

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

Date	26-05-2025
Team ID	SWUID20250172526
Project Name	SocialeX
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 Authentication	- Sign up, Login, Password Reset - JWT-based Authentication - Bcrypt password hashing
FR-2	Post Creation & Viewing	- Create text/image posts - View posts in a feed layout - Like, view post count
FR-3	24-Hour Stories	- Upload stories with media - Auto-expire after 24 hours - View active stories
FR-4	Real-time Messaging	- Send and receive real-time messages - One-on-one chat using Socket.io
FR-5	Notifications	- Receive real-time notifications - Notifications for messages, likes, stories
FR-6	Profile Management	- View and edit personal profile - Upload/change profile picture - Display posts and stories by user
FR-7	Media Storage	- Upload media files (images, stories) - Secure access via Firebase Storage

Non-functional Requirements

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

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The platform should offer a modern, intuitive UI usable across devices.
NFR-2	Security	All data transfers must be encrypted using HTTPS. User sessions protected via JWT. Firebase rules enforced for media access.
NFR-3	Reliability	Ensure all core features (auth, posts, chat, stories) work under normal and peak load.
NFR-4	Performance	Page loads and user interactions (like chat & stories) should be near-instant (within 2 seconds).
NFR-5	Availability	System should maintain 99.9% uptime and ensure service continuity.
NFR-6	Scalability	Architecture should support user growth with scalable backend and Firebase infrastructure. React Native migration planned for mobile expansion.