

# **RETROFIT – A USER FITNESS TRACKER APP**

## **A MINI PROJECT REPORT**

*Submitted by*

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*in partial fulfillment for the award of the degree*

*of*

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*in*

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Chennai)**

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(An Autonomous Institution, Affiliated to Anna University, Chennai)

**BONAFIDE CERTIFICATE**

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-Voce Examination held on.....

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**EXTERNAL EXAMINER**

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We **MOHAMED TARIQ ALI S** (211422104278), **LEO ASHWIN V** (211422104249) hereby declare that this project “**RETROFIT –A USER FRIENDLY FITNESS TRACKER**”, under the guidance of Mr. **WILLIAM ANDREWS** is the original work done by us and we have not plagiarized or submitted to any other degree in any university by us.

**1. MOHAMED TARIQ ALI S**

**2. LEO ASHWIN V**

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# **ABSTRACT**

This issue explores innovative health interventions designed to promote wellness through controlled diets and exercise programs. The app offers a customised weekly meal plan using advanced AI algorithms, allowing users to adjust their nutritional intake based on their own preferences and health goals. In addition to dietary guidelines, the app provides detailed weekly exercise programs to encourage users to participate and do them regularly.

To increase statistics, users can track their calorie intake and expenditure through a detailed workout log, allowing them to track their progress in real time. Now also, the application uses a self-assessment feature that uses respirators to provide convenient health checks, and guides users to nearby medical facilities when needed.

By combining these features, the application aims to create a comprehensive platform that empowers individuals to take control of their health and wellness journey. This paper discusses the potential impact of such a program on user engagement, behavioural adherence, and overall health outcomes, positioning it as an important tool in health in preventive measures.

Ultimately, the app not only addresses physical health but also fosters a holistic approach to well-being, making it a valuable resource for users seeking sustainable lifestyle changes.

# TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	<b>ABSTRACT</b>	i
	<b>LIST OF TABLES</b>	iv
	<b>LIST OF FIGURES</b>	v
<b>1.</b>	<b>INTRODUCTION</b>	01
	1.1 Overview	01
	1.2 Problem Definition	02
<b>2.</b>	<b>SYSTEM ANALYSIS</b>	03
	2.1 Existing System	03
	2.2 Literature Survey	03
	2.3 Proposed System	05
	2.4 Development Environment	06
<b>3.</b>	<b>SYSTEM DESIGN</b>	07
	3.1 UML Diagrams	07
	3.2 ER Diagram	12
	3.3 Data Flow Diagram	13
<b>4.</b>	<b>SYSTEM ARCHITECTURE</b>	16
	4.1 Architecture Overview	16
	4.2 Module Description	17
<b>5.</b>	<b>SYSTEM IMPLEMENTATION</b>	18
	5.1 Coding for Main Layout	18
	5.2 Coding for Diet Plan	20

<b>CHAPTER NO.</b>	<b>TITLE</b>	<b>PAGE NO.</b>
	5.3 Coding for Diet plan-1	21
	5.4 Coding for Self Check Up	22
<b>6.</b>	<b>SYSTEM TESTING</b>	25
	6.1 Testcases and Reports	25
<b>7.</b>	<b>CONCLUSION</b>	26
	7.1 Conclusion	26
	7.2 Future enhancement	26
<b>8.</b>	<b>APPENDICES</b>	27
	Sample Screenshots	27
<b>9.</b>	<b>REFERENCES</b>	33

# LIST OF TABLES

<b>TABLE NO</b>	<b>TABLE DESCRIPTION</b>	<b>PAGE NO</b>
6.1	Test cases and Report Table for Fitness Tracker app	25



# LIST OF FIGURES

FIG NO	FIGURE DESCRIPTION	PAGE NO
3.1.1	Use Case Diagram for Fitness Tracker app	7
3.1.2	Class Diagram for Fitness Tracker app	8
3.1.3	Sequence Diagram for Fitness Tracker app	9
3.1.4	State chart Diagram Fitness Tracker app	10
3.1.5	Activity Diagram for Fitness Tracker app	11
3.2	ER Diagram for Fitness Tracker app	12
3.3.1	Dataflow Diagram level-0	13
3.3.2	Dataflow Diagram level-1	14
3.3.3	Dataflow Diagram level-2	15
4.1	Architecture Diagram for Fitness Tracker app	16
8.1	Home Page	47
8.2	Home Page (Features)	27
8.3	Workout Schedule Page	28
8.4	Contact Us Page	28
8.5	Calories Burning Exercises Page	29
8.6	Diet Plan Main Page	29
8.7	Diet Plan - 1 Page	30
8.8	Diet Plan -2 page	30
8.9	AI Module Page	31
8.10	Basic Self Checkup Page	31
8.11	Signup Page	32
8.12	Feedback Page	32

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 OVERVIEW**

In today's fast-paced world, maintaining a healthy lifestyle can often feel overwhelming. The increasing prevalence of lifestyle-related health issues, such as obesity and chronic diseases, underscores the urgent need for effective health management solutions. This journal presents an innovative application designed to empower users in their health journeys through personalised diet and exercise plans, integrating cutting-edge technology to facilitate sustainable lifestyle changes.

At the core of this application is the use of advanced artificial intelligence (AI) to create tailored weekly diet plans that align with individual preferences, nutritional needs, and health goals. By enabling users to customize their nutritional intake, the app fosters greater adherence to healthy eating habits. Complementing the dietary aspect, the application also offers structured weekly exercise routines, accompanied by notifications to motivate users and enhance their commitment to physical activity.

A key feature of the application is its ability to track caloric intake and expenditure, allowing users to visualise their progress and make informed choices. Furthermore, the integration of a self-assessment tool for breathing medications ensures convenient access to health checkups, directing users to nearby medical facilities when necessary.

This journal explores the multifaceted benefits of this health management application, highlighting its potential to improve user engagement, foster accountability, and promote overall well-being. By combining personalised nutrition, exercise planning, and health monitoring, the application aims to redefine the approach to health management in an increasingly digital world, ultimately supporting individuals in achieving and maintaining a healthier lifestyle.

## 1.2 PROBLEM DEFINITION

### 1. User Authentication:

- **Login:** Secure access for returning users to track their health and safety features.
- **Sign Up:** Easy registration process for new users, ensuring a smooth onboarding experience.

### 2. Personalized Diet Plans:

- **Weekly Diet Plans:** Curated diet plans provided every week based on user preferences and health goals.
- **AI-Driven Customization:** Users can create personalized diet plans using AI that considers dietary restrictions, favorite foods, and nutritional needs.

### 3. Exercise Tracking and Notifications:

- **Weekly Exercise Routines:** Tailored exercise plans provided weekly to encourage physical activity.
- **Push Notifications:** Reminders and motivational messages sent once logged in to help users stay on track with their exercise regimen.

### 4. Calorie Management:

- **Calorie Tracking:** Users can log their food intake and exercises to monitor caloric balance.
- **Burned Calories Calculation:** Insights into how different exercises contribute to calorie burning.

### Summary

This app aims to provide a comprehensive health and safety solution by combining personalized diet and exercise plans with features that ensure users can manage their health effectively while also having access to emergency resources. This integrated approach promotes both physical well-being and personal safety, catering specifically to the needs of users who may require additional support in navigating health challenges and ensuring safety during emergencies.

## **CHAPTER 2**

### **SYSTEM ANALYSIS**

#### **2.1 EXISTING SYSTEM**

Existing health apps often lack personalization, providing generic diet and exercise plans that do not cater to individual needs. Many calorie tracking apps are tedious and overlook the integration of exercise routines with dietary management. Fitness apps typically focus solely on workouts, neglecting dietary advice and personal safety features. Health monitoring apps offer fragmented solutions, requiring users to juggle multiple applications without real-time support.

#### **DISADVANTAGES**

- No customized solution

#### **2.2 LITERATURE SURVEY**

The increasing prevalence of fitness trackers and health-related mobile applications has revolutionized the way individuals manage their health and wellness. This section summarizes key research in the field and highlights how these technological systems contribute to personalized health management. In contrast, it also addresses gaps that our proposed system seeks to fill.

Chris Lynch's systematic review and meta-analysis [1] represents a pivotal piece of research that examines the overall impact of fitness trackers on physical activity. The study aggregates findings from multiple sources and underscores the positive effects fitness trackers have on motivating users to increase their physical activity. However, one major limitation of this study is that many fitness trackers provide generic, non-personalized recommendations, which might not effectively cater to individual needs. To address this, our system focuses on providing tailored interventions, including personalized diet plans and activity recommendations based on users' data and preferences.

David Chaloupký's work [2] explores the use of fitness trackers in a blended

learning model aimed at improving the effectiveness of fitness education, specifically in running lessons. The integration of fitness technology with education has proven valuable, yet challenges related to learning curves associated with the use of these technologies are noted. Our system extends this approach by offering comprehensive educational support for users, with easy-to-understand instructions and data interpretation tools, thereby ensuring that users can seamlessly integrate fitness technology into their routines

Toritsemogba Tosan Omaghomi [3] provides an indepth review of the effectiveness of health apps in improving patient outcomes, treatment adherence, and behavioral changes. This review highlights the variability in effectiveness across different population demographics, a concern that our system directly addresses by tailoring interventions to meet the specific needs of diverse groups. By leveraging user data, our platform can deliver personalized health advice and track patient progress more effectively.

In a cross-sectional analysis [4], Gardner and Cubby L investigate the relationship between health-tracking behaviors and health literacy among military personnel. The study points out risks associated with unauthorized data sharing, emphasizing the need for strong data security measures. Our system not only ensures compliance with data privacy regulations but also regularly conducts security audits to mitigate any potential vulnerabilities, thereby enhancing user trust and engagement.

Krutheeka Baskaran's research [5] investigates how fear-based messaging impacts users' emotional responses to fitness tracking. The findings indicate that fear appeals can lead to defensive reactions, thus reducing the effectiveness of health interventions. To counteract this, our system integrates feedback mechanisms that monitor users' emotional responses, allowing for adjustments in messaging strategies that encourage positive engagement rather than fear-based motivation.

Our system aims to bridge existing gaps in fitness tracking and health management by integrating personalized health insights, user-friendly interfaces, and advanced security features into a single platform. By doing so, we provide a good, truthful and well balanced comprehensive solution that empowers users to achieve their fitness and health goals effectively. Unlike many current systems that either focus on isolated aspects of health or provide generalized recommendations, our approach is designed to support users through personalized interventions and enhanced data management throughout their fitness journey.

