RESTAURANT WEBSITE

TABLE BOOKING - FOOD ORDERING



GITHUB AND TESTING REPORT

SOFTWARE ENGINEERING LAB FIFTH SEMESTER 2021

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SECTION I : GITHUB REPORT

Githuh Link

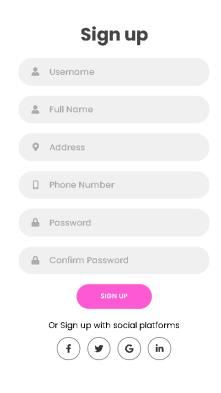
https://github.com/vijaylokith/Group-37_restaurant-website

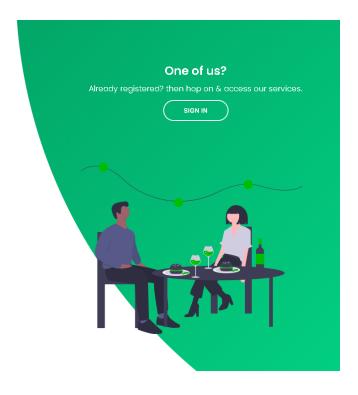
1. Implemented Modules

Module Name: Registration

In this module, a user registers on the website to access the restaurant's online services. To achieve this, we used a library called "WTForms" which temporarily stores the user's entered data on the form provided by the website. The entered data is then validated to check for errors and on validation, the data is stored in the database. The user's password is hashed using an extension of Flask called "Flask-Bcrypt".

- 1. The user heads to the registration page and enters their details in the form provided.
- 2. On submission, the user is redirected to the Phone Number Verification page.

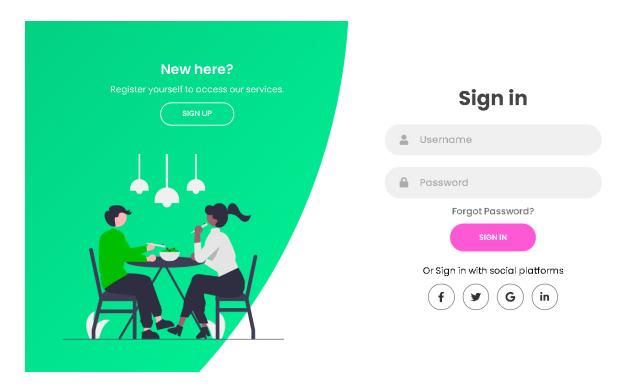




Module Name: Login

In this module, the registered user logs in on the website. To achieve this, we again used "WTForms" to temporarily store the user's entered data for validation. The user's username is then validated by filtering through the table "User" which stores the registered users. The password is validated using "Flask-Bcrypt" which checks if the user's entered hashed password matches the hashed password in the database. The user is then logged in using an extension of Flask called "Flask-Login"

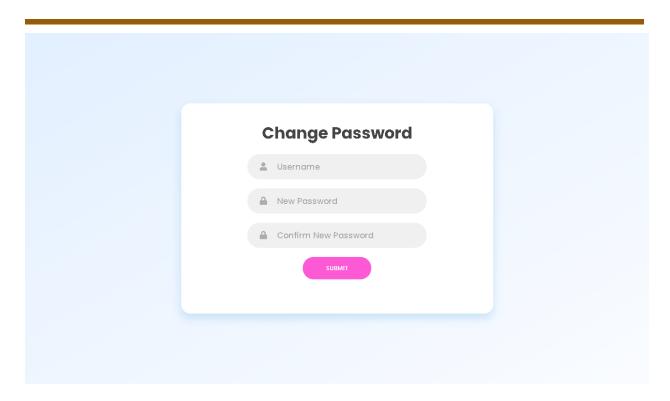
- 1. The user heads to the login page and enters their details in the form provided.
- 2. On validation, the user is redirected to the home page.



Module Name: Forgot Password

In this module, the registered user changes their account's password in the event that they forgot it. To achieve this, the user's new password is overwritten against the old password in the database.

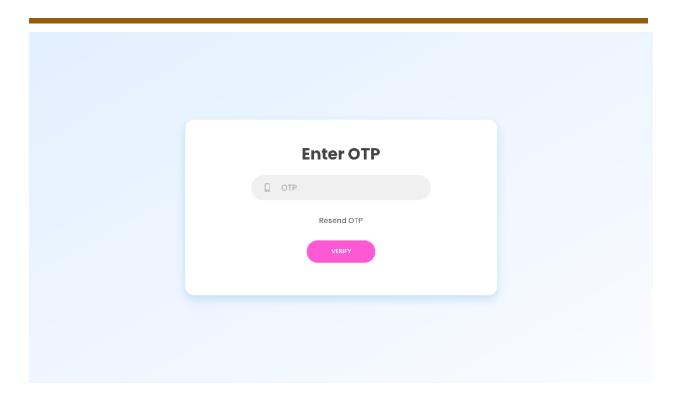
- 1. The user clicks on the "Forgot Password?" link on the login page.
- 2. The user is redirected to the Forgot Password page and enters their details in the form provided.
- 3. On submission, the user is redirected to the login page.



