

# **PARKING WEB APPLICATION**

## **USER ROLES - User and Admin**

### **1. Admin Module**

- Dynamic Floor and parking slot management.
- UI for creating and modifying parking structure.
- Create, update and remove the floors and slots individually.
- List all active bookings and admins can cancel bookings.
- Listing all the registered users in the system and admin can remove them from the system
- All tables are paginated with limit of 8 data per table

### **2. User Module**

- UI for representation for each floor and its slots with floor number and slot number.
- User can book each slot for a specific date and time range. (date restriction- 3 days)
- Displaying all active and upcoming bookings on card within the bookings page
- User are able to cancel their bookings.
- User can extend the end time of active bookings.

### **3. Authentication and Authorization**

- Register and Login modules.
- Role based authorization (routes and UI pages).

### **Technologies**

**Frontend** - React, Tailwind CSS, Ant Design, Redux Tool kit, RTK Query.

**Backend** - Express, MongoDB, JWT tokens, bcrypt.js, mongoose,

### **4. Schema Design**