## 2.3 PURPOSED SYSTEM

1. **Personalized Diet Plans:** The app uses AI to generate customized weekly meal plans based on individual preferences, dietary restrictions, and health goals, promoting balanced nutrition.
2. **Exercise Tracking:** Users receive tailored exercise routines along with reminders to encourage consistency and motivation, helping them achieve their fitness objectives.
3. **Calorie Management:** The app allows users to log their food intake and exercises, providing insights into calorie consumption and expenditure to support weight management.
4. **User-Friendly Interface:** Designed for simplicity, the app ensures that all features are easily accessible, making it straightforward for users to manage their health effectively.

## ADVANTAGES

- Personalized Approach
- Comprehensive Tracking

## 2.4 DEVELOPMENT ENVIRONMENT

### SOFTWARE REQUIREMENT

- **HTML, CSS, JavaScript:** Core web technologies.
- **React:** JavaScript library for building user interfaces.
- **Tailwind CSS:** Utility-first CSS framework.
- **Google Fonts:** For web fonts.
- **Iconify:** For icon integration.
- **ImageKit:** For optimized image delivery and management.
- **Node.js:** JavaScript runtime for building scalable network applications.

### HARDWARE REQUIREMENT

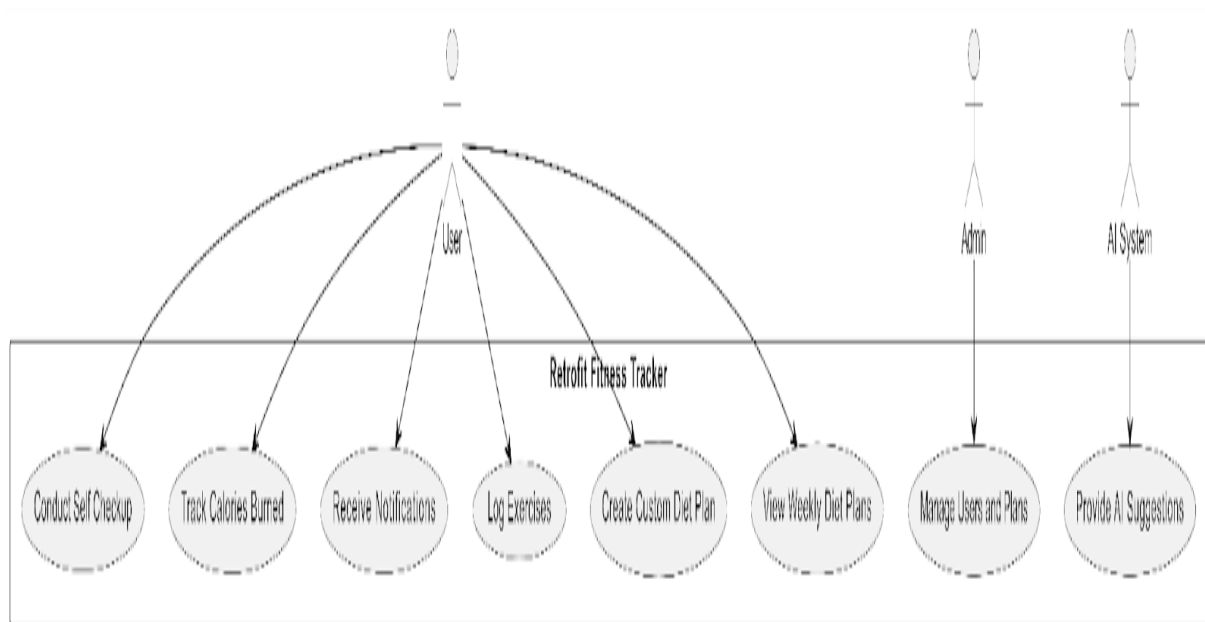
- **Processor:** Intel Core i5/i7
- **RAM:** 8GB or more
- **Storage:** SSD with at least 256GB
- **Graphics Card:** Integrated graphics are sufficient, but a dedicated GPU (like NVIDIA GTX/RTX series) can be beneficial.
- **Monitor:** Single monitor for efficient multitasking (1080p or higher resolution)
- **External Storage:** For backups (e.g., an external SSD or HDD)
- **Network:** Reliable internet connection (preferably wired for stability)
- **Keyboard and Mouse:** Comfortable ergonomic setup

## CHAPTER 3

### SYSTEM DESIGN

#### 3.1 UML DIAGRAMS

##### 3.1.1 Use case diagram:

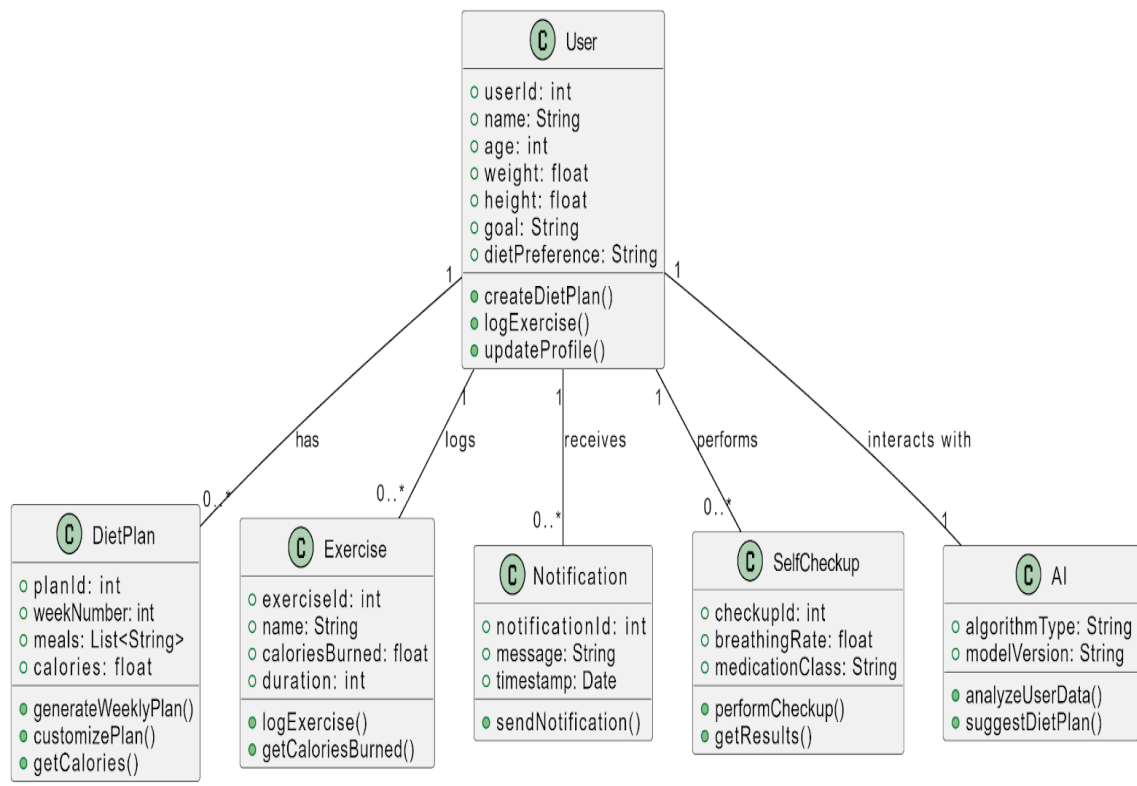


**Fig 3.1.1 Use case diagram for Fitness tracker**

This use case diagram refers to activities done by System and users and their corresponding use cases.



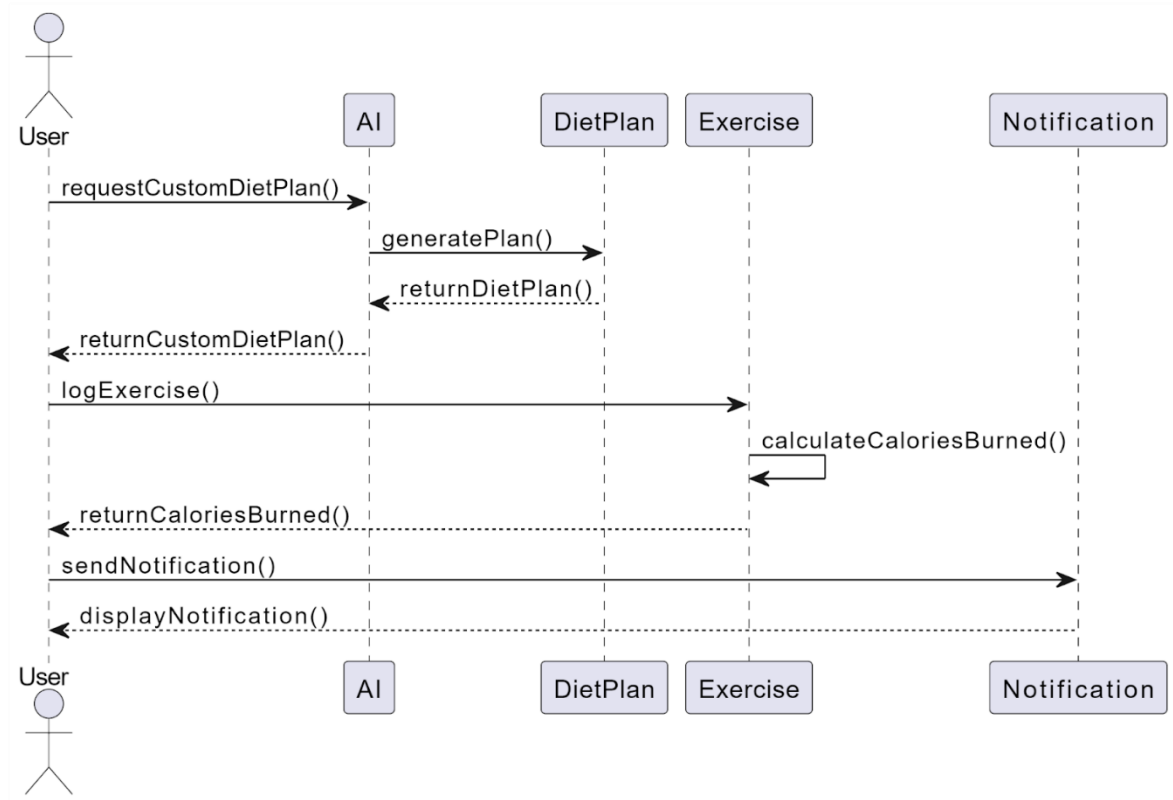
### 3.1.2 Class diagram:



**Fig 3.1.2 Class diagram for Fitness tracker**

The class diagram refers to relationships between different classes for diet plan , Exercises and etc .

