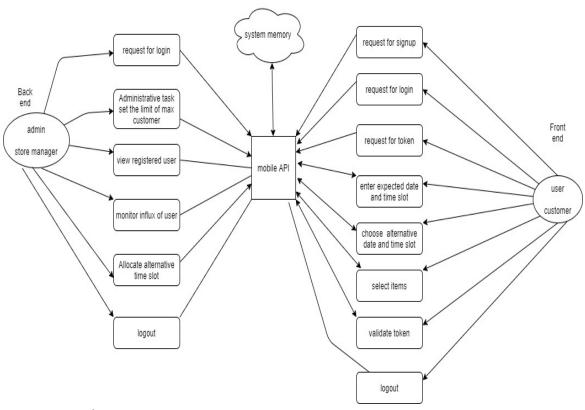
Front end and back end design:



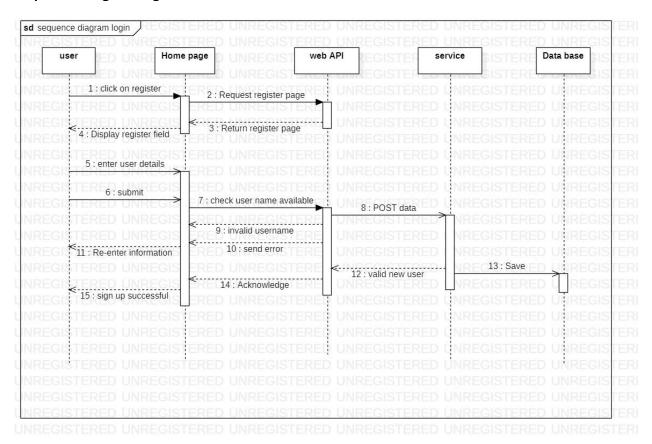
Front end:

- Whatever the user see and interacts with in the frontend of the application in front end design.
- Here our customer(user) is in frontend.
- User has acess for requesting signup, login, token, logout...
- User can enter date and time slot, can choose alternative time slot, can select items category.

Back end:

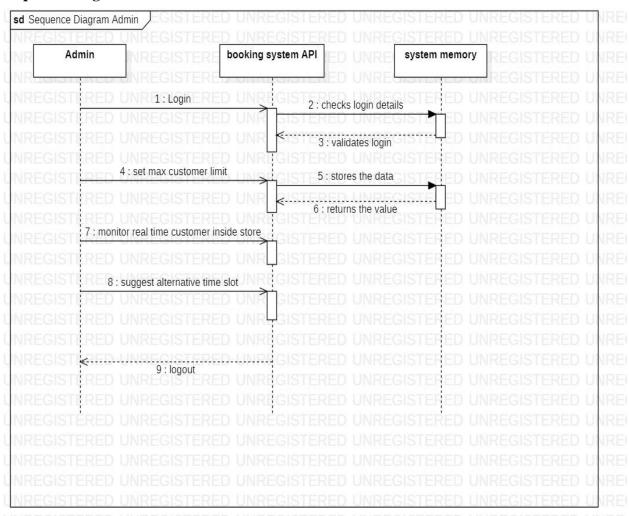
- Admin acts in the back end.
- Admin can set the maximum customer limit, can change the limit according to the given senario.
- Can montor the customers inside the store.
- Can view registered user.
- Can allocate alternative time slot to the user.

Sequence diagram login



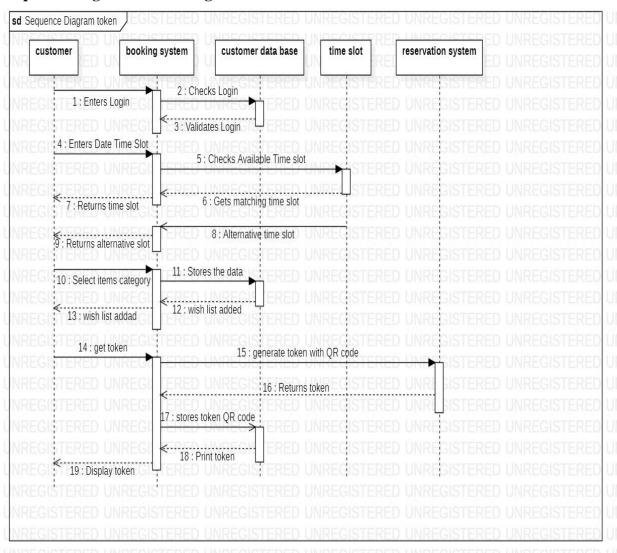
- User request for registration in home page.
- User enters their user details in home page.
- Confirms their details by clicking submit button.
- Username availability is checked in web API.
- If the user gets available username, then the user posts that valid data in the service.
- Finally, the user saves their data by storing it in data base.
- If the user gets invalid username, web API sends an error message to the home page.
- Again, user re-enters signup credentials.
- At the end user gets the signup successful message in their home page for their confirmation.

Sequence diagram admin:



- The store manager (admin) inserts the login credentials into the booking system application.
- The admin login credentials are validated through system memory.
- The admin can now add alternative timeslots.
- The admin can set the maximum customer limit into the application and send the entire store info (store id, store location, timeslots).

Sequence diagram for booking token:

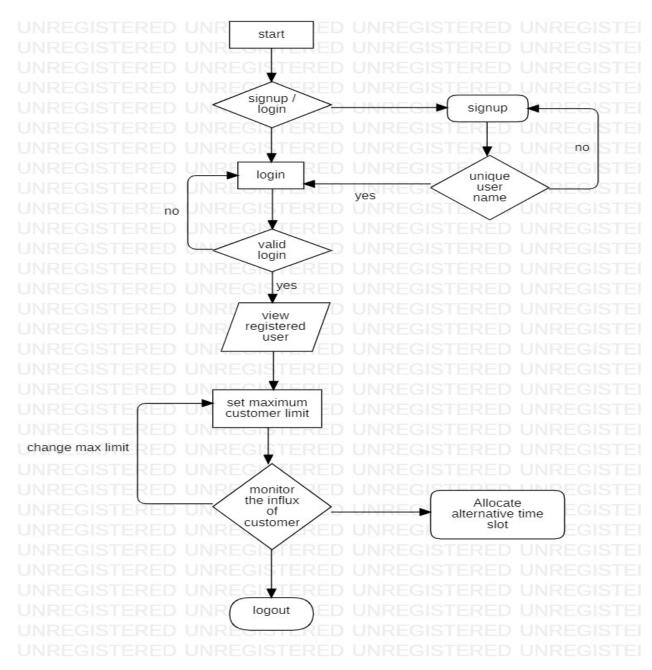


- User(customer) enters their login credentials in booking system.
- Booking system validates the login credentials by referring it with customer data base.
- User enters the expected time and date in booking system.
- User will get matching time slot when there is a free time slot available for that particular time.
- Otherwise, the booking system returns the alternative time slot.
- User selects the expected items category in booking system.
- Booking system stores that data in the customer data base.
- Finally, the user clicks the get token to generate the token.
- Booking system generates the token with QR code and stores it in customer data base.
- Booking system prints the token and displays it to user.

Flow Chart Diagram:

A flow chart is another important diagram to describe the dynamic aspects of the system. It is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. There are two types of users in our application. One is customer and another is a admin.

Flow chart diagram admin:



Flow chart diagram customer:

