**Project Design Phase-II**

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

| Date | 10-10-2025 |
| --- | --- |
| Team ID | SWUID20250199287 |
| Project Name | Social Media App |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

**Functional Requirements – Social Media App**

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Authentication | Sign up, Login, Password Reset |
|  |  | OAuth login using Google / GitHub |
| FR-2 | Profile Management | Create and edit user profile |
|  |  | Upload profile and cover photos |
| FR-3 | Post Creation & Interaction | Users can create text, image, and video posts |
|  |  | Like, comment, and share posts |
| FR-4 | Feed & Discovery | Personalized news feed based on friends/following |
|  |  | Explore trending posts and topics |
| FR-5 | Messaging | Real-time chat between users |
| FR-6 | Notifications | Notify users about likes, comments, messages, and follows |
| FR-7 | Friends / Followers Management | Send, accept, and manage friend requests or follow/unfollow users |
| FR-8 | Media & Content Management | Upload and manage images, videos, and stories |
| FR-9 | Search Functionality | Search users, posts, hashtags, and topics |

**Non-Functional Requirements – Social Media App**

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| **NFR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | Usability | Clean, intuitive UI with easy navigation for users of all skill levels. |
| NFR-2 | Security | All data transfers must be encrypted. Implement role-based access and token authentication. |
| NFR-3 | Reliability | Ensure posts, messaging, and notifications work reliably under all conditions. |
| NFR-4 | Performance | Pages and feeds should load within 2 seconds. Real-time messaging and media uploads should be near-instant. |
| NFR-5 | Availability | The system should maintain 99.9% uptime across all services. |
| NFR-6 | Scalability | Should handle high concurrency, large media uploads, and rapid feature scaling. |
| NFR-7 | Maintainability | Modular codebase, easy to update, with minimal downtime. |
| NFR-8 | Compatibility | Responsive design for mobile and desktop devices. |
| NFR-9 | Privacy & Compliance | User data should comply with privacy regulations (e.g., GDPR, CCPA). |