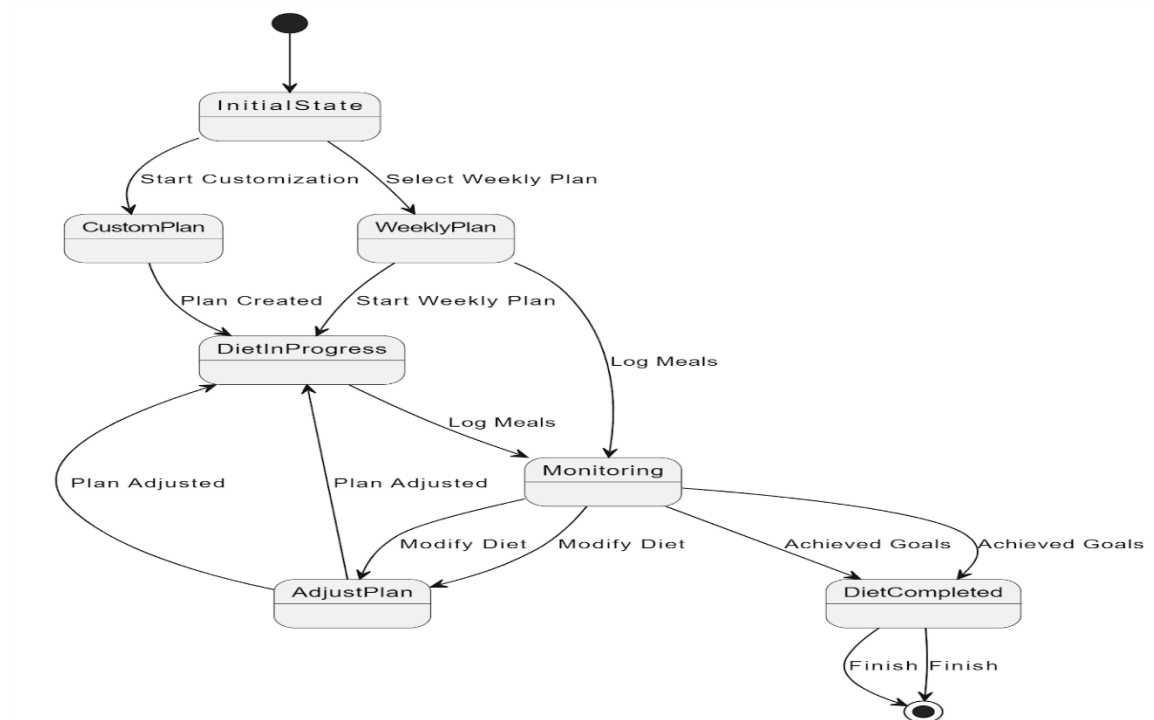
### 3.1.3 Sequence diagram:



**Fig 3.1.3 Sequence diagram for Fitness tracker app**

The sequence diagram of Fitness Tracker app shows the sequence of activities performed by the user while using the application.

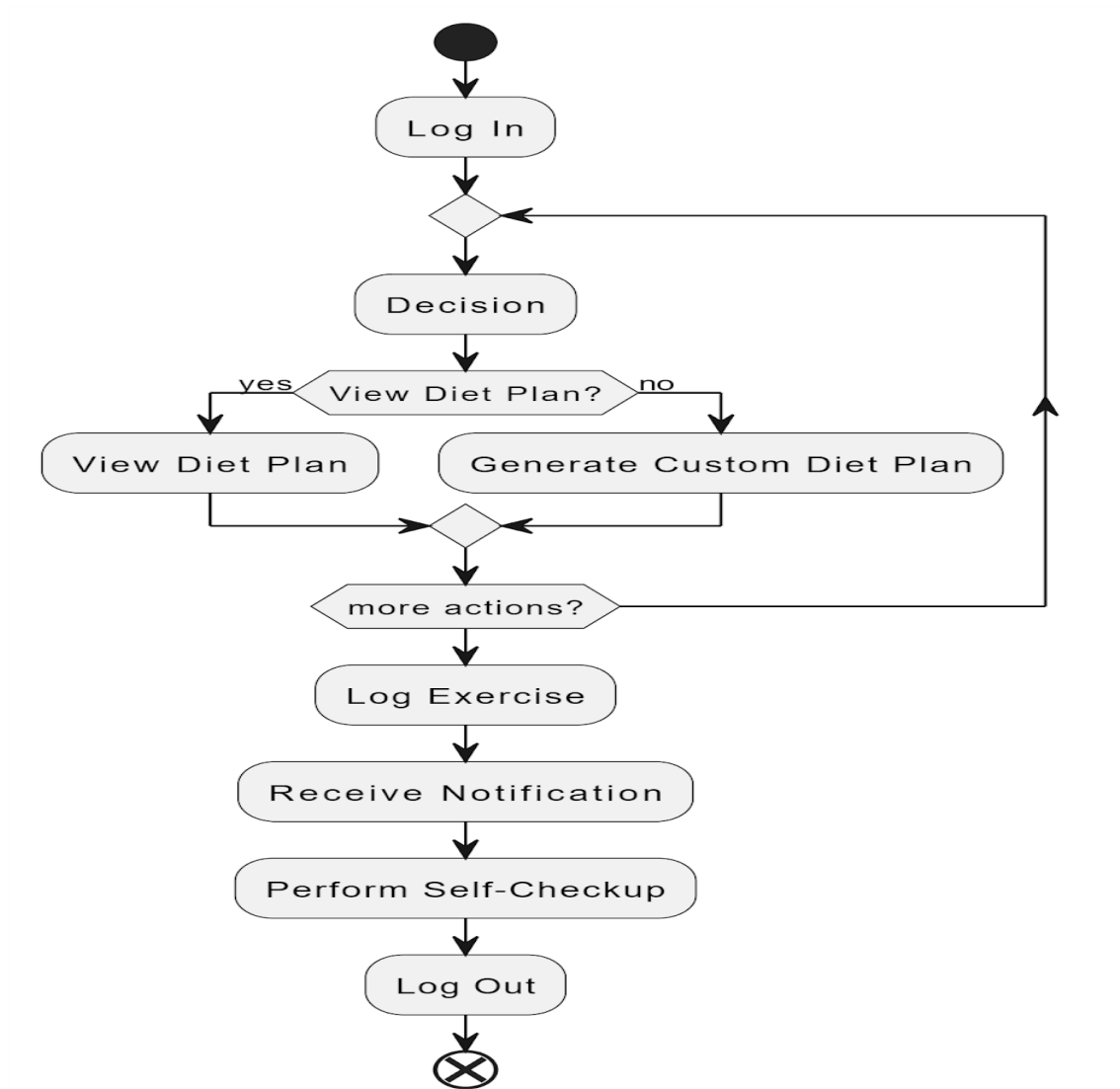
### 3.1.4 State chart diagram:



**Fig 3.1.4 State chart diagram for Fitness Tracker app**

The state chart diagram of Fitness Tracker app shows the entire workflow of the application. It shows the various states of the application from the installing stage.

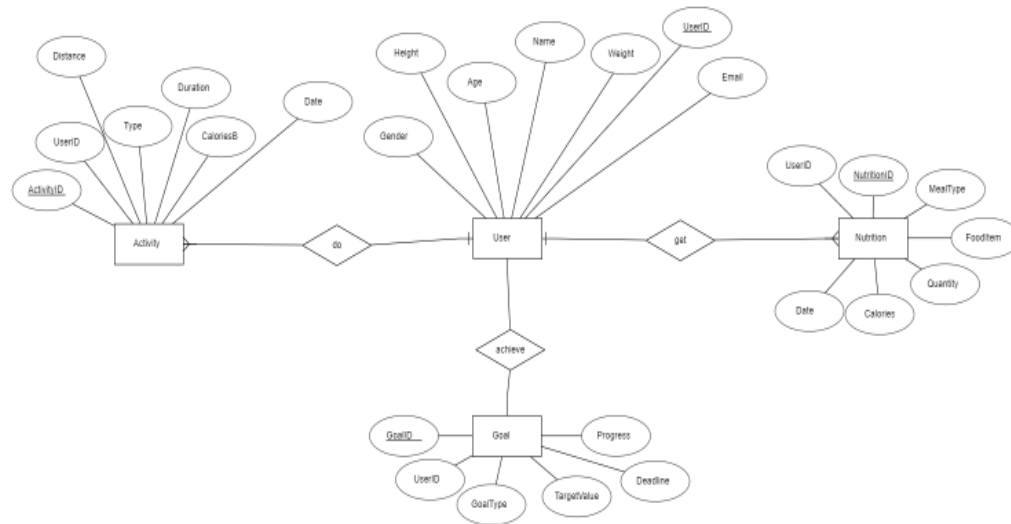
### 3.1.5 Activity diagram:



**Fig 3.1.5 Activity diagram for Fitness Tracker app**

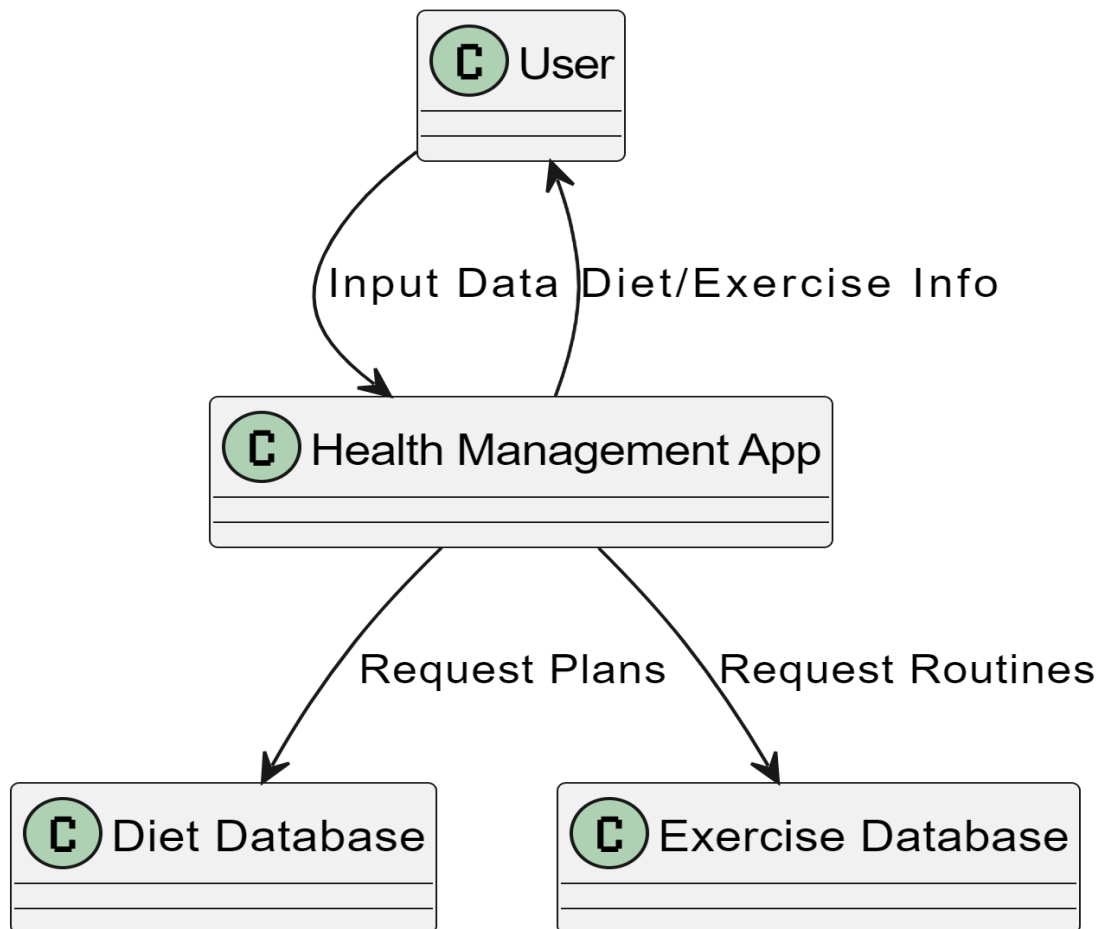
The activity diagram of Fitness Tracker app shows the flow of activities of using the application.

