**🌸 Women Fitness App– Project Documentation**

**1. App Concept**

**Women Fitness App** is a dedicated health companion designed for women of all ages to track their physical fitness, menstrual cycle, emotional well-being, and dietary habits.

The app helps users stay consistent with workouts, monitor their menstrual health, and follow better diet practices — all in a fun, simple, and motivating environment.

It encourages daily engagement through mini health tips, progress tracking, and smart reminders based on the user's personal fitness journey.

**2. Key Features**

| **Category** | **Feature Details** |
| --- | --- |
| **Cycle Health** | Period tracking, next period prediction, soft reminders |
| **Fitness Progress** | Workout plan tracking, completed/not completed progress logs |
| **Dietary Wellness** | Daily diet tips for hydration, balanced meals, and healthy habits |
| **Emotional Support** | Motivational quotes and small wellness hints before period days |
| **User Interface** | Soft colourful UI (gradient backgrounds, animated hints) |
| **Upcoming Modules** | Future upgrade for workout suggestions based on cycle phase |

**3. Technology Stack**

| **Layer** | **Technology Used** |
| --- | --- |
| Frontend | Flutter (cross-platform Android and iOS app) |
| Backend | No backend yet (local app storage like Shared Preferences planned) |
| APIs (Future Plan) | Optional integration of Fitbit/Google Fit APIs |
| Storage | Local (in-device storage), Firebase planned for backup |
| Push Notifications | Firebase Cloud Messaging (future enhancement) |
| **Layer** | **Technology Used** |
| **Push Notifications** | Firebase Cloud Messaging (for daily emotional forecasts, cycle alert) |
|  |  |

**4. Database Structure**

| **Table Name** | **Fields** |
| --- | --- |
| users | id, name, email, age |
| cycle\_data | id, user\_id, last\_period\_date, next\_period\_prediction |
| workout\_progress | id, user\_id, workout\_title, status (completed/not completed) |
| diet\_tips | id, tip\_title, tip\_description |

(Current version is local-only — no server yet.)

**5. Workflow (User Journey)**

1. Onboarding:

* User downloads app and lands directly on Home Screen.
* No signup needed (for now).

2. Daily Use:

* Picks last period date.
* Sees next expected period + subtle health reminder.
* Browses simple daily diet tips.
* Tracks workout sessions: marks them as "Completed" or "Not Completed".

3.Special Experience:

* As period date nears, receives a mini hint like a game: ("Be ready!", "Take extra care!", etc.)
* Motivation through colorful UI and smooth progress feedback.

4.Future Plan:

* Enable notification alerts for "Workout Time!" or "Your period is near".

**6. Challenges Faced**

| **Challenge** | **How It's Solved** |
| --- | --- |
| Consistency in User Engagement | Added motivational mini-hints, cheerful gradient UI |
| Smooth Period Prediction Logic | Used simple 28-day cycle calculation for now |
| Overwhelming User Interface | Focused on minimalistic, light, colourful design |
| Fitness tracking integration (future) | Planned usage of wearable device APIs |

**7. Revenue Model**

| **Model** | **Details** |
| --- | --- |
| **Freemium Model** | **Basic features free; premium access to advanced diet/workout plans** |
| **Ads (Optional)** | **Non-intrusive fitness brand promotions** |
| **Marketplace (Optional)** | **Sell fitness accessories inside the app** |