Data Plan

Several features will be included into the Restaurant Booking System with server and client-side interaction. These features include a search function, accounts log in/sign up, accounts management of previous history, and account information. The Restaurant Booking System will also have a restaurant management system for managing bookings from customers.

Client – Server Interaction

1. **Search Function**

    On the homepage of the site, the customer will be able to send a request for restaurants that fit their criteria of their search. The customer is able to search for cuisines or restaurants names themselves.

    Response
    The user will input a restaurant name or cuisine, and click on the search icon, or hit enter. A GET request is then sent to the server. Send back JSON with restaurants from server/database.

    POST to server with AJAX with restaurant objects on the search page, populate page with information and available booking times.

2. **Account Log in/sign up/log out**

    Users are able to sign up or log in to the site, users can log out of the system

    Response
    Send a POST request to receive username when the user logs in. If the user is already registered with the site and information is stored in a database. Otherwise advise that there is no account associated with their given information, message to tell them to sign up. JSON is used to keep track of different users restaurant history.
    Web page updates session with information relevant to the user i.e. username or history. Future API for Google, Facebook will be included, users can have an option to log in with social media rather than conventional forms.

    POST to server with AJAX, user indicates they want to log out, end the session and load back to main page.

3. **Editing profile**

    On the accounts page, users can click the button which allows them to edit their profile, changing their email, phone number.

    Response
    GET request user information, show user information with AJAX, when users click the "edit" button. POST request to server with AJAX to update their details. Successful information changed alert.

4. restaurant booking

On the restaurant page, users can click the "book now" button to select time and date to create a booking

Response:

GET request from server will POST availability to user, update times through AJAX to be listed. As user selects a time and confirms, the website will send another GET request to store booking information on database.

Data to be stored on server side

Review object

- Reviewer name/ Customer name: (string)
- Star Rating: (int 1-5) ie. 1 – 5 stars
- Review text: (string)

User Account Profile

- Name: (string)
- User ID: (int)
- Email: (string)
- Phone number: (string) //no need to add numbers together, therefore use a string to store
- Restaurant History: array(restaurant)

Restaurant

- restaurant ID (int)
- name(string)
- location(string)
- contact (int)
- opening hours (string)
- ratings (int)
- cuisine (string)

Restaurant Account Profile

- restaurant ID (int)
- email(string)
- password(string)
- Reviews: array(review objects)
- Images: array(image)
- Bookings: (int)
- bookingDates: (dd:mm:yy)
- foodCost: (int/float)
- numberOfSeats: (int)