTTTS
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L&T Technology Services



Details

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Miniproject -1 [Team]

Module: JavaScript and Jasmine Framework, and SDLC

Topic and Subtopics

Design of a Bank Web page:

- For designing the webpage, we have used HTML and CSS language to provide structure and style to our web page
- In this java script is being used to make the web page more interactive.

Jasmine Framework Unit Testing

- We had implemented Jasmine framework to test our JavaScript application.

Selenium Automation Testing

- we had automated our web page using selenium.

Objectives & Requirements

Objectives

Our Objective is to create a Web page for a bank which consists of the following requirements:

High level Requirements

- H1 - Home Page
- H2 – Banking
- H3 – Loans
- H4 - Online Services
- H5 - Terms and Conditions
- H6 - First Time User
- H7 – Login

Low Level Requirements

- 1) H1 - Home Page:
The homepage consists of login option and other information about banking, loan, help and services.
- 2) H2 - Banking:
This includes various low level requirements as follows:
 - L1-online banking
 - L1_1- My Accounts
 - L1_2- My Transactions
 - L1_3- Net Banking
 - L1_4- Online Offers
 - L1_5- Mobile Banking
 - L2-services

- L2_1-Statement on Email
- L2_2-Online Services

L3-Other useful links

- L3_1-FATCA and CRS
- L3_2-Interest Rate
- L3_3-Terms and conditions

3) H3 - Loans

L1-Online Loans

- L1_1-Personal Loan
- L1_2-Apply for Loan on Credit Card
- L1_3-Home Loan
- L1_4-Business Loan

