

A
Preliminary Project Report
on
Personalized Exercise and Diet plan
recommendation system for Gym

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Nashik-422009

2023-24

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Nashik-422009

2023-2024

Department of Computer Engineering



CERTIFICATE

This is to certify that the PRELIMINARY PROJECT REPORT entitled

**Personalized Exercise and Diet plan
recommendation system for Gym**

is submitted as partial fulfilment of the

Project Examination BE in Computer Engineering

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recommendation system for Gym.**

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Abstract

In today's fast-paced world, maintaining a healthy lifestyle and achieving fitness goals can be a daunting challenge. Many individuals struggle to balance their work, personal life, and health, often resulting in unhealthy dietary habits and a lack of physical activity. To address this issue and provide a comprehensive solution, we introduce a "Personalized Exercise and Diet Plan Recommendation System for Gym." This system leverages cutting-edge technology, data analytics, and user preferences to create tailored exercise and diet plans for individuals. By considering factors such as fitness goals, dietary restrictions, and health conditions, the system generates personalized recommendations. The core features of the system include an intuitive user interface for easy data input, an extensive database of exercises and dietary options, and an intelligent recommendation engine. Users can set their fitness goals, input their health information, and express their dietary preferences. The system then processes this data and offers a personalized exercise regimen and diet plan that aligns with the individual's objectives. This personalized approach not only makes fitness and health management more accessible but also encourages users to stay motivated on their wellness journey. By taking into account individual needs and preferences, the system becomes a dedicated fitness partner, promoting a healthier and more active lifestyle. Our system aims to revolutionize the way gym-goers approach their health, making personalized exercise and diet plans easily accessible and adaptable to their busy lives. As health and wellness continue to gain importance, our "Personalized Exercise and Diet Plan Recommendation System for Gym" stands as an innovative and valuable tool for achieving fitness goals and maintaining a balanced, healthy life.

Keywords:- *Personalized Exercise Diet Plan, Recommendation System, Fitness Goals, Health Management, Gym, Data Analytics, User Preferences, Wellness, Health Tracking, Dietary Recommendations*

Abbreviation

Sr No.	Abbriviation	Full Form
1	PEDPRS	Personalized Exercise and Diet Plan Recommendation System
2	FGR	Fitness Goals and Recommendations
3	GRS	Gym Recommendation System
4	FTS	Fitness Tracking System
5	HLS	Healthy Living Support
6	API	Application Programming Interface
7	React JS	React JavaScript library
8	UIT	User Input Tool

List of Figures

5.1	System Architecture	15
5.2	System Architecture	16
5.3	Dataflow Diagram	17
5.4	Dataflow Diagram	17
5.5	ER Diagram	18
5.6	Activity Diagram	19
5.7	Use Case Diagram	20
5.8	Class Diagram	21
5.9	Sequence Diagram	22
5.10	Object Diagram	23
7.1	Gantt Chart	27

List of Tables

7.1	System Implementation Plan	26
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Contents

Acknowledgement	i
Abstract	ii
Abbreviation	iii
List of Figures	iv
List of Tables	v
1 Introduction	1
1.1 Project Title	1
1.2 Problem Definition	1
1.3 Motivation of the Project	1
2 Literature Survey	3
2.1 Conclusion From Literature Survey	5
3 Problem Definition and Scope	6
3.1 Problem Statement	6
3.1.1 Goals and objectives	6
3.2 Software Context	7
3.3 Major Constraints	7
3.4 Scenario in Which Multi-Core, Embedded and Distributed Computing Used	8
3.5 Hardware Resources	9
3.6 Software Resources	9
3.6.1 Hosting Platform	9
3.6.2 Technologies Used	10
3.6.3 Database	10

4	Software Requirement Specification	11
4.1	Introduction	11
4.1.1	Purpose and Scope of Document	11
4.1.2	Overview of responsibilities of Developer	12
4.2	Functional Requirements	13
4.3	Non Functional Requirements	13
4.4	System Requirements	14
4.4.1	Database Requirements:	14
4.5	Analysis Models: SDLC model to be applied	14
5	System Design	15
5.1	System Architecture	15
5.2	Data Flow Diagrams	16
5.3	Entity Relationship Diagrams	18
5.4	UML Diagrams	19
5.4.1	Activity Diagram	19
5.4.2	Use Case Diagram	20
5.4.3	Class Diagram	21
5.4.4	Sequence Diagram	22
5.4.5	Object Diagram	23
6	Other Specifications	24
6.1	Advantages	24
6.2	Limitations	24
6.3	Applications	25
7	Project Plan	26
7.1	System Implementation Plan	26
7.2	Gantt Chart	27
8	Conclusion	28
	References	29
	Plagiarism Report For this Report	30

Chapter 1

Introduction

1.1 Project Title

Personalized Exercise and Diet Plan Recommendation System for Gym .

1.2 Problem Definition

The goal of this project is to develop a personalized exercise and diet plan recommendation system for individuals who visit the gym. It will allow gym trainers to keep track of client's progress and alter training programs according to it .

