Neo Party Hall Booking Application

Objective:

Neo Party Hall is an application to be built as a product that can help customers to choose a Party Hall and book a Hall for Party for a specific date..

Users of the System:

- 1. Super Admin
- 2. Admin
- 3. Customer

Functional Requirements:

- Build an application that customers can book Party Hall.
- The application should have signup, login, profile, dashboard page for user and login, signup, profile, dashboard, add bike page for the admin.
- This application should have a provision to maintain a database for customer information, Admin information, booking information and room information.
- Also, an integrated platform required for customers, admin and super admin.
- Administration module to include options for adding / modifying / removing the existing product(s) and customer management.
- There should be one user per booking.

While the above ones are the basic functional features expected, the below ones can be nice to have add-on features:

- □ Filters for products like Low to High or showcasing halls based on the customer's price range, specific date etc.
- Email integration for intimating new personalized offers to customers.
- □ Multi-factor authentication for the sign-in process
- Payment Gateway

Output/ Post Condition:

- □ Records Persisted in Success & Failure Collections
- Standalone application / Deployed in an app Container

Non-Functional Requirements:

Security	 App Platform –UserName/Password-Based Credentials 		
	 Sensitive data has to be categorized and stored in a secure 		
	manner		
	Secure connection for transmission of any data		
Performance	 Peak Load Performance (during Festival days, National holidays 		
	etc)		
	eCommerce -< 3 Sec		

	 Admin application < 2 Sec 			
	• •			
	Non Peak Load Performance Commorate			
	eCommerce < 2 Sec			
	 Admin Application < 2 Sec 			
Availability	99.99 % Availability			
Standard	Scalability			
Features	 Maintainability 			
	Usability			
	Availability			
	Failover			
Logging &	 The system should support logging(app/web/DB) & auditing at 			
Auditing	all levels			
Monitoring	 Should be able to monitor via as-is enterprise monitoring tools 			
Cloud	 The Solution should be made Cloud-ready and should have a 			
	minimum impact when moving away to Cloud infrastructure			
Browser	● IE 7+			
Compatible	 Mozilla Firefox Latest – 15 			
	 Google Chrome Latest – 20 			
	Mobile Ready			

Technology Stack

Front End	Angular 7+ Google Material Design Bootstrap / Bulma
Server Side	Spring Boot Spring Web (Rest Controller) Spring Security Spring AOP Spring Hibernate
Core Platform	OpenJDK 11
Database	MySQL or H2

Platform Prerequisites (Do's and Don'ts):

- 1. The angular app should run in port 8081. Do not run the angular app in the port: 4200.
- 2. Spring boot app should run in port 8080.

Key points to remember:

1. The id (for frontend) and attributes(backend) mentioned in the SRS should not be modified at any cost. Failing to do may fail test cases.

- 2. Remember to check the screenshots provided with the SRS. Strictly adhere to id mapping and attribute mapping. Failing to do may fail test cases.
- 3. Strictly adhere to the proper project scaffolding (Folder structure), coding conventions, method definitions and return types.
- 4. Adhere strictly to the endpoints given below.

Application assumptions:

- 1. The login page should be the first page rendered when the application loads.
- 2. Manual routing should be restricted by using Auth Guard by implementing the canActivate interface. For example, if the user enters as http://localhost:8080/signup or http://localhost:8080/home the page should not navigate to the corresponding page instead it should redirect to the login page.
- 3. Unless logged into the system, the user cannot navigate to any other pages.
- 4. Logging out must again redirect to the login page.
- 5. To navigate to the admin side, you can store a user type as admin in the database with a username and password as admin.
- 6. Use admin/admin as the username and password to navigate to the admin dashboard.

Validations:

- 1. Basic email validation should be performed.
- 2. Basic mobile validation should be performed.

Project Tasks:

API Endpoints:

Admin Side:

Action	URL	Method	Response
Admin Login	/admin/login	POST-Sends email ID and password	Return True/False
Admin SignUp	/admin/signup	POST-Sends Admin Model data	Admin added
Admin Dashboard	/admin/dashboard	IGET	Return All the Rooms in the hotel

Admin Add Room	/admin/addRoom	POST-Sends Room Data	Room Added
Admin Edit Room	/admin/editRoom	POST-Sends Room Data	Room Edited
Admin Delete Room	/admin/deleteRoom	POST-Sends Room ID	Room Deleted
Admin Profile	/admin/profile	POST-Sends Admin ID	Return Admin Profile Details
Edit Profile	/admin/editProfile	GET-Sends Admin ID	Return Admin Profile Details
Edit Profile	/admin/editProfile	POST-Sends Admin Model data	Edits Admin Profile

User Side:

Action	URL	Method	Response
User Login	/user/login	POST-Sends email ID and password	Return True/False
Admin SignUp	/user/signup	POST-Sends User Model data	User added
User Dashboard	/user/dashboard	GET	Return all the Hotels available
Displaying Hotel Rooms	/user/rooms	POST - Sends Hotel name and admin ID of that hotel	Return all the rooms of the hotel
Room Details	/user/roomDetails	POST-Sends Room ID	Return room details
Booked Rooms	/user/bookings	POST-Sends User ID	Return user bookings

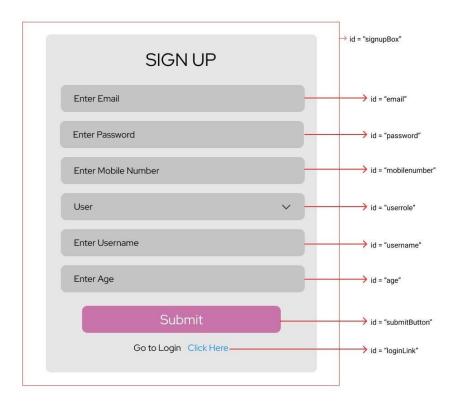
Super Admin:

Action	URL	Method	Response
Super Admin Login	/super/login	email ID and	Return True/False
Delete an admin	/super/deleteAdmin	POST-Sends admin email ID	Delete an admin
Delete an User	/super/deleteUser	POST-Sends user email ID	Delete a user

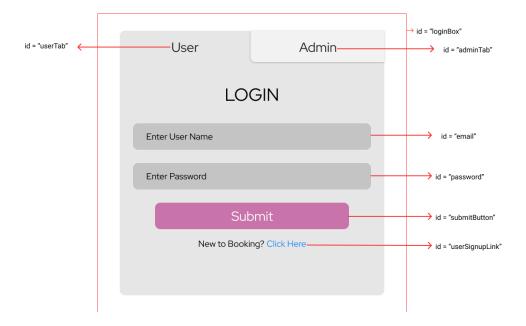
Frontend:

Customer:

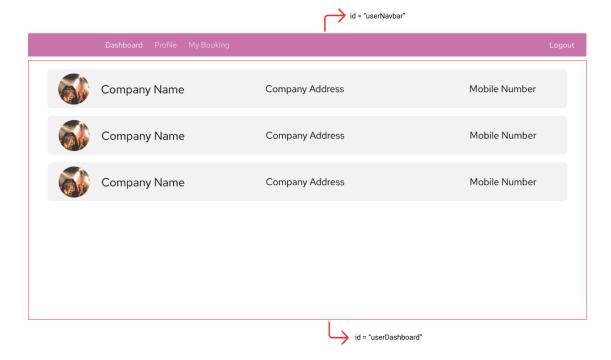
- 1. Signup: Design a signup page component where the new customer has options to sign up by providing their basic details.
 - a. lds:
 - i. signupBox
 - ii. email
 - iii. password
 - iv. mobilenumber
 - v. userrole
 - vi. username
 - vii. age
 - viii. submitButton
 - ix. loginLink
 - b. API endpoint Url: http://localhost:8080/signup
 - c. Output screenshot:



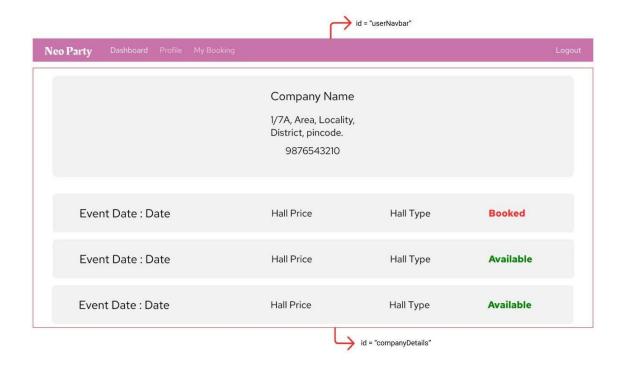
- 2. Login: Design a login page component where the existing customer can log in using the registered email id and password.
 - a. Ids:
 - i. loginBox
 - ii. userTab
 - iii. email
 - iv. password
 - v. submitButton
 - vi. userSignupLink
 - b. API endpoint Url: http://localhost:8080/login
 - c. Output screenshot:



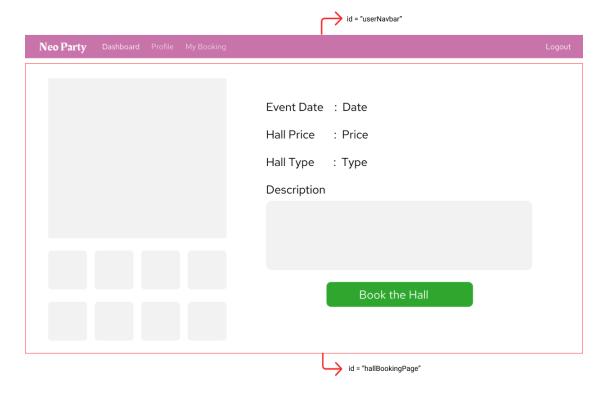
- 3. Dashboard / Home: Design a dashboard page component which provides a list of companies available where the user can book a particular Hall.
 - a. Ids:
 - i. userNavbar
 - ii. userDashboard
 - b. API endpoint Url: http://localhost:8080/home
 - c. Screenshot



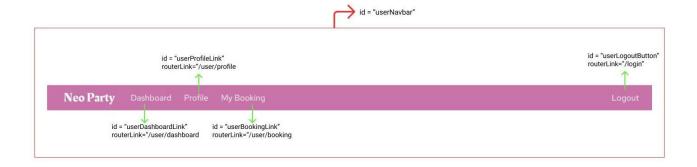
- 4. Company Details : Design a Company Details component which lists available dates along with the individual status of each day (available / Booked).
 - a. Ids
- i. userNavbar
- ii. companyDetails
- b. API endpoint URL: http://localhost:8080/companyDetail/fid}
- c. Screenshot



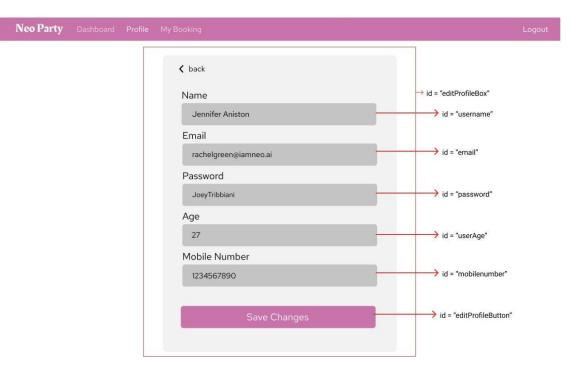
- 5. Bookings: Design a Booking Page that displays the details of the hall that the user is currently booking.
 - a. Ids
- i. userNavbar
- ii. hallBookingPage
- b. API endpoint URL: http://localhost:8080/booking/fid}
- c. Screenshot



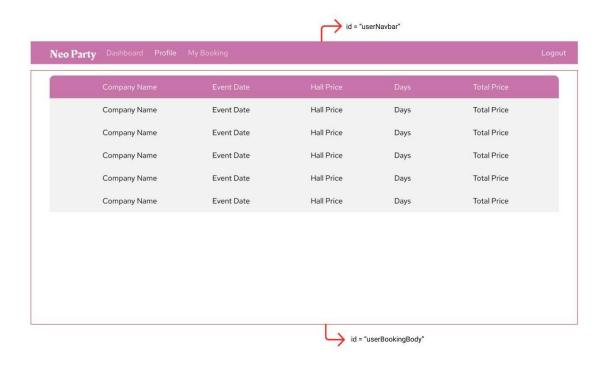
- 6. User Navigation: Design a Booking page component where the user can navigate to their profile and bookings page.
 - a. Ids
- i. userNavbar
- ii. userProfleLink
- iii. userDashboardLink
- iv. userBookingLink
- v. userLogoutButton
- b. Screenshot