L2-Useful links

- L2_1-FATCA and CRS
- L2_2-Interest Rate
- L2_3-Terms and conditions

4) H4 - Online Services

L1-Net Banking

- L1_1-login

L2-Mobile banking

- L2_1-Learn More

L3-Online Transactions

- L3_1-Go online

L4-Statement on Email

- L4_1-Check now

5) H5 - Terms and Conditions

L1-FATCA and CRSN

L2-Interest Rate

L3-T&C

6) H6 - First Time User

7) H7 – Login

Design

Behavioral Diagrams

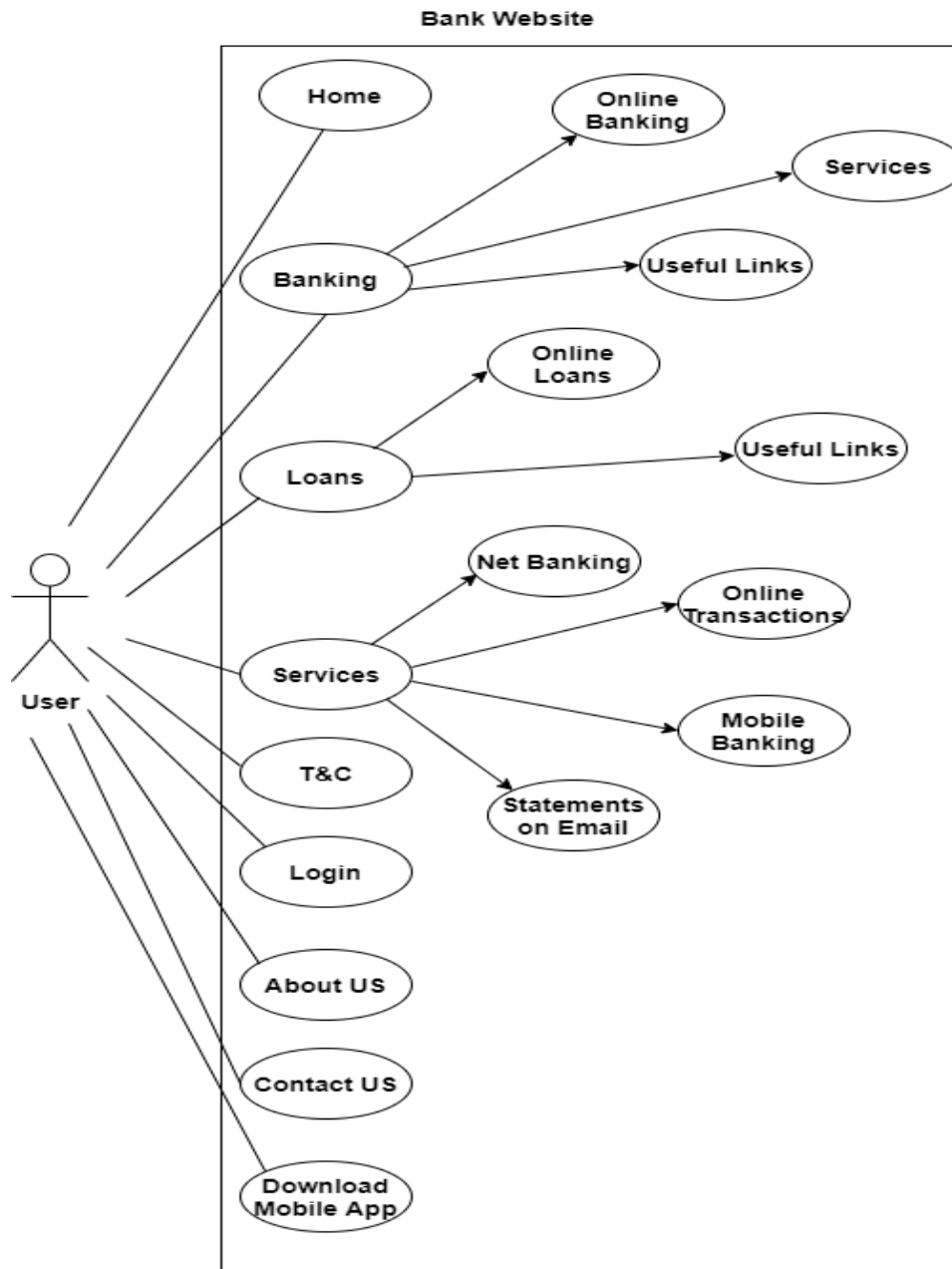


Figure 1: User Case Diagram

Structural Diagrams

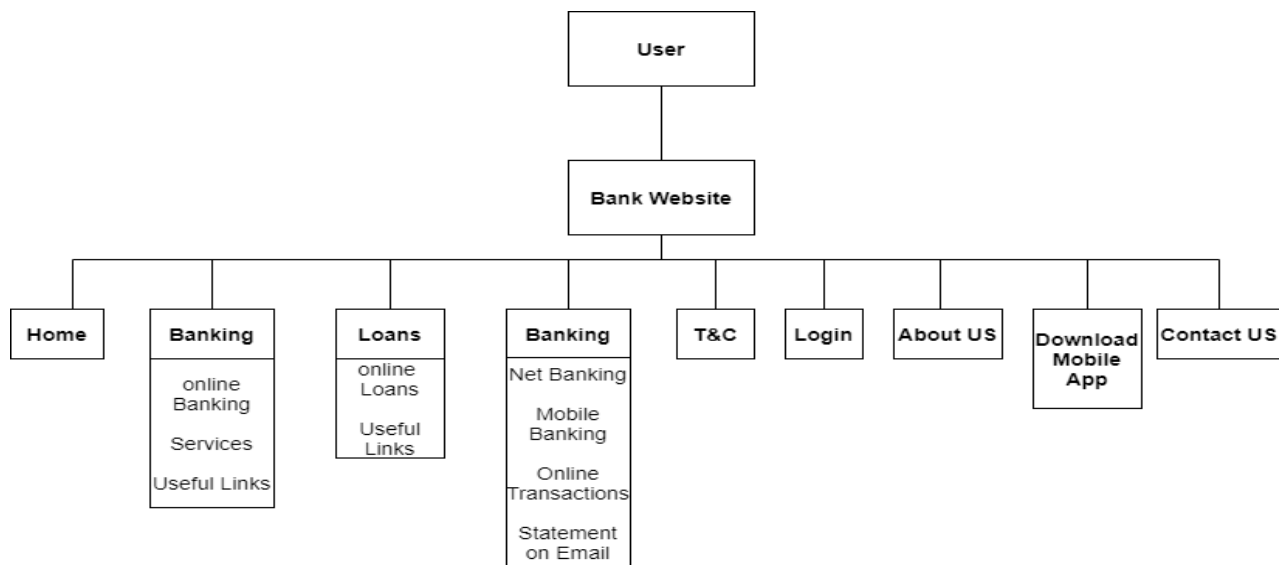


Figure 2: Object Diagram

Test Plan

Test ID	Test Description	Input	Expected Output	Result
H1	To test the Home option on the homepage	Click on the option	It should show redirect the user to the homepage	Pass
H2	To test the Banking option on the homepage	Click on the option	It should redirect the user to the banking page	Pass
H3	To test the Loans option on the homepage	Click on the option	It should redirect the user to the loans page	Pass
H4	To test the Services option on the homepage	Click on the option	It should redirect the user to the services page	Pass
H5	To test the T&C option on the homepage	Click on the option	It should redirect the user to the T&C page	Pass
H6	To test the register option on the homepage	Click on the option	It should redirect the user to the registration page	Pass
H7	To test the forgot password option on the homepage	Click on the option	It should redirect the user to the forgot password page	Pass
H2_L1	To test the customer ID field in the My Account page	Enter the customer ID	It should take in the customer ID if it's in the right format or shows an error	Pass

H2_L2	To test the password/PIN field in the My Account page	Enter the password/PIN	The password/PIN should be given in the correct format or an error is thrown	Pass
H2_L3	To test the customer ID field in the My Transactions page	Enter the customer ID	It should take in the customer ID if it's in the right format or shows an error	Pass
H2_L4	To test the password/PIN field in the My Transactions page	Enter the password/PIN	The password/PIN should be given in the correct format or an error is thrown	Pass
H2_L5	To test the customer ID field in the Net Banking page	Enter the customer ID	It should take in the customer ID if it's in the right format or shows an error	Pass
H2_L6	To test the Credit Card/Debit Card radio buttons in the Net Banking page	Select an option from the two radio buttons	Selected button(Credit/Debit Card)	Pass
H2_L7	To test the valid through field in the Net Banking page	Enter the expiry date	It should take in the expiry date if it's in the right format or shows an error	Pass
H2_L8	To test the password/PIN field in the Net Banking page	Enter the password/PIN	The password/PIN should be given in the correct format or an error is thrown	Pass
H2_L9	To test the customer ID field in the Statement on email page	Enter the customer ID	It should take in the customer ID if it's in the right format or shows an error	Pass
