

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	31 January 2025
Team ID	
Project Name	
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none"><li>- Registration through Form</li><li>- Registration through Gmail</li><li>- Registration through Facebook</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>- Confirmation via Success Message</li><li>- Manual Admin Approval (Owner only)</li></ul>
FR-3	User Login	<ul style="list-style-type: none"><li>- Login via Email &amp; Password</li><li>- Session Management with JWT</li></ul>
FR-4	Role-Based Dashboard	<ul style="list-style-type: none"><li>- Admin Dashboard with User/Property Approvals</li><li>- Owner Dashboard to List/View Properties</li><li>- Renter Dashboard to View/Book Properties</li></ul>
FR-5	Property Listing	<ul style="list-style-type: none"><li>- Add Property with Image Upload</li><li>- Edit/Delete Listing</li><li>- Availability Status</li></ul>
FR-6	Property Booking	<ul style="list-style-type: none"><li>- Book Property</li><li>- Booking Confirmation Status</li><li>- View Booking History</li></ul>
FR-7	Admin Controls	<ul style="list-style-type: none"><li>- Approve/Reject Owners</li><li>- View All Bookings</li><li>- View All Users &amp; Properties</li></ul>
FR-8	Security & Authentication	<ul style="list-style-type: none"><li>- JWT Authentication Middleware</li><li>- Role-Based Route Protection</li></ul>
FR-9	UI/UX Features	<ul style="list-style-type: none"><li>- Responsive Layout (Bootstrap, MUI)</li><li>- Toast Notifications (AntD)</li></ul>
FR-10	Testing&Deployment	<ul style="list-style-type: none"><li>- API Testing with Postman</li><li>- Hosting on Vercel (Frontend) &amp; Render (Backend)</li></ul>

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The application provides an intuitive and responsive UI for all user roles.
NFR-2	<b>Security</b>	JWT-based authentication and role-based access control to ensure data security.
NFR-3	<b>Reliability</b>	Ensures system reliability through proper exception handling and server uptime.
NFR-4	<b>Performance</b>	The system handles multiple user requests efficiently with minimal latency.

NFR-5	<b>Availability</b>	Application is hosted on scalable platforms (Vercel, Render) to ensure uptime.
NFR-6	<b>Scalability</b>	The system is designed to support an increasing number of users and pro