App of choice:

-Fitness App with Workout Diet & Motivation

Software Requirements Specification (SRS)

**1. Scope**

The scope of this document outlines the requirements for the "FitnessPal" app, a comprehensive fitness application that provides workout, diet planning, and motivation features. This document describes its functionality, target audience, objectives, constraints, functional and non-functional requirements, use case models, and relevant appendices.

**2. General Description**

a. Target Audience

The intended users of "FitnessPal" are:

Fitness enthusiasts

Individuals looking to improve their health and fitness

Personal trainers and fitness coaches

b. Objectives

The main objectives of "FitnessPal" include:

Provide personalized workout plans based on user goals and fitness levels.

Offer a nutrition planner to create and track dietary goals and meal plans.

Motivate users with daily fitness tips, inspirational quotes, and progress tracking.

c. Constraints

The following constraints apply to "FitnessPal":

Compatibility with Android and iOS platforms.

Integration with third-party fitness tracking devices may be limited by API availability.

**3. Functional Requirements**

Workout Feature

User Registration: Users can create accounts with personal information and fitness goals.

Workout Plans: Users can select predefined workout plans or create custom plans.

Exercise Library: A library of exercises with descriptions and instructional videos.

Progress Tracking: Users can log their workout progress and view historical data.

Notifications: Reminders for upcoming workouts and rest days.

Diet Feature

Meal Planning: Users can set dietary goals and create daily meal plans.

Nutrition Database: Access to a database of food items with nutritional information.

Calorie Tracking: Track daily calorie intake and expenditure.

Grocery List: Generate grocery lists based on meal plans.

Motivation Feature

Daily Tips: Provide daily fitness tips and advice.

Inspirational Quotes: Display motivational quotes to keep users engaged.

Progress Visualization: Graphical representation of fitness progress.

**4. Non-functional Requirements**

Performance: The app must respond within 2 seconds for user interactions.

Security: User data, especially personal and health-related information, must be securely stored and encrypted.

Usability: The user interface should be intuitive and user-friendly.

Reliability: The app should be available 24/7 with minimal downtime.

Scalability: The app must handle an increasing number of users without significant performance degradation.

Availability: The app should be available on both Android and iOS platforms.

**5. Use Case Models (Diagrams using UML)**

I uploaded the image separately

**6. Appendices**

a. Definitions, Acronyms, Abbreviations

BMI: Body Mass Index

API: Application Programming Interface

b. References

"FitnessPal" User Interface Design Document

"FitnessPal" Data Security Guidelines

"FitnessPal" External API Documentation