H2_L10	To test the e-mail address field in the Statement on email page	Enter the email address	It should take in a valid email address or shows an error	Pass
H2_L11	To test the password/PIN field in the Statement on email page	Enter the password/PIN	The password/PIN should be given in the correct format or an error is thrown	Pass
H3_L1	To test the full name field in the Personal loan page	Enter the full name	The full name should be given in the correct format or an error is thrown	Pass
H3_L2	To test the email address field in the Personal loan page	Enter the email address	The email address should be given in the correct format or an error is thrown	Pass

H3_L3	To test the Phone No. field in the Personal loan page	Enter the phone no	The phone no. should be given in the correct format or an error is thrown	Pass
H3_L4	To test the gender radio buttons in the Personal loan page	Select an option from the two radio buttons	Selected button(Male/Female)	Pass
H3_L5	To test the Account No. field in the Personal loan page	Enter the bank account no.	The bank account no. should be given in the correct format or an error is thrown	Pass
H3_L6	To test the IFSC code field in the Personal loan page	Enter the IFSC code	The IFSC code should be given in the correct format or an error is thrown	Pass
H3_L7	To test the Branch field in the Personal loan page	Enter the branch	The branch should be given in the correct format or an error is thrown	Pass
H3_L8	To test the Name field in the Apply for Loan on Credit Card page	Enter the name	The name should be given in the correct format or an error is thrown	Pass
H3_L9	To test the Phone No. in the Apply for Loan on Credit Card page	Enter the Phone No.	The Phone No. should be given in the correct format or an error is thrown	Pass
H3_L10	To test the Credit Card No. in the Apply for Loan on Credit Card page	Enter the Credit Card No.	The name should be given in the correct format or an error is thrown	Pass
H3_L11	To test the Password/PIN field the Apply for Loan on Credit Card page	Enter the Password/PIN	The password/PIN should be given in the correct format or an error is thrown	Pass
H3_L12	To test the name field in the Home loan page	Enter the name	The name should be given in the correct format or an error is thrown	Pass
H3_L13	To test the Phone No. field in the Home loan page	Enter the Phone No.	The Phone No. should be given in the correct format or an error is thrown	Pass
H3_L14	To test the address field in the Home loan page	Enter the address	The address should be given in the correct format or an error is thrown	Pass
H3_L15	To test the gender radio buttons in the Personal loan page	Select an option from the two radio buttons	Selected button(Male/Female)	Pass
H3_L16	To test the branch field in the Home loan page	Enter the branch	The branch should be given in the correct format or an error is thrown	Pass