Module Name: Phone Number Verification

In this module, the user's phone number is verified. To achieve this, we used "Twilio Authy API" which takes in the user's entered phone number and sends an SMS containing a 4-digit OTP. The entered OTP is then verified by the API.

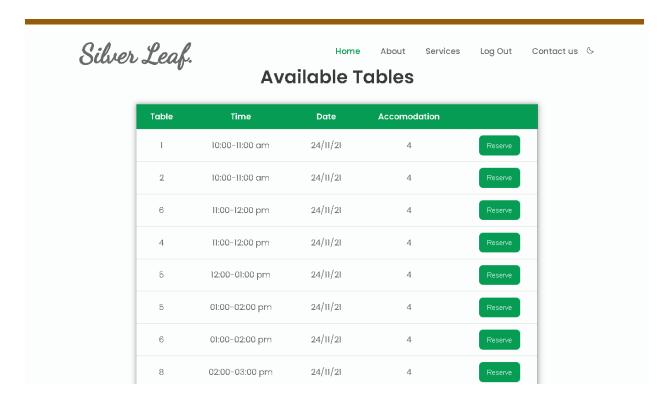
- 1. The user receives a 4-digit OTP and enters it in the form provided.
- 2. On verification, the user is redirected to the home page.



Module Name: Table Reservation

In this module, the user reserves an available table on the restaurant's website. To achieve this, the user's selected table for reservation is temporarily stored using "WTForms". The selected table is filtered through the list of tables in the database and is then assigned the current user's full name which shows that a particular table belongs to the user. Once a table is assigned to a user, the table is no longer displayed on the website by filtering through the tables in the database which do not have an assigned user.

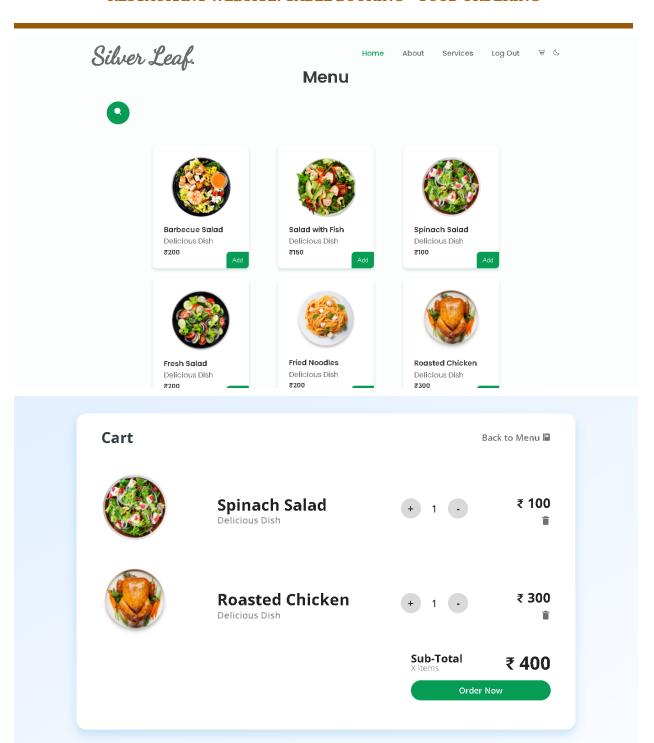
- 1. The user heads to the table reservation page and reserves an available table of their choice.
- 2. On successful reservation, the user is redirected to the table page.
- 3. The website's available tables are updated.

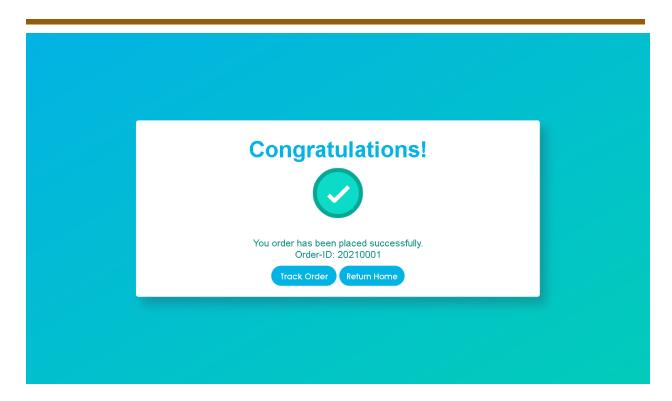


Module Name: Food Ordering

In this module, the user orders a food item of their choice on the restaurant's menu. To achieve this, the user's selections are stored in the database which is then displayed on the cart. "Flask-Login" keeps track of the currently logged-in user and on checkout, the current user's full name, password, and selected items are stored in the database.