## 3.2 ER DIAGRAM



The ER diagram for your app represents key entities such as **User**, **Diet Plan**, **Exercise**, **Notification**, and **Self Checkup**. Each entity includes attributes that capture essential details, like a User's personal information and preferences, or a Diet Plan's weekly meals and calorie counts. The relationships illustrate how Users interact with their Diet Plans, log Exercises, receive Notifications, and perform Self Checkups, facilitating a comprehensive overview of the app's functionality and data structure.

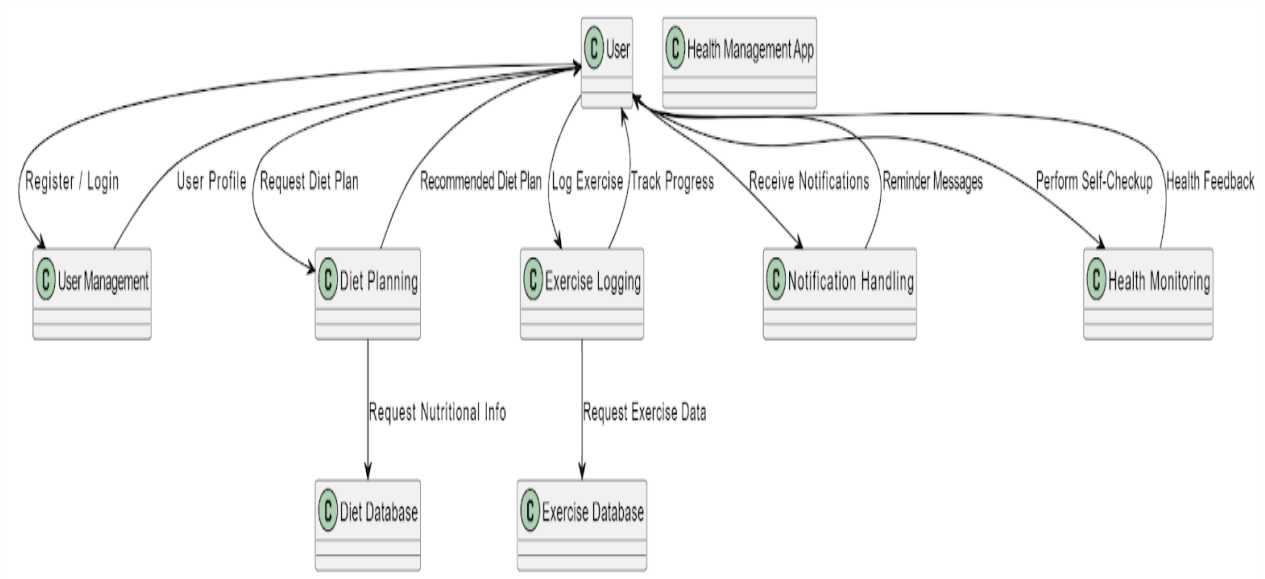
### 3.3 DATAFLOW DIAGRAM3.3.1 0 LEVEL DFD



**Fig 3.3.1 Data flow diagram level 0**

The zero level of data flow diagram of Fitness Tracker app shows the various management levels.

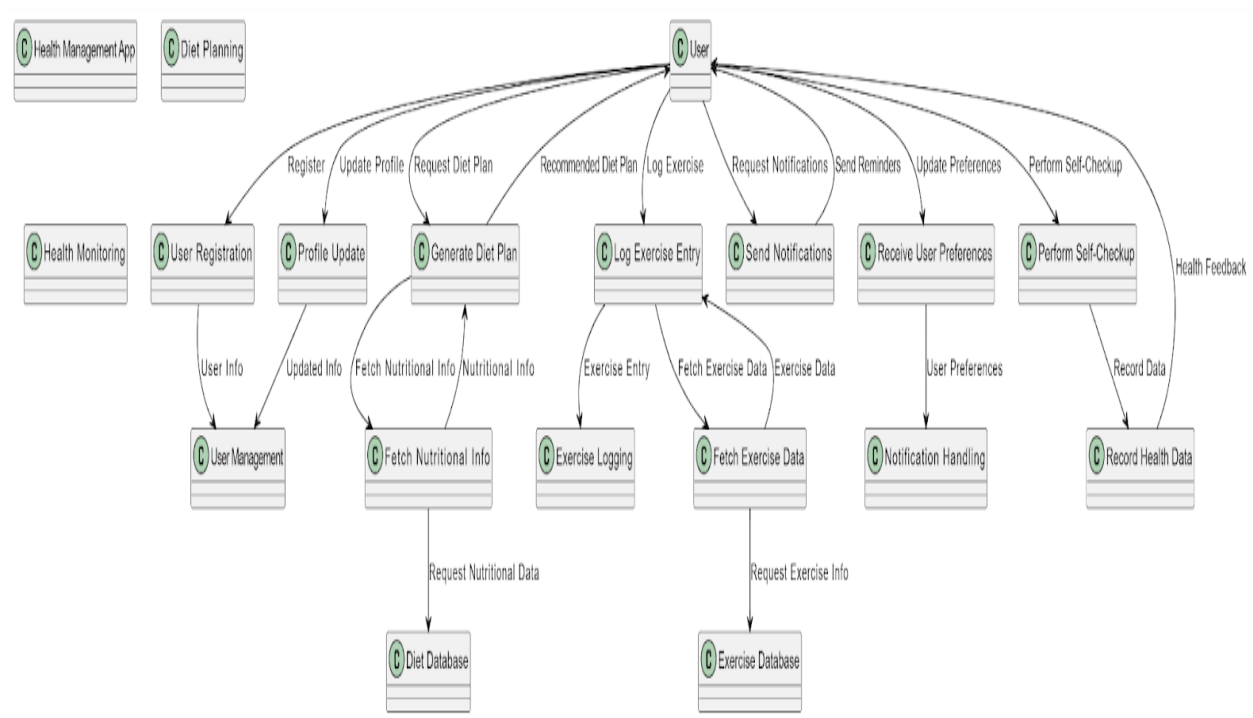
### 3.3.2 FIRST LEVEL DFD



**Fig 3.3.2 Dataflow diagram level 1**

The first level of data flow diagram of Fitness Tracker app shows the various management levels and their corresponding report

### 3.3.3 SECOND LEVEL DFD



**Fig 3.3.3 Dataflow diagram level 2**

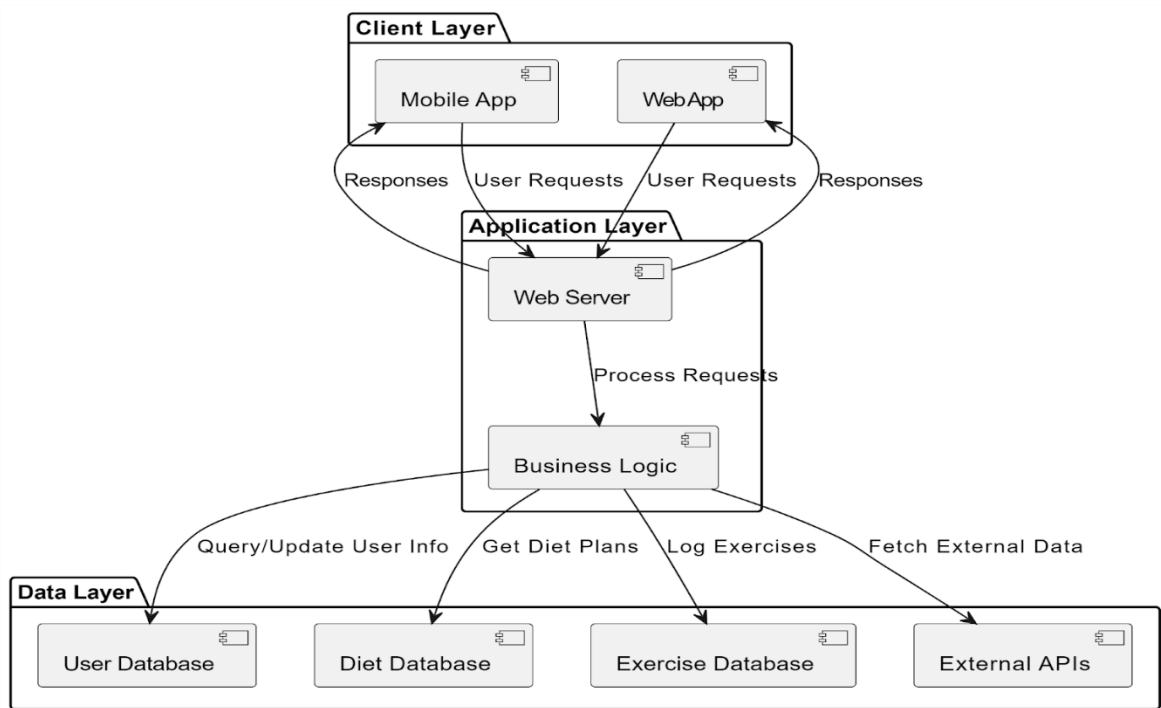
The second level of data flow diagram of Fitness Tracker app shows the various details of actions.