H3_L17	To test the amount field in the Home loan page	Enter the amount	Valid amount should be given or an error is thrown	Pass
H3_L18	To test the Loan Tenure field in the Home loan page	Enter the Loan Tenure	Valid Loan Tenure should be given or an error is thrown	Pass
H3_L19	To test the Name field in the Business loan application page	Enter the Name	Valid name should be given or an error is thrown	Pass
H3_L20	To test the Phone No. field in the Business loan application page	Enter the Phone No.	The Phone No. should be given in the correct format or an error is thrown	Pass
H3_L21	To test the address field in the Business loan application page	Enter the address	The address should be given in the correct format or an error is thrown	Pass
H3_L22	To test the gender radio buttons in the Business loan application page	Select an option from the two radio buttons	Selected button(Male/Female)	Pass
H3_L23	To test the branch field in the Business loan application page	Enter the branch	The branch should be given in the correct format or an error is thrown	Pass
H3_L24	To test the amount field in the Business loan application page	Enter the amount	Valid amount should be given or an error is thrown	Pass
H3_L25	To test the Loan Tenure field in Business loan application page	Enter the Loan Tenure	Valid Loan Tenure should be given or an error is thrown	Pass

Table 1: Test Plan

Implementation Summary

- Here we have implemented HTML and CSS language to give a structure and style to the webpage.
- Using JavaScript, we have made our web page more interactive and dynamic in nature and have made our web page more functional.
- We have implemented the Jasmine framework here to test our JavaScript application.
- Lastly we have automated the webpage by using selenium.

Video Summary

https://github.com/99002634/2009MYSEMB03-JavaScript-1/blob/main/JavaScript_miniproject/6_ImagesandVideos/GENESIS%20-2009MYSEMB03-%20JavaScriptMini%20Project.rar

GitHub Link

<https://github.com/99002634/2009MYSEMB03-JavaScript-1>

GitHub Dashboard

The below screenshot shows the GitHub Dashboard of the JavaScript mini-project.