- 7. User Profile Edit: Design an Profile Edit Page where the user can edit the details of him/herself.
 - a. Ids
- i. userNavbar
- ii. editProfileBox
- iii. username
- iv. email
- v. password
- vi. userAge
- vii. mobilenumber
- viii. editProfileButton
- b. API endpoint URL : http://localhost:8080/editProfile/fid}
- c. Screenshot:

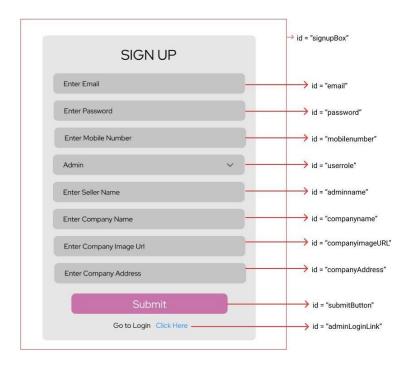


- 8. User Bookings: Design a User Bookings Page that allows the user to view the bookings that the user has made till date.
 - a. lds:
- i. userNavbar
- ii. userBookingBody
- b. API endpoint URL: http://localhost:8080/bookings/fid}
- c. Screenshot:

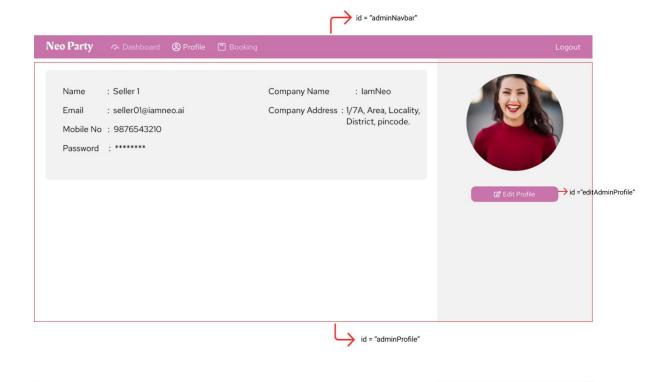


Admin:

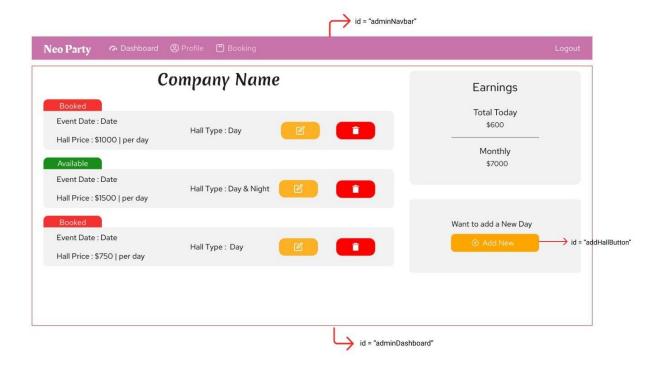
- 9. Admin Signup: Design a Signup page that registers a particular user with the role of Admin.
 - a. Ids
- i. signupbox
- ii. email
- iii. password
- iv. mobilenumber
- v. userrole
- vi. adminname
- vii. companyname
- viii. companyimageURL
- ix. companyAddress
- x. submitButton
- xi. adminLoginLink
- b. API endpoint Url: http://localhost:8080/admin/signup
- c. Screenshot



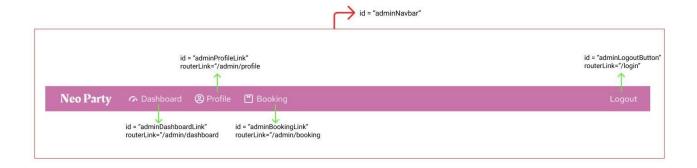
- 10. Admin Profile: Design a Admin Profile page that displays the details of the admin currently logged in.
 - a. Ids
- i. adminNavbar
- ii. adminProfile
- iii. editAdminProfile
- b. API endpoint URL: http://localhost:8080/admin/profile
- c. Screenshots