# CHAPTER 4

## SYSTEM ARCHITECTURE

### 4.1 ARCHITECTURE OVERVIEW



**Fig 4.1 Architecture diagram for  
Fitness  
Tracker app**

**Figure 4.1** presents the complete architecture diagram for the Health Management App. Initially, the user needs to install the application. Upon launching the app, it prompts the user to grant permissions for accessing location, camera, and contacts. The app stores user details and preferences in the database. Additionally, it includes default helpline numbers for easy access. Utilizing GPS, the application tracks the user's location and can send coordinates to selected contacts through a network connection.

## 4.2 MODULE DESCRIPTION

The Health Management App consists of six main modules:

- **Diet Planning Module**
- **Exercise Logging Module**
- **Notification Module**
- **Self Checkup Module**
- **User Management Module**

### **Diet Planning Module:**

- Allows users to create and customize diet plans based on personal preferences and goals.
- Users can save multiple diet plans and update them as needed.
- Includes a feature to delete unwanted plans easily.
- Provides nutritional information and guidelines for each meal in the plan.

### **Exercise Logging Module:**

- Users can log various exercises and track their progress over time.
- Allows for the addition of custom exercises and routines.
- Displays calories burned and time spent on each exercise.
- Provides instructional content for different exercises to ensure proper form.

### **Notification Module:**

- Sends reminders for meal times, exercise sessions, and health checkups.
- Users can customize notification settings according to their preferences.

### **Self Checkup Module:**

- Enables users to perform basic health self-assessments.
- Collects data on breathing rate and other vital signs.
- Provides feedback based on the self-checkup results and suggests further action if needed.

### **User Management Module:**

- Facilitates user registration and profile management.
- Stores user history, including previous diet plans and exercise logs.

# CHAPTER 5

## SYSTEM IMPLEMENTATION

### 5.1 CODING FOR MAIN LAYOUT FILE:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>RETROFIT - Features</title>
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/6.0.0-beta3/css/all.min.css">
<script src="https://cdn.tailwindcss.com"></script>
<link rel="stylesheet" href="app.css">
</head>
<body>
<!-- Navbar -->
<nav class="bg-[#0d2436] text-white p-4 flex justify-between items-center
shadow-md">

<a href="#HOME" class="hover:text-[#d0b200] text-2xl font-
bold">RETROFIT</a>
<div class="hidden md:flex space-x-10">
<a href="#DIET PLANS" class="hover:text-[#d0b200]">Features</a>
<a href="#WORKS" class="hover:text-[#d0b200]">Workout</a>
<a href="#FOLLOW US" class="hover:text-[#d0b200]">Follow Us</a>
</div>
</nav>

<!-- Diet Plans Section -->
<div class="2xl:container" id="DIET PLANS">
<div class="w-[90%] mx-auto grid grid-cols-1 md:grid-cols-3 gap-4">
<div class="bg-white py-3 px-2 rounded-xl flex flex-col items-center">
<h2>Calories burn</h2>
<a href="calories/calorie.html"><button class="bg-[#d0b200] px-6 py-4
```

```

rounded-lg text-white">CALORIES</button></a>
</div>
<div class="bg-white py-3 px-2 rounded-xl flex flex-col items-center">
<h2>MY DIET PLANS</h2>
<a href="meal.html"><button class="bg-[#d0b200] px-6 py-4 rounded-lg text-
white">GO TO DIET PLANS</button></a>
</div>
<div class="bg-white py-3 px-2 rounded-xl flex flex-col items-center">
<h2>AI GENERATED DIET</h2>
<a href="ai bot/index.html"><button class="bg-[#d0b200] px-6 py-4 rounded-
lg text-white">GO TO MODULE</button></a>
</div>
</div>
</div>

```

```

<!-- Workout Schedule Section -->
<section class="py-10" id="WORKS">
<div class="2xl:container">
<h2 class="text-3xl">WORKOUT SCHEDULE</h2>
<div class="w-[90%] mx-auto grid grid-cols-1 md:grid-cols-2 lg:grid-cols-4
gap-4">
<div class="bg-white shadow-lg p-6">
<p>Monday: Cardio</p>
</div>
<div class="bg-white shadow-lg p-6">
<p>Tuesday: Lower body</p>
</div>
<div class="bg-white shadow-lg p-6">
<p>Wednesday: Upper body and core</p>
</div>
<div class="bg-white shadow-lg p-6">
<p>Thursday: Active rest and recovery</p>
</div>
</div>
</div>
</div>
</section>

```

```

<footer class="bg-[#0d2436] py-10">
<div class="2xl:container">
<div class="w-[90%] mx-auto text-center">
<h2 class="text-[#fff] text-base">RETROFIT.com</h2>
</div>
</div>

```

```

</footer>
<script src="script.js"></script>
</body>
</html>

```

## 5.2. CODE FOR DIET PLAN

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Meal Plans</title>
  <script src="https://cdn.tailwindcss.com"></script>
<style>
body {
background-image:
url("https://ik.imagekit.io/tariq/meals.jpg.jpg?updatedAt=1711122742183");
background-size: cover;
background-repeat: no-repeat;
margin: 0;
height: 100vh;
display: flex;
align-items: center;
justify-content: center;
}
</style>
</head>
<body class="text-white font-poppins">
<!-- Meal Plans Section -->
<section class="py-10">
<div class="container mx-auto px-4 text-center">
<h1 class="text-4xl font-bold mb-8">Explore Types of Meals</h1>
<div class="grid grid-cols-1 gap-8 md:grid-cols-2 mx-auto">
<!-- Diet Plan 1 -->
<div class="text-center">
<a href="meal/diet1.html">
<button class="bg-[#ea3d5f] px-8 py-4 rounded-lg text-white font-semibold text-
lg transition duration-300 ease-in-out hover:bg-[#c6286c] focus:outline-none

```

```

focus:ring-2 focus:ring-[#ea3d5f]">
Simple Diet Plan
</button>
</a>
</div>

<!-- Diet Plan 2 -->
<div class="text-center">
<a href="meal/diet2.html">
<button class="bg-[#ea3d5f] px-8 py-4 rounded-lg text-white font-semibold
text-lg transition duration-300 ease-in-out hover:bg-[#c6286c] focus:outline-
none focus:ring-2 focus:ring-[#ea3d5f]">

Diet Plan with Exercise
</button>
</a>
</div>
</div>
</div>
</div>
</section>
</body>
</html>

```

## 5.3 .CODE FOR DIET PLAN 1

```

<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>7-Day Diet Plan Overview</title>
</head>
<body>

<h1>7-Day Diet Plan Overview</h1>

<!-- Day Links -->
<ul>

```

<li><a href="day1.html">Day 1</a></li>

<h1>Day 1 Diet Plan</h1>

<h2>Meals</h2>

<p><strong>Breakfast (387 calories):</strong> 2 servings Baked Banana-Nut Oatmeal Cups, 1 clementine</p>

<p><strong>A.M. Snack (190 calories):</strong> 1 medium apple, 1 Tbsp. peanut butter</p>

<p><strong>Lunch (325 calories):</strong> 1 serving Veggie & Hummus Sandwich</p>

<p><strong>P.M. Snack (105 calories):</strong> 1 medium banana</p>

<p><strong>Dinner (451 calories):</strong> 1 serving Sheet-Pan Chicken Fajita Bowls with 1/2 cup cooked brown rice</p>

<div>

<p><strong>Daily Totals:</strong> 1,458 calories, 77 g protein, 220 g carbohydrate, 39 g fiber, 47 g fat, 1,355 mg sodium</p>

</div>

<button onclick="location.href='index.html'">Back to Overview</button>

<li><a href="day2.html">Day 2</a></li>

<li><a href="day3.html">Day 3</a></li>

<li><a href="day4.html">Day 4</a></li>

<li><a href="day5.html">Day 5</a></li>

<li><a href="day6.html">Day 6</a></li>

<li><a href="day7.html">Day 7</a></li>

</ul>

</body>

</html>

## 5.4.CODE FOR SELF CHECK UP

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Fitness and Diet Self-Checkups</title>

</head>

<body>

<h1>Basic Self-Checkups</h1>

```

<!-- Fitness Self-Checkups Section -->
<h2 onclick="toggleSection('fitness')">Fitness Self-Checkups</h2>
<div id="fitness" style="display:none;">
<p><strong>1. Resting Heart Rate (RHR):</strong> Measure your pulse when
at rest. Lower RHR indicates better cardiovascular fitness.</p>
<p><strong>2. Step Test:</strong> Step up and down on a bench for 3 minutes
and check your heart rate to assess endurance.</p>
<p><strong>3. Flexibility Test:</strong> Touch your toes or do a sit-and-reach
test to check joint flexibility.</p>
<p><strong>4. Push-Up Test:</strong> Count how many push-ups you can do
in 1 minute to evaluate upper body strength.</p>
<p><strong>5. Single-Leg Stand:</strong> Test your balance by standing on
one leg with your eyes closed.</p>
<p><strong>6. Waist Circumference:</strong> Measure your waist at the navel
to check for health risks associated with excess abdominal fat.</p>
</div>

```

```

<!-- Diet Self-Checkups Section -->
<h2 onclick="toggleSection('diet')">Diet Self-Checkups</h2>
<div id="diet" style="display:none;">
<p><strong>1. Hydration Levels:</strong> Monitor urine color (light yellow is
optimal) to assess hydration.</p>
<p><strong>2. Daily Calorie Intake:</strong> Use a food diary or app to track
your daily intake for weight management.</p>
<p><strong>3. Protein Intake:</strong> Track protein to ensure you're meeting
fitness goals. Aim for 0.8-1.2g/kg body weight.</p>
<p><strong>4. Portion Control:</strong> Use hand portions to control serving
sizes (fist for carbs, palm for protein, thumb for fats).</p>
<p><strong>5. Balanced Diet:</strong> Ensure you're consuming foods from
all essential food groups.</p>
<p><strong>6. Macro and Micronutrient Check:</strong> Track essential
nutrients to prevent deficiencies.</p>
<p><strong>7. Body Fat Percentage:</strong> Use a body fat caliper or smart
scale to monitor body composition.</p>
<p><strong>8. Meal Timing:</strong> Track meal frequency to maintain stable
energy levels and avoid overeating.</p>
</div>

```

```

<button onclick="toggleAll()">See All</button>

```

```

<script>
function toggleSection(sectionId) {
var content = document.getElementById(sectionId);