- 1. The user heads to the menu page and selects the food item(s) of their choice.
- 2. The user heads to the cart page and clicks on the "Order Now" button.
- 3. The user is redirected to a page displaying their order information

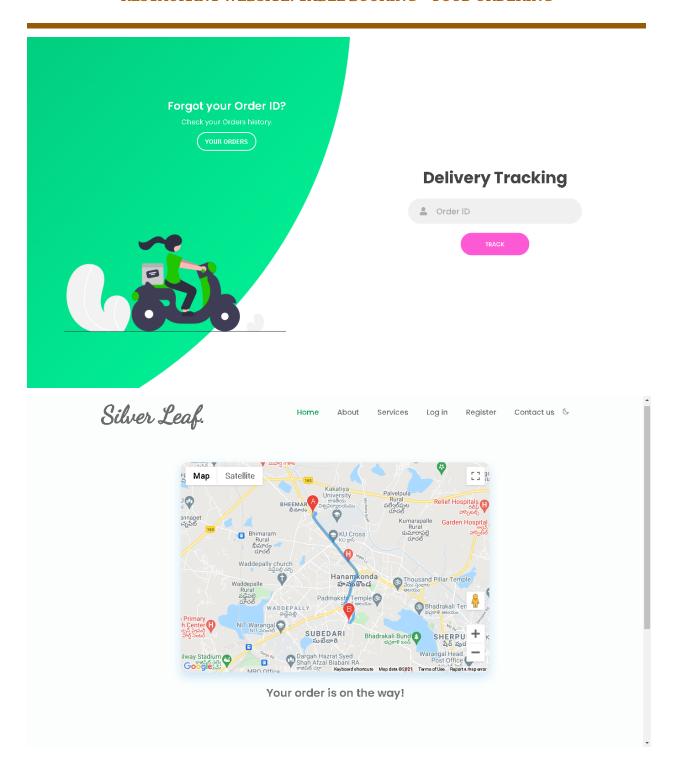




Module Name: Delivery Tracking

In this module, the user starts tracking the delivery of their order. To achieve this, the entered order-id is temporarily stored using "WTForms". On submission, the entered order-id is filtered through the table "Order" in the database which contains the order information of the website. On validation, the path from the delivery agent's current location to the user's address is displayed on a map. The map is displayed using the "Google Maps JavaScript API" while the direction is displayed using "Google Directions API"

- 1. The user heads to the Delivery Tracking page and enters their order-id.
- 2. On validation, the user is redirected to a webpage displaying a map containing the path of the delivery agent to the user's address.



Module Name: Logout

In this module, the user logs out from the website. To achieve this, a function of "Flask-Login" called "logout_user" is used which logs out the current user and redirects the user to a page.

- 1. The logged-in user clicks on the "Log Out" button.
- 2. The user is logged out and is redirected to the home page.

2. Individual Contributions

Vijay Lokith R R:

- ➤ Developed and designed the home, phone number verification, about us and contact us page.
- > Developed the Phone Number Verification functionality.
- > Developed the Table Reservation functionality.

Chinthala Ashish:

- Developed and designed the table reservation, login, registration and forgot password page.
- ➤ Developed the Delivery Tracking functionality.
- > Developed the Login and Registration functionality.

Avo Elvis Theyo:

- ➤ Developed and designed the menu, cart, and order confirmation and services page.
- Developed the Online Food Ordering functionality.
- > Developed the database for the website.

3. Individual Github Activities:

Total No of Commits: 75

Total No of Commits(excluding merge): 55

Total No of pull requests: 10

Vijay Lokith R R:

No of Commits: 23 No of pull requests: 0

Chinthala Ashish:

Total No of Commits: 26 No of pull requests: 7

Avo Elvis Theyo:

No of Commits: 26 No of pull requests: 3

SECTION II: TESTING REPORT

Introduction:

Testing is an important component in the development of a software. It is a process of evaluating the correctness of software by considering its all attributes such as Reliability, Scalability, Portability, Re-usability, Usability and evaluating the execution of software components to find the software bugs and errors.

White box Testing:

White Box Testing is a testing technique where the internal structures, the used data structures, internal design, code structure and the working of the software are tested to verify the flow of input-output and to improve design, usability and security.

White box testing involves code testing for:

- The functionality of conditional loops
- Broken or poorly structured paths in the coding processes
- Testing of each statement, object, and function on an individual basis

Black box Testing:

Black box testing is a testing technique where testing the functionalities of the software is done without prior knowledge of internal code structure, implementation details and internal paths.

In Black box testing, the tester selects a function and then gives an input value to examine its functionality, and checks whether the function is providing expected output or not. If the function is giving correct output, then it is passed in testing, or else failed.