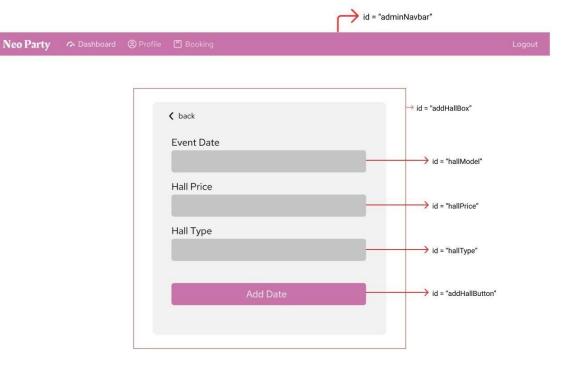
- 11. Admin Dashboard: Design a dashboard page where the list of products is displayed on the admin side.
 - a. Ids
- i. adminNavbar
- ii. addHallButton
- iii. adminDashboard
- b. API endpoint Url: http://localhost:8080/admin/dashboard
- c. Screenshot



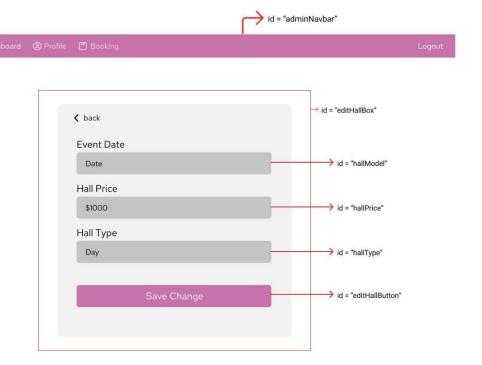
- 12. Admin Navigation: Design an Admin navigation component that can navigate to the Dashboard, profile and bookings done by the users
 - a. Ids:
 - i. adminNavbar
 - ii. adminProfileLink
 - iii. adminDashboardLink
 - iv. adminBookingLink
 - v. adminLogoutButton
 - b. Screenshot:



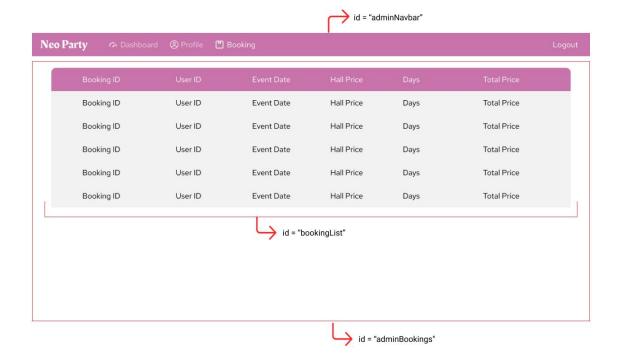
- 13. Admin Add Date: Design an Add Date component in which the admin can add new dates to the inventory.
 - a. Ids:
 - i. adminNavbar
 - ii. addHallBox
 - iii. hallNo
 - iv. hallPrice
 - v. hallType
 - vi. addHallButton
 - b. API endpoint Url: http://localhost:8080/admin/addHall
 - c. Screenshot



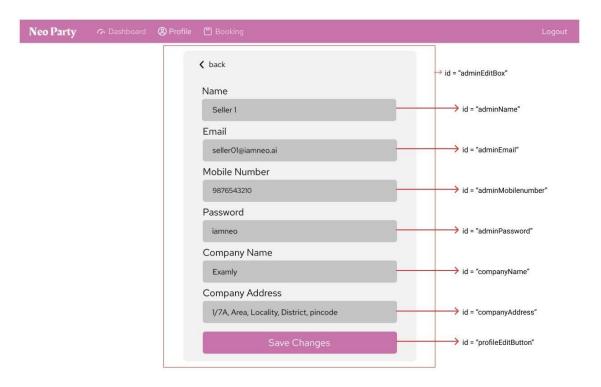
- 14. Admin Edit Bike: Design an Edit Bike component in which the admin can edit details of an already existing bike in the inventory.
 - a. lds:
 - i. adminNavbar
 - ii. editHallBox
 - iii. hallNo
 - iv. hallPrice
 - v. hallType
 - vi. editHallButton
 - b. API endpoint Url: http://localhost:8080/admin/editHall
 - c. Screenshot



- 15. Admin Bookings: Design a Admin Bookings component where the admin can see the booking details that all the users have made till present date.
 - a. Ids
- i. adminNavbar
- ii. adminBookings
- iii. bookingList
- b. API endpoint URL: http://localhost:8080/admin/bookings
- c. Screenshot:

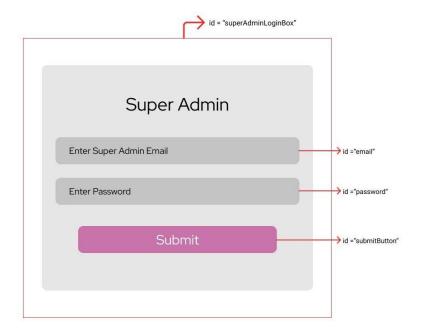


- 16. Admin Profile Edit: Design an Admin Profile Edit page where the admin can edit the details of himself.
 - a. Ids
- i. adminEditBox
- ii. adminName
- iii. adminEmail
- iv. adminMobileNumber
- v. adminPassword
- vi. companyName
- vii. companyAddress
- viii. profileEditButton
- b. API endpoint URL: http://localhost:8080/admin/editProfile
- c. Screenshot:

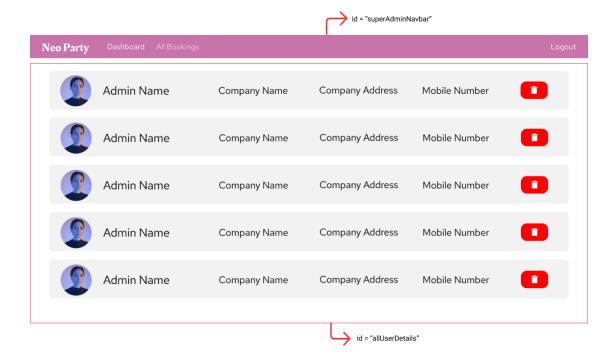


Super Admin:

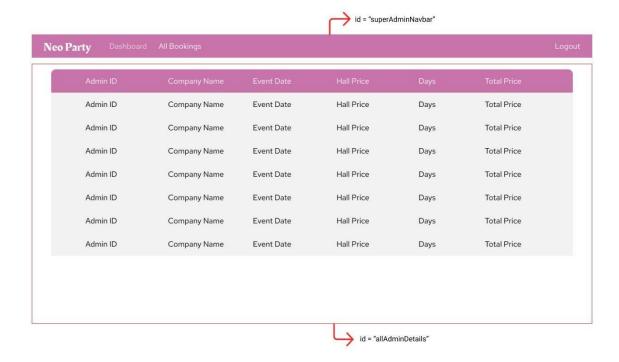
- 17. Super Admin Login Page: Design a Login page through which the super user can log in.
 - a. Ids:
 - i. superAdminLoginBox
 - ii. email
 - iii. password
 - iv. submitButton
 - b. API endpoint URL: http://localhost:8080/superadmin/login
 - c. Screenshot:



- 18. Super Admin Users page: Design a Super-Admin users page where the super admin has authority to view and delete any user currently registered into the system.
 - a. Ids:
 - i. superAdminNavbar
 - ii. allUserDetails
 - b. API endpoint URL : http://localhost:8080/superadmin/users
 - c. Screenshot



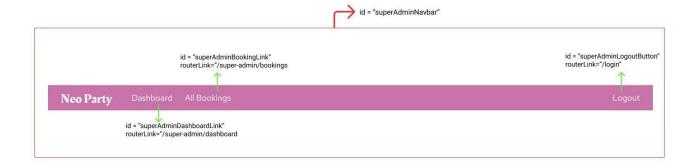
- 19. Super Admin Bookings page: Design a Super-Admin Booking component where the super admin has authority to view the bookings.
 - a. Ids:
 - i. superAdminNavbar
 - ii. allAdminDetails
 - b. API endpoint URL: http://localhost:8080/superadmin/admin
 - c. Screenshot



20. Super Admin Navigation: Design a Navigation page for the super user where he can navigate to the dashboard, all the bookings and logout.

a. lds:

- i. superAdminNavbar
- ii. superAdminBookingLink
- iii. superAdminLogoutButton
- iv. superAdminDashboardLink
- b. Screenshot:



Backend:

Class and Method description:

Model Layer:

- 1. UserModel: This class stores the user type (admin or the customer) and all user information.
 - a. Attributes:

i. email: String

ii. password: String

iii. username: String

iv. mobileNumber: String

v. age: int

vi. userRole: String

- 2. LoginModel: This class contains the email and password of the user.
 - a. Attributes:

i. email: String

ii. password: String

- 3. AdminModel: This class stores the details of the product.
 - a. Attributes:
 - i. email:String
 - ii. password:String
 - iii. mobileNumber:String
 - iv. sellerName:String
 - v. userRole:String
 - vi. hotelName:String
 - vii. hotellmageURL:String
 - viii. hotelAddress: String
 - ix. earnings:int
- 4. RoomModel: This class stores the cart items.
 - a. Attributes:
 - i. roomID:String
 - ii. roomNo:String
 - iii. adminID:String
 - iv. status:String
 - v. price:String
 - vi. type:String

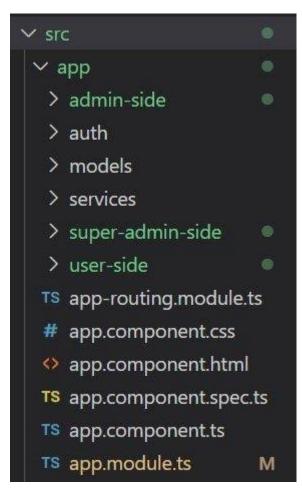
Controller Layer:

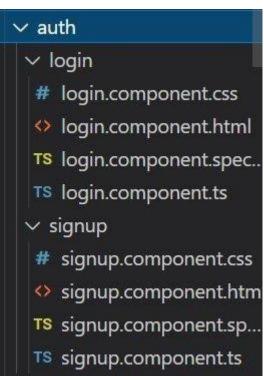
- 5. AuthController: This class control the user /admin signup and signin
 - a. Methods:
 - is UserPresent(LoginModel data): This method helps to check whether the user present or not and check the email and password are correct and return the boolean value.
 - ii. isAdminPresent(LoginModel data): This method helps to check whether the admin present or not and check the email and password are correct and return the boolean value.
 - iii. saveUser(UserModel user): This method helps to save the user data in the database.
 - iv. saveAdmin(UserModel user): This method helps to save the admin data in the database.
- 6. RoomController: This class controls the save/edit/delete/view rooms.

a. Methods:

- i. saveRoom(RoomModel data): This method helps the admin to save new rooms in the database.
- ii. editRoom(RoomModel data):This method helps the admin to edit the details of the rooms and save it again in the database.
- iii. deleteRoom(String Room ID): This method helps the admin to delete a room from the hotel and as well as in the database.
- iv. getRooms(String Admin_Email_ID): This method helps the admin to get all the rooms in the hotel.
- v. bookRoom(String Room_ID): This method helps the user to book the room by changing the room status and add the record in the bookings table.
- 7. AdminController: This class controls the edit/view admin details.
 - a. Methods:
 - i. editAdmin(AdminModel data): This method helps the admin to edit the profile details and save it in the database.
 - ii. getProfile(String Admin_Email_ID): This method helps admin to get the profile details.
- 8. UserController: This class helps to get the rooms.
 - a. Methods:
 - i. userBookings(String User_ID): This method helps users to get all the booking details done by them.

Angular Folder Structure:





× 8	admin-side	•
>	admin-dashboard	
>	admin-navbar	
>	admin-profile	
#	admin-side.comp	U
<>	admin-side.comp	U
TS	admin-side.comp	U
TS	admin-side.comp	U



✓ super-admin-side	
> super-admin-dashboard	
> super-admin-navbar	
# super-admin-side.compone	U
super-admin-side.compone	U
TS super-admin-side.compone	U
TS super-admin-side.compone	U

NOTE:

You should create the above folder structure mandatorily to pass the test cases and you can also create extra components if you need.

Workflow Prototypes:

Admin Flow

https://www.figma.com/proto/5QVhQYuw1tYAKFFmtVksCc/Neo-Party-Hall-Admin-Flow?node-id=1%3A482&viewport=556%2C197%2C0.03661709651350975&scaling=scale-down

User Flow

https://www.figma.com/proto/f9BG3VvxHTOTpzXNi9C5zy/Neo-Party-Hall-User-Flow?node-id=1%3A33&viewport=476%2C203%2C0.04019034653902054&scaling=scale-down

Super Admin Flow

https://www.figma.com/proto/B15Jf2uQhqqufVwEgbfrFv/Neo-Party-Hall-Super-Admin-Flow?node-id=1%3A2&viewport=418%2C363%2C0.03856455534696579&scaling=scale-down