**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| --- | --- |
| Date |  |
| Team ID | PNT2025TMID09657 |
| Project Name | Rentease-HOUSE RENT APP USING MERN |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | User login | Login with credentials  Login with Gmail  Login with LinkedIn  Forgot Password / Reset Password |
| FR-4 | Property Listing Management | Add a new property listing  Edit an existing property listing  Delete a property listing  Upload photos and videos  Set rental details (price, lease terms) |
| FR-5 | Property Search and Discovery | Search properties by location  Filter properties by price range, number of bedrooms, and amenities |
| FR-6 | Application Submission | Submit an application for a property  Upload required documents (ID, proof of income)  View the status of submitted applications  Receive notifications about application status updates |

**Non-functional Requirements:**

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The application should be stable and free from crashes. It must handle errors gracefully without data loss, ensuring that critical functions like property listings and application submissions are always operational. |
| NFR-2 | **Security** | The system must protect all user data, including personal information and payment details, using robust authentication and encryption. The application should be resilient against common security threats like SQL injection and cross-site scripting. |
| NFR-3 | **Reliability** | The application should be stable and free from crashes. It must handle errors gracefully without data loss, ensuring that critical functions like property listings and application submissions are always operational. |
| NFR-4 | **Performance** | The application must load pages and display search results quickly, ideally within 2-3 seconds, even during peak usage. Actions like submitting an application or a payment should be processed without noticeable delay. |
| NFR-5 | **Availability** | The system must be available to users at least 99.9% of the time. Planned maintenance and downtime should be minimized and communicated in advance. |
| NFR-6 | **Scalability** | The application must be able to support a growing number of users, properties, and transactions without a significant degradation in performance. The architecture should allow for easy expansion of server capacity as the user base increases. |