```



```
content.style.display = content.style.display === "block" ? "none" : "block";  
}
```

```
function toggleAll() {  
  var fitnessContent = document.getElementById('fitness');  
  var dietContent = document.getElementById('diet');  
  
  var showAll = fitnessContent.style.display !== "block" &&  
    dietContent.style.display !== "block";  
  fitnessContent.style.display = showAll ? "block" : "none";  
  dietContent.style.display = showAll ? "block" : "none";  
}  
</script>
```

```
</body>  
</html>
```

# CHAPTER 6

## SYSTEM TESTING

### 6.1 TEST CASES & REPORTS

TEST CASE ID	TEST CASE / ACTION TO BE PERFORMED	EXPECTED RESULT	ACTUAL RESULT	PASS / FAIL
1	Login in the website using email and password	Goes back to main page if successful.	Goes back to main page if successful.	Pass
2	View the diet plan	Can see two diet plan	Can see two diet plan	Pass
3	AI customization details	Give the plan to the preference of user	Give the plan to the preference of user	Pass
4	Breathing exercise	See the demo of the exercise	See the demo of the exercise	Pass
5	Exercise details	See the demo of the exercise	See the demo of the exercise	Pass
6	Feedback	Feedback is accepted	Feedback is accepted	Pass
7	<u>Self Checkup module</u>	Display self-checkup options	Display self-checkup options	Pass
8	Workout module	Successfully view the workout details	Successfully view the workout details	Pass

# CHAPTER 7

## 7.1 CONCLUSION

The Health Management App aims to empower users by promoting a healthier lifestyle and enhancing personal well-being. By offering features such as customized diet plans, exercise logging, and health monitoring, the app supports individuals in achieving their health goals. It encourages users to take proactive steps towards their fitness and well-being, thereby fostering a culture of health awareness. The integration of self-checkup tools and location tracking further enhances user safety and peace of mind, making it an invaluable resource for anyone seeking to improve their overall health.

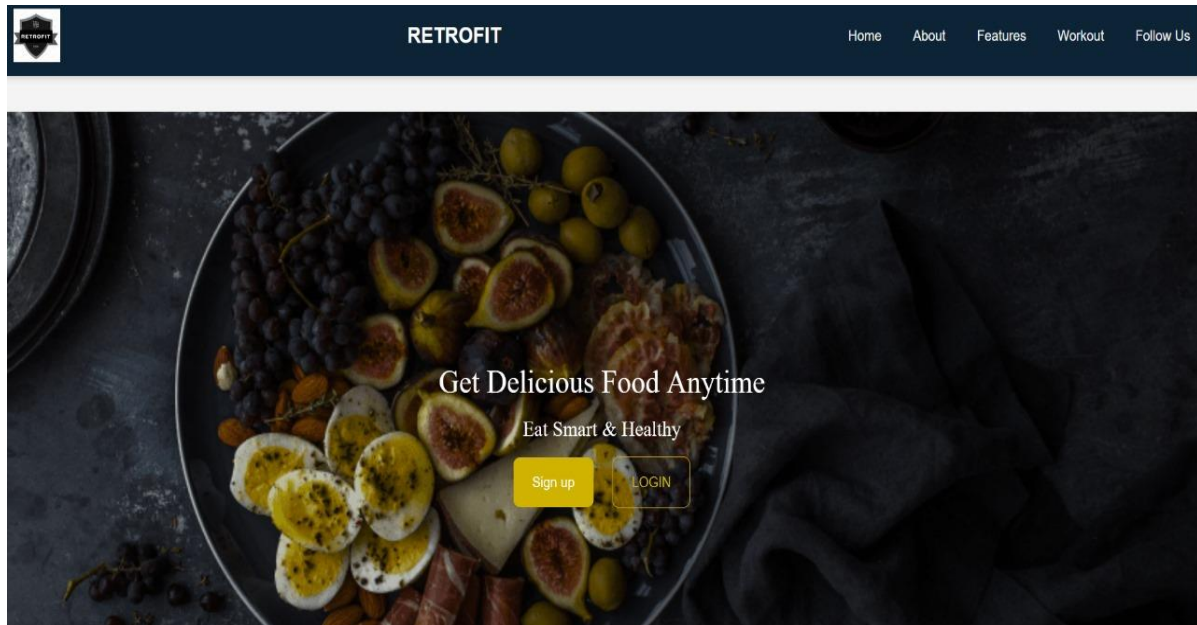
## 7.2 FUTURE ENHANCEMENTS

1. **Offline Functionality:** Future upgrades could enable essential features to function without a mobile network, allowing users to access vital health information and tools even in low-connectivity areas.
2. **Cloud Data Storage:** To overcome device limitations, incorporating cloud storage will ensure that users can access their health data and preferences from multiple devices securely.
3. **Voice Activation:** Implementing voice recognition technology could allow users to interact with the app hands-free, enhancing usability, especially during workouts or when multitasking.

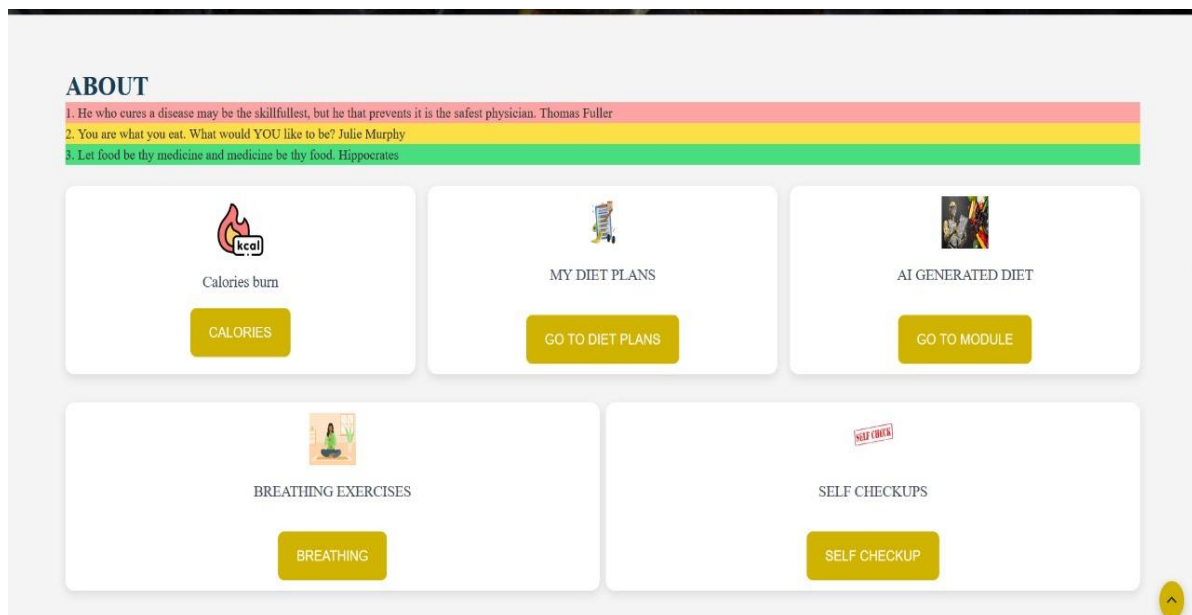
These proposed enhancements will make the Health Management App more versatile and user-friendly, ultimately contributing to a more dynamic health management experience.