Unit Testing:

Unit testing is a testing method where testing of each individual component of the software application is done. It is a first level testing technique. Unit testing is of two types: manual and automated. In this report we used manual unit testing.

Testing Information(Already registered)

Username	Binod_bp
Full Name	Binod Kumar
Password	BInod123
Phone Number	1234567890
Received OTP	8987
Order Id	1236784

Module Name: Registration

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 1	Check registering with already registered username	Username = Binod_bp		Pass
Test 2	Check registering with a unregistered username	Username = Ashish	Successful, upon which the user will	Pass

		be redirected for the phone number verification.	
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Module Name: Login

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 3	Check login with unregistered username	Username = Ashish		Pass
Test 4	Check login with registered account	Username = Binod_bp Password = BInod123	Successful login, upon which the user will be redirected to the home page	Pass
Test 5	Check login with incorrect username	Username = Ashish	Unsuccessful login, a warning will be displayed which says "Username or password is incorrect! Please Try Again"	Pass
Test 6	Check login with incorrect password	Password = binod123	Unsuccessful login, a warning will be displayed which says "Username or password is incorrect! Please Try Again"	Pass

Module Name: Forgot Password

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 7	Check test case for forgot password	New password and phone number	Successful, the new password will be stored in the database. The user will be redirected to the login page	Pass

Module Name: Phone Number Verification

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 8	Check with wrong OTP (Blank)	OTP =	Unsuccessful, a warning will be displayed which says "Your OTP is incorrect! Please Try Again"	Pass
Test 9	Check with wrong OTP (Less than four digit)	OTP = 890	Unsuccessful, a warning will be displayed which says "Your OTP is incorrect! Please Try Again"	Pass
Test 10	Check with wrong OTP (Equal to four digit)	OTP = 8765	Unsuccessful, a warning will be displayed which says "Your OTP is incorrect! Please Try Again"	Pass
Test 11	Check with wrong OTP (Greater than four digit)	OTP = 89765	Unsuccessful, a warning will be displayed which says "Your OTP is incorrect! Please Try Again"	Pass

Test 12	Check with correct OTP	OTP = 8987	Successful, upon which a popup will be displayed on the screen for the confirmation of registration. Then the user will be redirected to the home page	Pass
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Module Name: Table Reservation

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 13	Check test case for reserving a table	Table numbers and dates in which the tables are reserved	Successful booking, upon which the user will get a confirmation displayed on their screen.	Pass
Test 14	Check for the reserved table to be not displayed in the website	Table number	Upon successful reservation that particular table at that particular time will be removed from the website.	Pass

Module Name: Food Ordering

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 15	Check adding items to the cart	Food items	Successful, order upon which that menu will be displayed in the cart	Pass

Test 16	Check placing the order	Food items and number of times they got added	Successful, upon which the user will get the confirmation along with the order id displayed in the screen	Pass
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Module Name: Delivery Tracking

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 17	Check using a wrong order id to Track	Order id = 56789321	Unsuccessful, upon which a warning will be displayed which says "Your Order-Id id invalid! Please Try Again"	Pass
Test 18	Check using a correct order id to Track	Order id = 1236784	Successful, upon which the user will be redirected to the delivery tracking page.	Pass
Test 19	Check testing the live location tracking	Manual	Delivery persons live location should automatically update every 20 seconds.	Pass

Module Name: Logout

Test No	Test Case	Test Data	Expected Result	Pass/fail
Test 20	Check logging out	Enabled	Successful logout, upon which a message will be	Pass

	displayed for confirmation.	
	comminación.	

Integration Testing:

Integration testing is a testing technique where software modules are integrated and tested together. Some of the strategies to execute Integration testing are:

- Big Bang Approach
- Incremental Approach
 - o Top Down Approach
 - o Bottom Up Approach
 - Sandwich Approach Combination of Top Down and Bottom Up

System Testing:

System testing is a technique where we test the completely integrated software application. In System Testing, we test the software code for:

- Fully integrated applications including external peripherals in order to check how components interact with one another and with the system as a whole.
- The user's experience with the application.

Acceptance Testing:

Acceptance testing is a technique performed to determine if the software application has met the requirement specifications. The main purpose of this testing is to evaluate the system's compliance with the business requirements and verify if it has met the required criteria when the end users receive it.

Some of the types of acceptance testing are:

- Alpha Testing
- Beta Testing
- Business acceptance Testing
- User acceptance Testing

Test Coverage:

Test Coverage is a procedure which measures the efficiency of the entire testing process over the entire program based on its metric

Ensuring Test Coverage:

- Based on the initial requirements we have created a testing strategy and we made sure that it was highly efficient.
- Then we ordered the testing based on our priority
- Also made sure that we included all the boundary test cases

So by this we ensure that our software is tested both completely and efficiently