**Product Requirement Document (PRD)**

**1. Product Overview**

**Product Name**: fItneSS us

**Objective**:

fItneSS us is a comprehensive fitness app that provides users with personalized gym and workout recommendations, AI-powered workout plans, real-time form feedback using computer vision, and social media features for community engagement.

**Key Features**:

• User sign-up and profile creation through an onboarding quiz.

• Summary page tracking fitness progress with activity rings, workout trends, and history.

• Map-based gym locator with advanced filtering and AI-based recommendations.

• AI-powered workout plans with customization options.

• Social media integration for sharing fitness progress, browsing community content, and connecting with friends or coaches.

• Real-time workout feedback using camera-based AI for posture and form correction.

**2. Functional Requirements**

**2.1. User Authentication**

• **Description**: Users must sign up or log in to access the app’s features.

• **Functionalities**:

• **Sign-Up**: New users can sign up using email, phone number, or social media (optional).

• **Login**: Existing users can log in with credentials.

• **Password Recovery**: Users can recover forgotten passwords through email or phone number.

• **Success Criteria**: Users can successfully sign up, log in, and recover their account credentials.

**2.2. User Profile Creation via Quiz**

• **Description**: After signing up, users complete a quiz to create a personalized fitness profile.

• **Quiz Questions**:

• **Height and Weight**

• **Age and Gender**

• **Workout Frequency** (e.g., How often do you work out?)

• **Fitness Goals** (e.g., weight loss, muscle gain, endurance)

• **Profile Data**:

• The quiz responses are saved and used to personalize workout recommendations.

• **Success Criteria**: Quiz responses are saved, and the user profile is created.

**2.3. Main Navigation & Sidebar**

• **Description**: The app includes a bottom navigation bar with 5 main pages and a sidebar for additional settings.

• **Navigation Items**:

• **Summary**: Displays user fitness data.

• **Sites**: Gym and workout place locator.

• **Workout**: Start workouts and get real-time feedback.

• **Plans**: View and create workout plans.

• **Sharing**: Browse community posts and add friends or coaches.

• **Sidebar**:

• Triggered from the top-left corner, providing access to account settings, notifications, and help/support.

• **Success Criteria**: Users can easily switch between main pages and access the sidebar.

**2.4. Summary Page**

• **Description**: The Summary page allows users to track their fitness progress.

• **Key Features**:

• **Activity Rings**: Display move, exercise, and stand rings (similar to Apple’s Activity).

• **Step Count**: Daily step count.

• **Distance**: Distance traveled during workouts.

• **Calendar View**: Show workout sessions for each day.

• **Body Part Workout Counts**: Track workouts for different body parts (e.g., upper body, legs).

• **Trends**: Show trends based on workout history.

• **Link to Details**: Users can click a day in the calendar to view detailed workout stats.

• **Success Criteria**: All fitness data is accurately displayed, and users can navigate to detailed history views.

**2.5. Sites Page (Gym Locator)**

• **Description**: Displays nearby gyms and workout locations on a map.

• **Key Features**:

• **Map View**: Users can see gyms and workout locations near them.

• **Saved and Recent Places**: List of places the user has saved or recently visited.

• **Search and Filter**: Users can search for workout places and filter/sort by distance, rating, equipment, and available activities.

• **AI-Based Recommendations**: Users can be advised of a workout place based on their plan or preferences.

• **Detailed View**: After selecting a place, users can view details such as:

• Pictures

• Activities offered

• Equipment available

• Ratings and reviews

• Location and operating hours

• Similar places nearby

• **Success Criteria**: Users can search, filter, and view detailed information about gyms/workout places.

**2.6. Workout Plan Page**

• **Description**: Users can view AI-recommended workout plans and create or modify their own plans.

• **Key Features**:

• **AI-Recommended Plans**: Based on user profile and workout history.

• **Create Custom Plans**: Users can create their own workout plans.

• **Edit Plans**: Users can modify existing plans (e.g., add or remove exercises, change workout frequency).

• **Success Criteria**: Users can view, create, and modify workout plans, and save them for future workouts.

**2.7. Sharing Page (Community)**

• **Description**: Users can browse posts, add friends and coaches, and discover community events.

• **Key Features**:

• **Browse Posts**: Users can search and view posts, blogs, and articles shared by other users.

• **Add Friends and Coaches**: Users can send friend requests or follow coaches for advice.

• **Discover Activities**: Users can find fitness activities, events, or challenges they can attend.

• **Success Criteria**: Users can engage with the community by viewing posts, adding friends, and finding fitness activities.

**2.8. Workout Page**

• **Description**: Users can start workouts, receive real-time form feedback, and track workout sessions.

• **Key Features**:

• **Workout Templates**: Start workouts based on templates from the workout plan.

• **Add Exercises**: Users can add extra exercises during their workout.

• **Real-Time Form Feedback**:

• The camera monitors the user’s posture during exercises.

• AI provides feedback on whether the movement is correct or incorrect.

• If incorrect, the app suggests how to fix the form.

• **Track Workouts**: The workout is recorded and reflected in the Summary page.

• **Update Plan**: The user’s workout plan is updated based on completed exercises.

• **Success Criteria**: Users can complete workouts with AI feedback, and the system updates workout history and plans accordingly.

**3. Non-Functional Requirements**

**3.1. Performance**

• The app should load pages and respond to user interactions within 2 seconds.

• AI feedback during workouts should be delivered in real-time (within 1 second).

**3.2. Security**

• User data, including profile and workout history, must be encrypted.

• Secure login with two-factor authentication (optional).

**3.3. Usability**

• The app must be intuitive, with smooth navigation and user-friendly interfaces.

• Accessibility features should be implemented, such as support for screen readers and colorblind-friendly modes.

**3.4. Scalability**

• The system should support large numbers of users simultaneously, especially during peak workout times.

**4. Timeline & Milestones**

• **Day 1-4**: Define AI models and algorithms, set up the development environment, and begin data collection.

• **Day 5-7**: Implement basic features such as user sign-up, profile creation, and main navigation.

• **Day 8-14**: Complete implementation of Summary, Sites, Plans, Sharing, and Workout pages, including AI feedback.