# CHAPTER 8

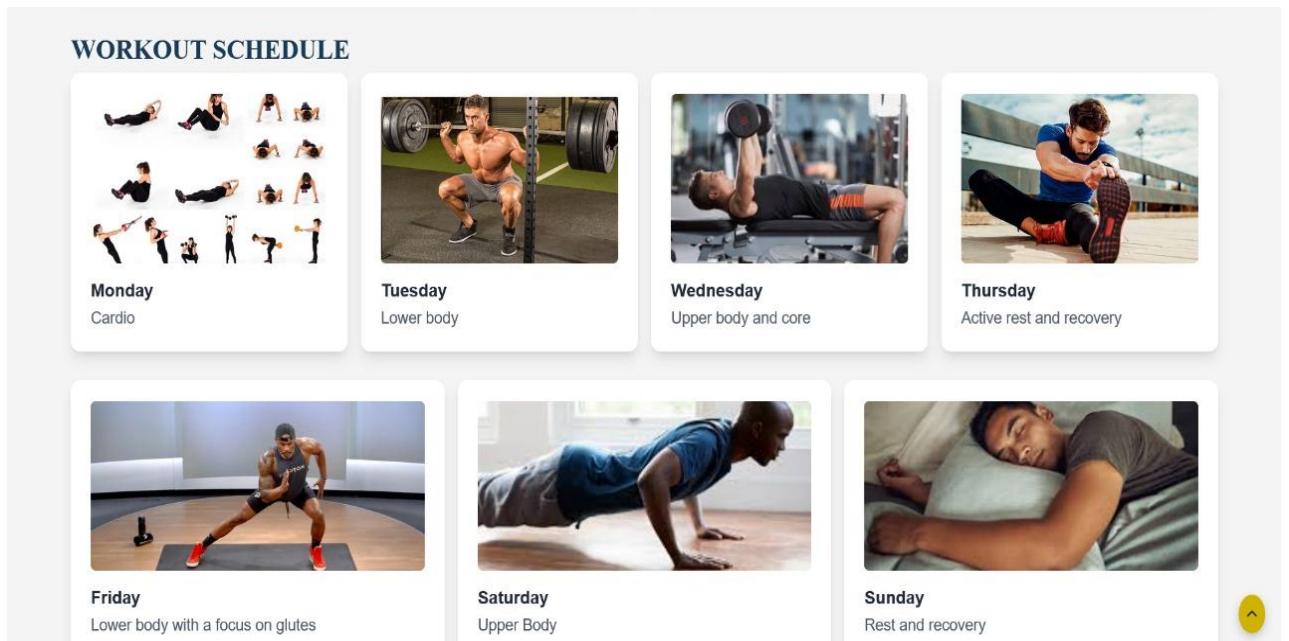
## APPENDICES



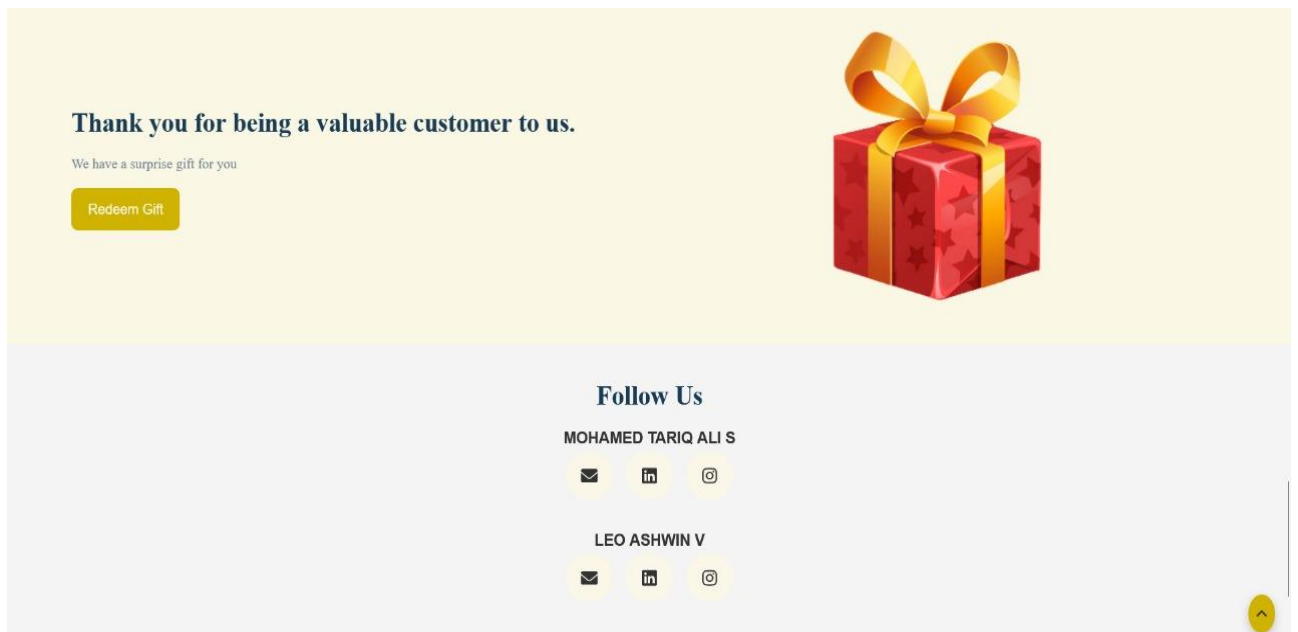
**Fig 8.1 Home Page**



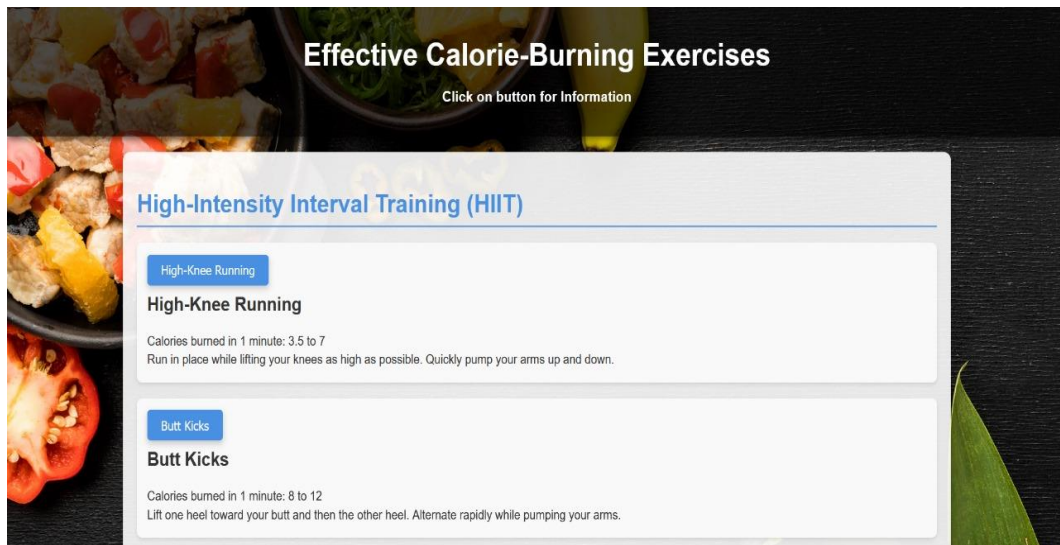
**Fig 8.2 Home Page Features**



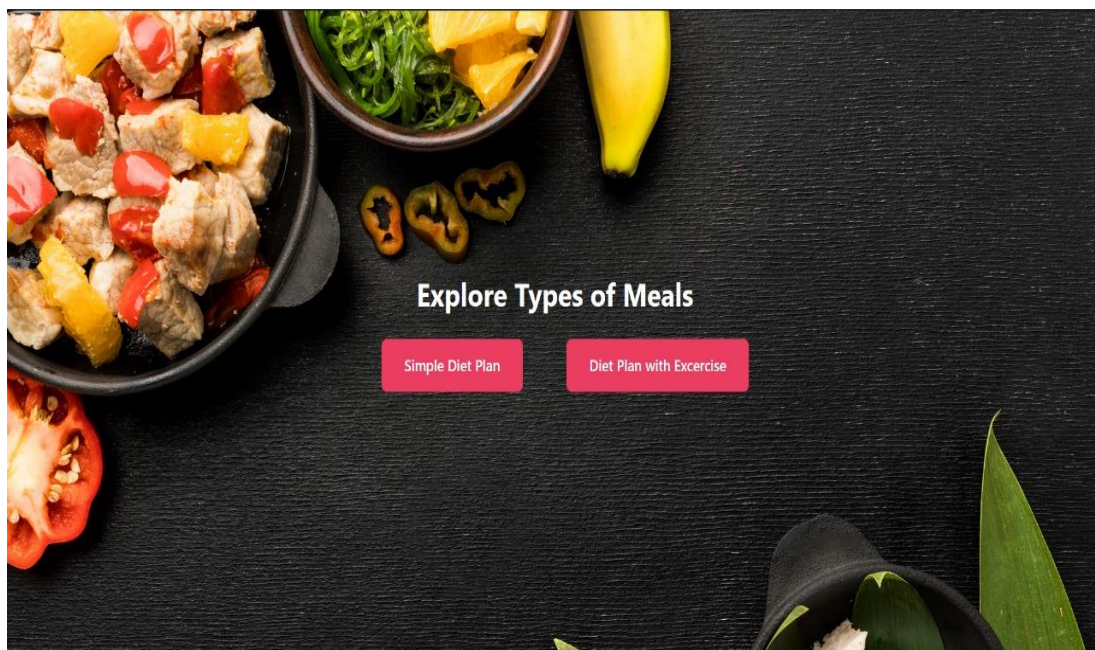
**Fig 8.3 Workout Schedule**



**Fig 8.4 Contact Us Page**

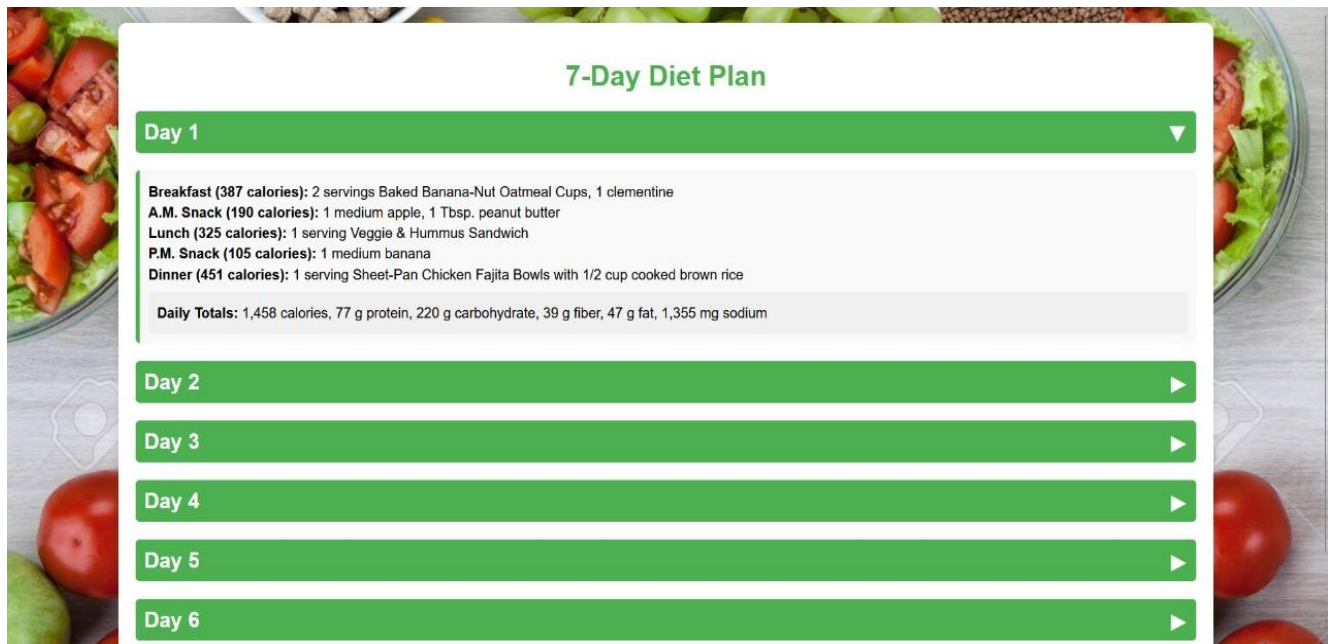


**Fig 8.5 Calories Burning Exercises Page**



**Fig 8.6 Diet Plan Main Page**

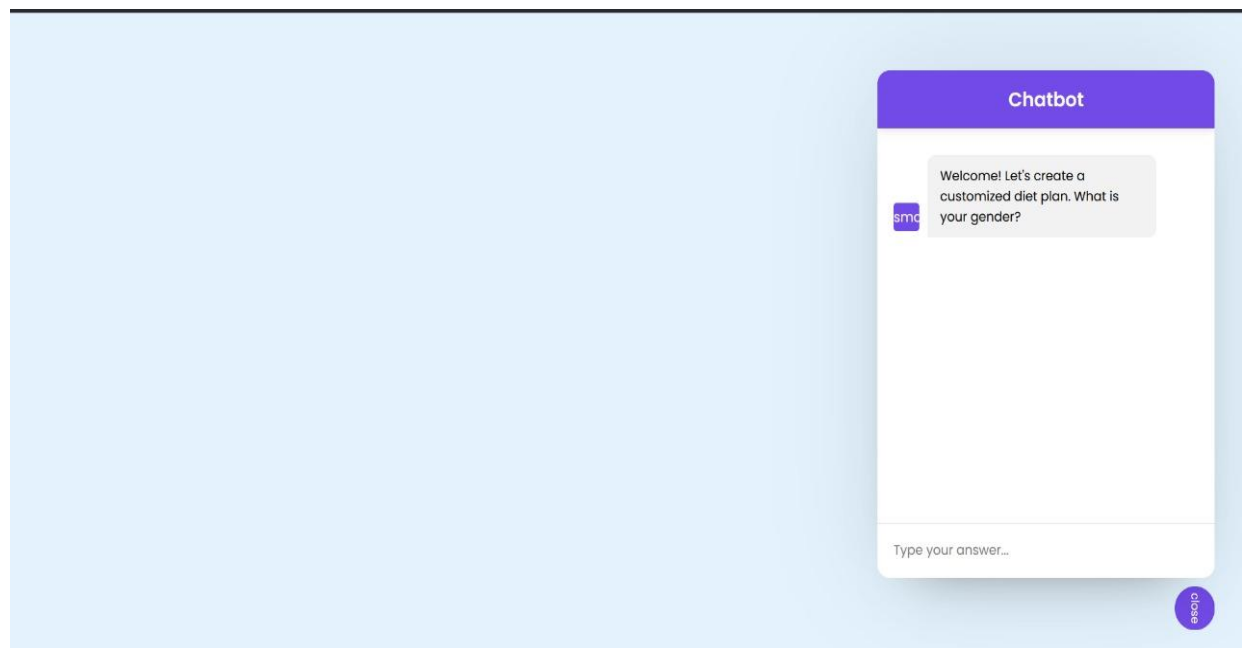




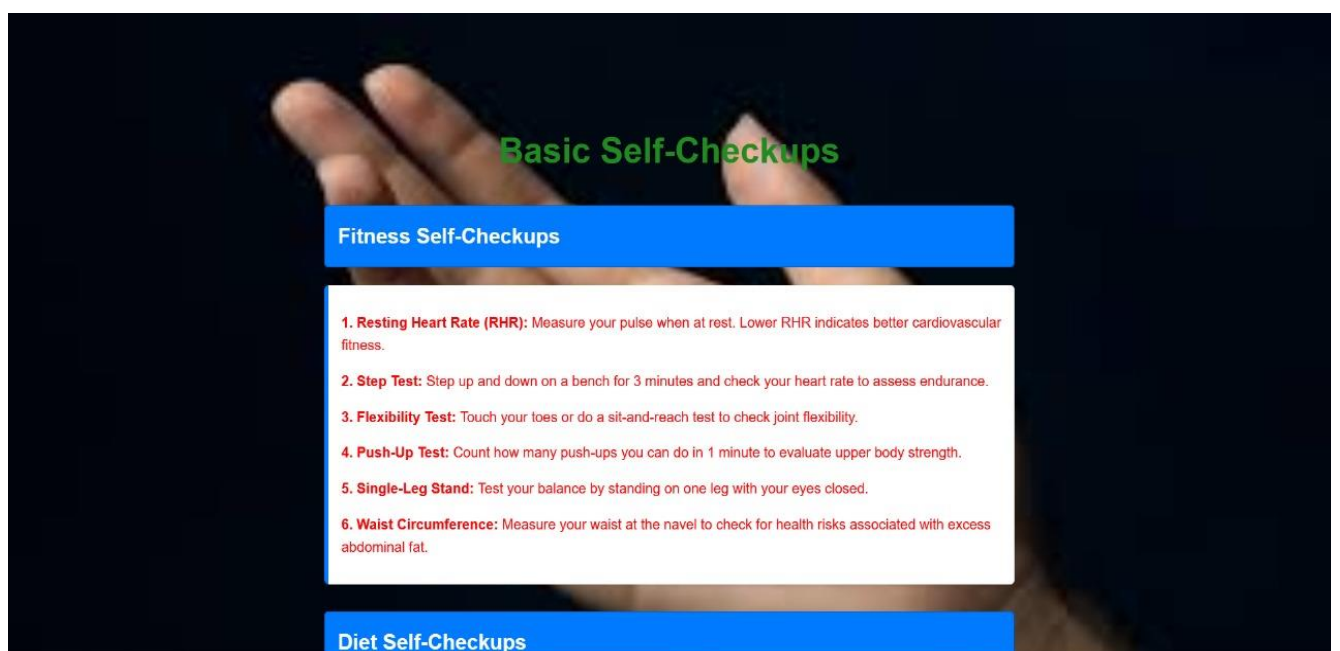
**Fig 8.7 Diet plan -1 Page**



**Fig 8.8 Diet Plan-2 Page**

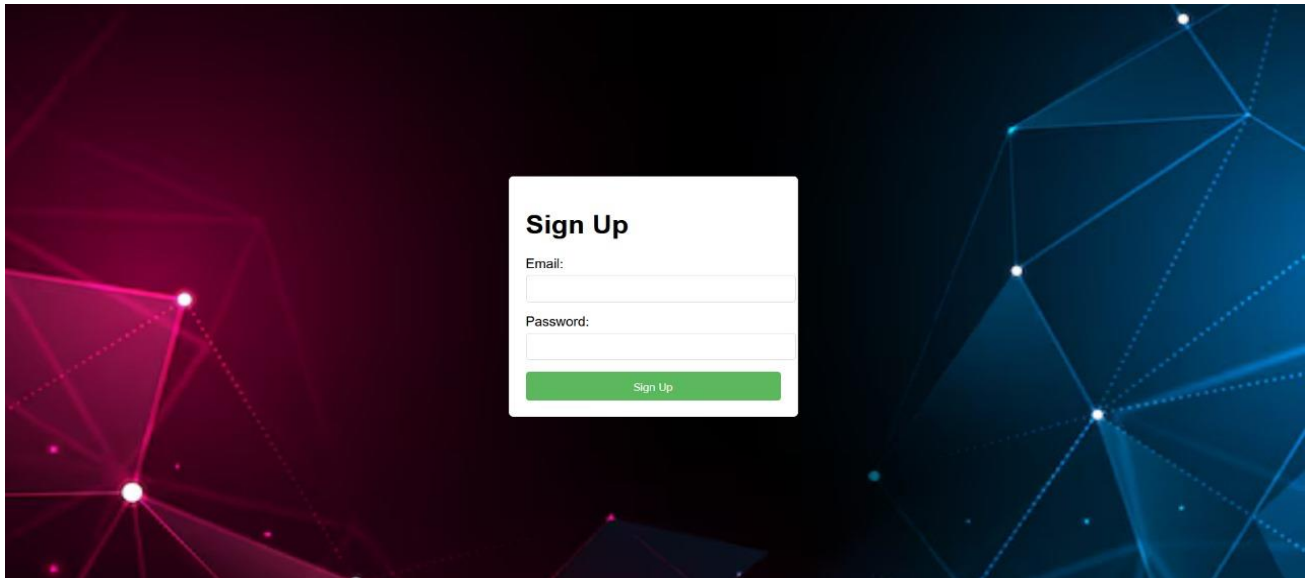


