Requirement Gathering and Analysis Phase

Solution Requirements (Functional & Non-functional)

Date	
Team ID	
Project Name	FitFlex:Your Personal Fitness Companion
Maximum 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 and Authentication	- Implement email-based registration and login. - Enable third-party logins (Google, Facebook). - Add password recovery functionality.
FR-2	Personalized Workout Recommendations	- Develop an algorithm to recommend personalized workouts based on user preferences, goals, and fitness level. - Enable users to save and bookmark workouts.
FR-3	Exercise Search and Filtering	- Implement a search function to find exercises by name, category, or goal. - Provide filters to sort exercises by difficulty, duration, and type (e.g., cardio, strength).
FR-4	Workout Routines and Management	- Allow users to create custom workout routines. - Provide options to edit, save, and delete workout routines. - Integrate a progress tracker for each routine.
FR-5	User Interface and Navigation	- Design a clean, easy-to-navigate interface that highlights key workout categories. - Ensure quick access to favorite workouts and routines. - Optimize the interface for mobile and tablet use.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The app should be easy to use with an intuitive interface. Users should be able to navigate through workout categories, access their routines, and interact with the platform without confusion. The design should be simple, clean, and accessible to both beginners and experienced users.
NFR-2	**Security**	User data, including personal information and payment details, should be securely stored and transmitted. The app must implement encryption, secure authentication (e.g., OAuth, 2FA), and adhere to data protection regulations (e.g., GDPR, CCPA) to ensure privacy and security.
NFR-3	**Reliability**	The app should perform consistently without crashes or bugs. It must provide reliable access to workouts and features even under heavy traffic, ensuring that all functions work correctly and seamlessly. The app must have proper error-handling mechanisms in place.
NFR-4	**Performance**	The app should load quickly and deliver content (videos, images, workouts) with minimal latency. It should support smooth streaming with no buffering or interruptions. Response times for searches and interactions should be fast, providing a seamless user experience.
NFR-5	**Availability**	The app should be available 24/7 with minimal downtime. In case of maintenance, users should be notified in advance, and downtime should be minimized to ensure users have continuous access to the platform
NFR-6	**Scalability**	The app should be able to handle a growing user base without performance degradation. It should scale efficiently to accommodate new users, workouts, and features. The system should be designed to support the addition of new workout categories, integrations, and functionalities without significant rework.