Requirement Gathering and Analysis Phase
Solution Requirements (Functional & Non-functional)

Date	29-06-2024
Team ID	SWTID1720075141
Project Name	Project - House Hunt
Maximum Marks	3 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**	Registration through Gmail
FR-2	**User Confirmation**	Confirmation via Email
FR-3	**User Login**	Login through Gmail
FR-4	**Search for Houses**	Search by Location Search by Number of Bedrooms Search by Property Type Search by Price Range Navigate to Locations Based on Price Range
FR-5	**Filtering**	Filter by Price Range Filter by Location
FR-6	**House Posting**	Post House for Rent Include Number of Bedrooms Include Location on Map (Longitude and Latitude) Include Distances from School, Restaurant, and Bus Include Pet Policy Include Property Type Include Description and Images Upload Images
FR-7	**Messaging System**	Real-time Messaging Chats Message Owners
FR-8	**Save Posts**	Save Houses to Favorites
FR-9	**User Dashboard**	View Saved Houses View Posted Houses
FR-10	**Notifications**	Notify Users on Messages Notify Users on House Status

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The application should have an intuitive, user-friendly interface and be responsive across devices
NFR-2	**Security**	Secure handling of user data, including encryption for data storage and transmission, secure authentication ,and encrypted real-time messaging.
NFR-3	**Reliability**	Ensure data consistency and integrity, implement error handling, data backup, and recovery mechanisms, and provide informative error messages.
NFR-4	**Performance**	Fast response times for searches, postings, and messaging. Optimize backend efficiency and use caching to handle high traffic volumes.
NFR-5	**Availability**	24/7 availability with minimal downtime. Implement high availability architecture with load balancing and failover strategies.
NFR-6	**Scalability**	Ability to scale horizontally and vertically to accommodate growth. Use scalable architecture, such as microservices and cloud-based solutions
NFR-7	**Localization**	Support multiple languages and regions with localization and internationalization features.
NFR-8	**Interoperability**	Ensure the system can interact with other systems and APIs, such as third-party map services, payment gateways, and social media logins.
NFR-9	**Maintainability**	Easy to maintain and update. Use modular, well-documented code, follow coding standards, and implement automated testing.