**Fig 8.9 AI module Page**



**Fig 8.10 Basic Self Checkup Page**

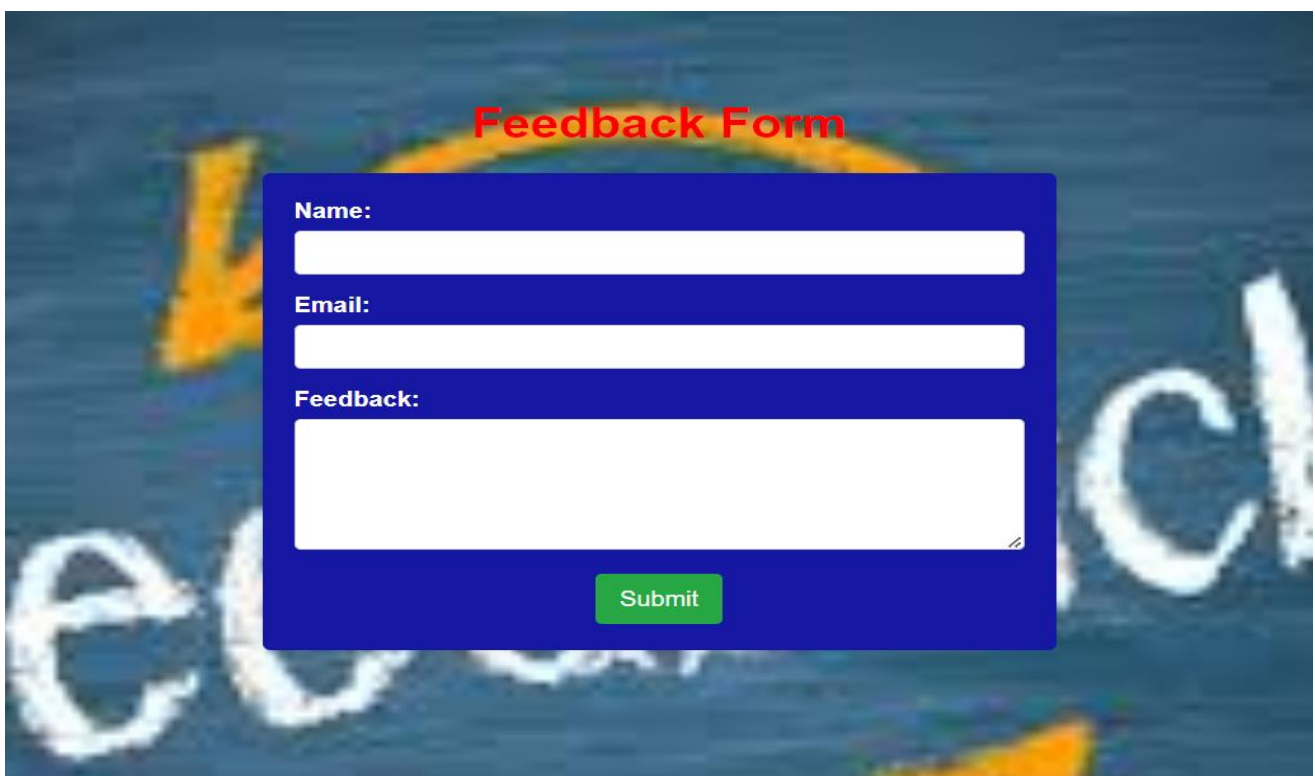




A sign-up form titled "Sign Up" is centered on a dark background with a network pattern of red and blue lines and dots. The form has a white background and contains the following fields:

- Email:
- Password:
- 

**Ex 8.11 Signup Page**



A feedback form titled "Feedback Form" is centered on a background featuring a rainbow and the word "Feedback" in large, stylized letters. The form has a dark blue background and contains the following fields:

- Name:
- Email:
- Feedback:
- 

**Ex 8.12 Feedback Page**

## CHAPTER 9

### REFERENCES

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