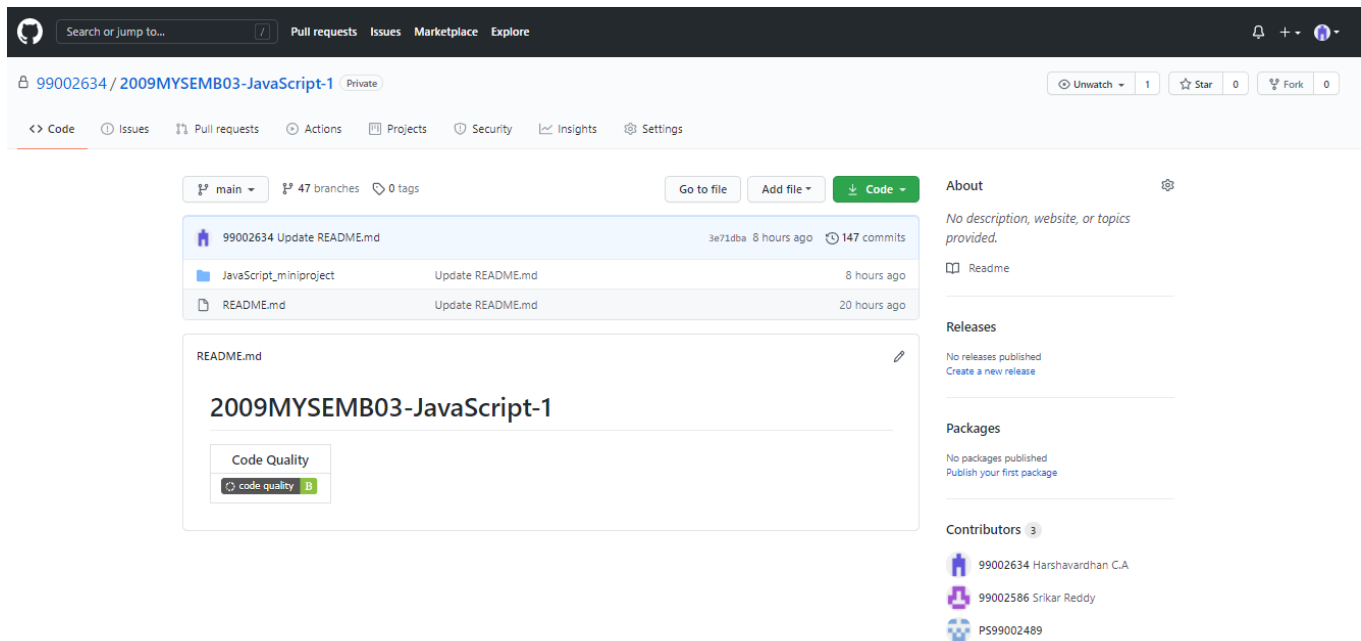


Figure 3: GitHub Dashboard

Summary

Code quality and Issues or Bug Tracking

The below screenshot shows the code quality of the JavaScript mini-project.

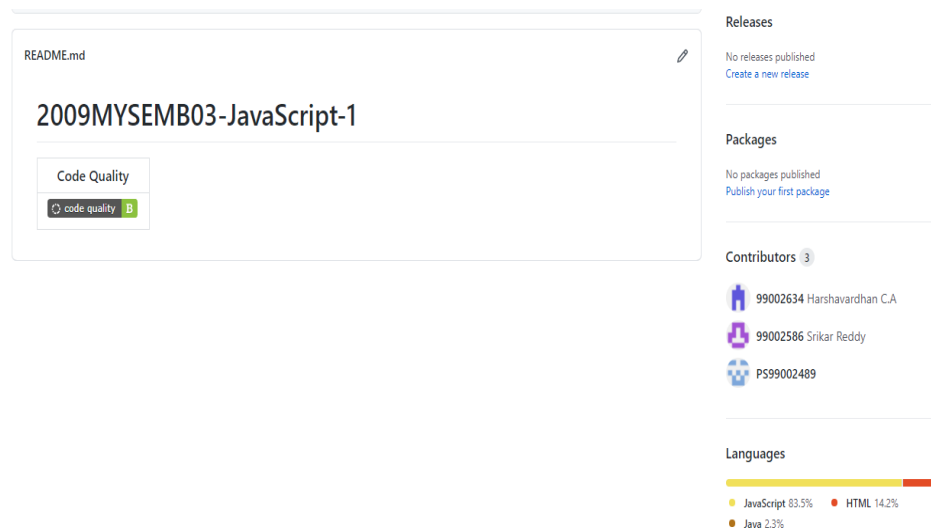


Figure 4: Code Quality Badge

Bug Tracking

1. Initially the “Login Now” button on the homepage was redirecting to the wrong webpage, but the problem is solved.
2. Unable to automate the login page because of wrong login credentials.

Unit Testing

These are the unit tests for every functionality:

- Testing the Business Loan Application

- Check for Full Name
- Check for Phone No.
- Check for Address
- Check for Branch
- Check for Business Name
- Check for Amount
- Check for Loan Tenure

- Testing the Create Account

- Check for First Name
- Check for Last Name
- Check for Phone No.
- Check for E-mail Address
- Check for Address
- Check for Password
- Check for Confirm Password

- Testing the Forgot Password

- Check for Customer ID
- Check for E-mail Address

- Testing the Home Loan

- Check for Name
- Check for Phone No.
- Check for Address
- Check for Branch
- Check for Amount
- Check for Loan Tenure

- Testing the Apply for Loan on Credit Card

- Check for Name
- Check for Phone No.
- Check for Credit Card No.
- Check for PIN
- Check for Password

- Testing the Account Login

- Check for Customer ID
- Check for PIN
- Check for Password

- Testing the To check Transaction Details

- Check for Customer ID
- Check for PIN
- Check for Password

- Testing the Net Banking
 - Check for Customer ID
 - Check for Valid Through
 - Check for Password
 - Check for PIN
- Testing the Personal Loan Application form
 - Check for Full Name
 - Check for E-mail Address
 - Check for Phone No.
 - Check for Account No.
 - Check for IFSC
 - Check for Branch
- Testing the Statement on E-mail
 - Check for Customer ID
 - Check for E-mail Address
 - Check for Password
 - Check for PIN

