# **full stack engineering**

# **CouRse 2- Web Development**

# **Assignment3- Backend API development WITH DRF**

Submission Date: 19th Feb 2023

Assignment Submission Mode: Canvas LMS- File Upload

Weightage: 20%

# I Objective:

1. To create backend APIs for the use stories of Food Catering Application using DRF.
2. To integrate the frontend developed in assignment 1 with the backend through APIs

Note: This a group assignment. Each group has to do the problem statement based on the assignment competed in Course 1.

# **II Problem Statement 1:**

A web application which offers food ordering services to the Indian rail passengers. Passengers can order food by specifying the station and from which nearby restaurant they want to order food. As a part of this assignment, you are required to implement the User Interface and its related functionalities for the features listed below as user stories.

## **EPIC 1:** LOGIN AND REGISTRATION

**1.1) Registration:**

**User Story:** As a new user, I should be able to register as a customer /restaurant.

**Acceptance Criteria:**

* Input data fields to enter - 1) Username [email id] 2) Password 3) Basic Details depending on customer or restaurant required.
* Password criteria should be displayed to the user when user clicks inside the password data field.
* If 'Password' entry does not match criteria specified and user hits Submit, show error alert "Password entry does not meet criteria"
* After successful validation of all entered fields and on clicking Submit, show message indicating successful account creation

**1.2) Login:**

**User Story:** As a user, I should be able to login with the username and password to the portal.

**Acceptance Criteria:**

* Input data fields to enter - 1) Username [email id] 2) Password 3) Role
* Indicate invalid usernames and passwords as alerts to the user.
* After successful validation of all entered fields and on clicking Submit, show message “Login Successful” and redirect to the Dashboard page of user.

## **EPIC 2: CUSTOMER FOOD ORDER**

**User Story 2.1:** As a customer, I should be presented with a dashboard page on successful login.

**Description:** The dashboard page should contain navigation menu options to search for available restaurants and order food, view previous order details. The Dashboard to contain the status of active order details

**Acceptance Criteria:**

* If there are no active orders, it should display a message “no orders”.
* The status of active orders with details to be displayed.

**User Story 2.2:** As a customer, I should be able to view the available restaurants at a given location.

**Description:** On the customer entering the required details like PNR number, location (station name) and other details, the list of available restaurants should be displayed. Filtering options to be present

**Acceptance Criteria:**

* The restaurants details to be displayed
* Pagination to be applied.

**User Story 2.3:** As a customer, I should be able to select the items and order food

**Description:** On clicking the available restaurants, the user should be able to select items from the restaurant menu and place the order. The user should be made to enter the appropriate payment mode.

**Acceptance Criteria:**

* Once the user selects the items and places the order, the details of the order with status to be displayed on dashboard.

## **EPIC 3: RESTAURANT DASHBOARD**

**User Story 3.1:** As a restaurant administrator, I should be presented with a dashboard page on successful login.

**Description:** The dashboard page should contain navigation menu options to add/update menu items, time, availability status etc., The Dashboard to contain the status of active order details (Orders pending for confirmation, orders awaiting delivery

**Acceptance Criteria:**

* If there are no active orders, it should display a message “no orders”.
* The status of active orders with details to be displayed.

**User story 3.2:** As a restaurant administrator, I should be able to accept or reject the orders

**Description:** The restaurant administrator should be able to view the details of the order and reject /accept it

**Acceptance Criteria:**

* The status of upcoming orders with details to be displayed in dashboard
* **API expectations for All EPICs**
* The backend APIs needs to be implemented for the above mentioned Epics as assigned to your group.
* You are supposed to call these newly implemented backend API from the user interface developed earlier as part of assignment 2.
* Any other assumptions made can be listed in the documentation.

## **4: Submission Instructions**

1. Upload the complete code to the github repository and provide access to Pravin Pawar [ppawar@wilp.bits-pilani.ac.in](mailto:ppawar@wilp.bits-pilani.ac.in) and Bharani Dharan Krishnaswamy <bharani.k@wilp.bits-pilani.ac.in>.
2. Prepare a brief word document / image giving the quick overview of various APIs implemented for different use cases.
3. Create a Swagger document/s giving the complete details of the APIs implemented
4. While naming the files use your Group ID and your name for identification purposes
5. Upload the documents mentioned in #2, 3 to the Canvas LMS in a single zip file having your groups name in the file name.
6. While naming the files use your Group ID and your name for identification purposes
7. Academic Honesty: You are welcome to discuss with peers and refer the internet in order to better understand the concept, but you may not share code or do not do a verbatim copy from the internet.

**Files to Be Submitted -**

1. Complete code in Github- Link to be shared
2. API overview , Swagger Description document to be uploaded to Canvas as a single zip file

## **5 Weightage:**

**Total: 20 Points**

**EPIC 1: API Implementation and Demo: 5 %**

**EPIC 2: API Implementation and Demo: 15%**

## **6 Evaluation**

After the completion of deadline, Assignment discussion will be scheduled, where you can showcase the demonstration of the features implemented.

## **7 Notes:**

* This is a take-home assignment to be carried out by each group independently
* In case of any further queries, use discussion forums, or reach out to me at [ppawar@wilp.bits-pilani.ac.in](mailto:ppawar@wilp.bits-pilani.ac.in).