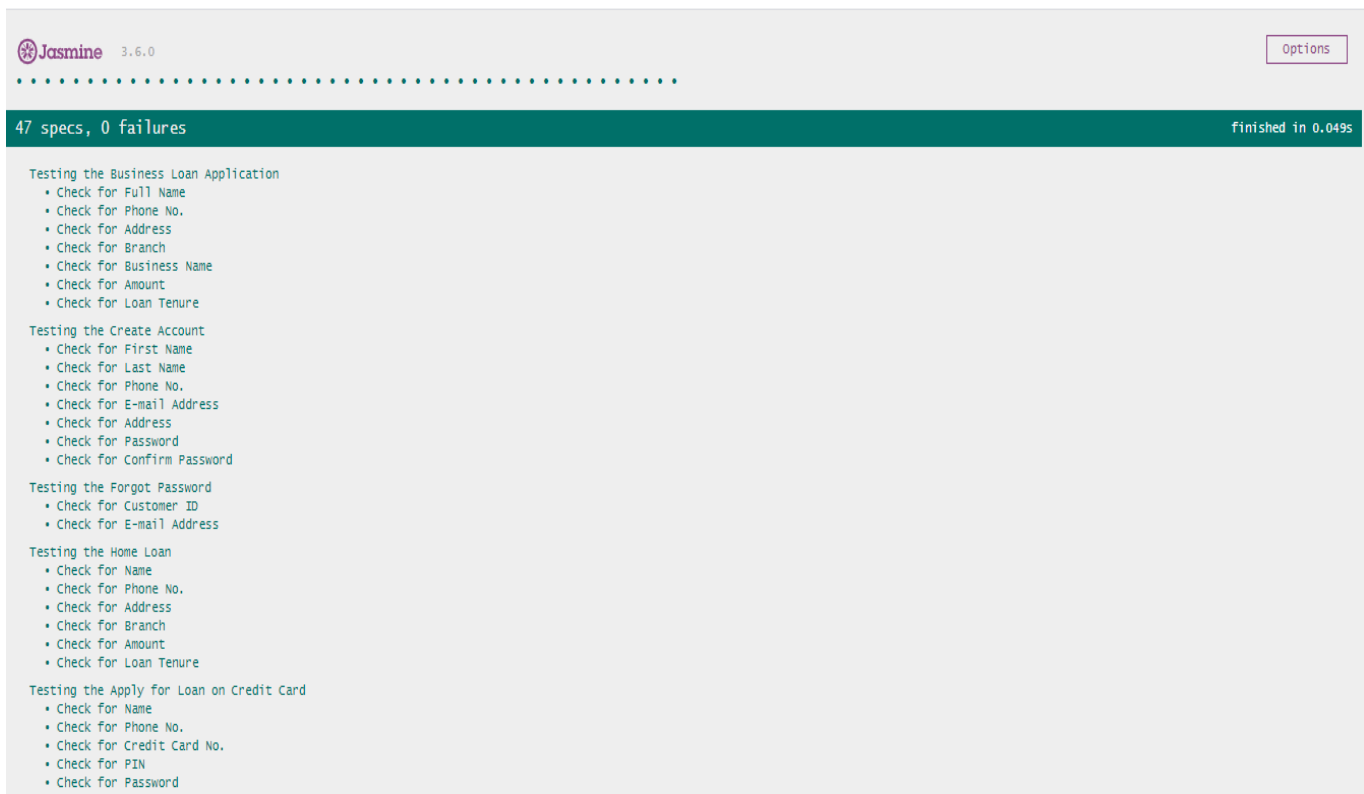


Figure 5: Jasmine Framework Unit Testing Results

Individual Contribution & Highlights

99002634 (Harshavardhan C.A):

1. Created AboutUS.html file
2. Created Home.html file
3. Created Loans.html file
4. Created MyTransactions.html file
5. Created OnlineOffers.html file
6. Created StatementsOnEmail.html file
7. Created UsefulLinks.html file
8. Created BankwebsiteSpec.js file
9. Created Bankwebsite.js file

99002586 (B. Srikar Reddy):

1. Created FirstTimeUser.html file
2. Created LoanonCreditCard.html file
3. Created MyAccount.html file
4. Created Functions.js file
5. Created NetBanking.html file
6. Created OnlineServices.html file

99002489 (Smita Senapati):

1. Created BusinessLoan.html file
2. Created ForgotPassword.html file
3. Created HomeLoan.html file
4. Created MobileBanking.html file
5. Created PersonalLoans.html file

Challenges faced and how were they overcome

We are Unable to build the JavaScript file because we didn't have the JSON file in our project.