1.3 Motivation of the Project

Many individuals face significant challenges when it comes to achieving their fitness goals. These challenges often stem from a lack of guidance, tailored plans, and, most importantly, motivation. It's all too common for people to start their fitness journey with enthusiasm, only to lose momentum along the way. This is where our system comes into play. Our system is designed to tackle these hurdles head-on. It provides gym-goers with personalized exercise routines and dietary recommendations that are finely tuned to their specific fitness objectives, preferences, and limitations..

What truly sets our system apart is its ability to offer a continuous source of motivation. It's not just a tool; it's your dedicated fitness partner. It understands that motivation is the key to consistency, and it ensures that you have that in abundance. Whether your goal is to build muscle, shed unwanted weight, enhance your endurance, or simply lead a healthier life, our system is tailored to be with you every step of the way. It provides the guidance and support you need, but more importantly, it keeps you

SUNIL RAYATE'S
LEO FITNESS CLUB

CARD NO. _____ DATE OF JOINING : _____

TRAINING SCHEDULE CARD

NAME : _____

AGE : _____ FACILITY : GYM/GYM + Cardio / Cardio

GOAL : Fitness / Body Building / Wt. Loss / Wt. Gain

MEDICAL HISTORY : _____

PHYSICIANS / FITNESS INSTRUCTORS ADVISE : _____

WORKOUT PERIOD DATE : FROM _____ TO _____

BATCH : MORNING _____ EVENING _____

INSTRUCTOR SIGN : _____ CHEF INSTRUCTOR SIGN : _____

WARMUP : _____

FLOOR EXERCISE : _____

ABS WORK OUT : _____

STRETCHING / COOL DOWN : _____

SPECIFIC INSTRUCTION : _____

GYM existing Card

motivated and committed to your fitness goals. No more wavering, no more quitting; with our system, you'll find the determination to succeed.

Chapter 2

Literature Survey

Pathan Shahebaz Khan Feroz Khan — Pachpute Kshitija Mohan — Kamble Prajakta Gautam — Shaikh Alphiya Munir — Prof. Nagaraju Bogiri "Gym Management System" Published in International (ijtsrd), ISSN: 24566470, Volume-6 — Issue-3, April 2020, The paper discusses the implementation of a **Gym Management Software system** to replace an outdated manual system in gyms. The primary focus is on automating and streamlining various processes, including member data entry, information retrieval, and system security. By transitioning to a digital platform, the gym management aims to provide a more user-friendly and efficient experience for both staff and members. The software is designed to eliminate the limitations and drawbacks associated with manual record-keeping, ensuring data security, accessibility, and ease of use. The ultimate goal is to enhance the overall functionality of gym management through technology integration .[1]

Christian Prasetyo¹, Wirawan Istiono² **Fitness Exercise Recommendation System Using Weighted Products** Published in International (ijtsrd), ISSN: 24566470, Volume-6 — Issue-3, August 2021, This paper addresses the lifestyle changes brought about by the COVID-19 pandemic, which has led to weight gain for many due to reduced physical activity. Some individuals, though, wish to embark on fitness regimens but face uncertainty in selecting suitable exercises. Regular exercise is crucial for burning excess calories, making fitness centers an appealing choice. The paper introduces a web-based fitness exercise recommendation system designed using the Weighted Product method. This method assesses multiple exercise alternatives against distinct attributes or criteria, each of which is considered independently. Evaluation results from a user questionnaire show success rate 83.89. [2]

Brunda R1, Preethi K S2, Sushmitha N Reddy3 FITKIT ANDROID APPLICATION International Journal of Engineering Applied Sciences and Technology, 2019 Vol. 4, Issue4, ISSN No. 2455-2143, Pages 203-205, IRJET Published Online July 2022 ,

The paper presents "B-Fit: **A Fitness and Health Recommendation System.**" It offers users a wide selection of fitness videos and personalized content based on their preferences. The system employs a recommendation model that combines content-based and collaborative filtering techniques to suggest diverse workout videos. It also classifies users' health status based on blood test parameters and recommends appropriate diets. This system provides 24/7 access to cost-effective, diverse fitness resources from any location with internet connection, allowing users to work out at their own pace.[3]

Swati Jadhav1, Sandip Shinde2, Vivek Ghuge3, Divija Godse4 "**Diet Recommendation System based on UserActivities**" ITM Web of Conferences 50, 01009 (2022), This paper highlights the crucial role of software engineering in establishing a robust and transparent communication bridge between the client and the design and development teams. This process effectively minimizes redundancy and rework in design and development, ensuring that the client remains actively engaged throughout the development cycle. As demonstrated in the paper using the example of a diet application, meticulous planning and design preceded the actual development, with sprint cycles and burn-down charts employed to track progress. The use of UML diagrams and use case diagrams facilitated modeling and understanding of the project. This structured approach, following a well-defined Software Development Life Cycle (SDLC), resulted in the successful development of the application, meeting all user requirements and simplifying ongoing maintenance. [4]

Prajakta Bhosale, Prof. Madhav Ingle **Diet Recommendation Using Machine Learning** (IJIRSET) Issue 7, July 2022,

This paper introduces a technology-driven dietary evaluation system that offers a convenient way to monitor and manage daily food intake. It utilizes Artificial Intelligence (AI) to make personalized food recommendations based on user preferences and past choices. The goal is to provide users with nutritionally balanced diet suggestions. The paper employs Support Vector Machine (SVM) classifiers for recommending meals, covering Breakfast, Lunch, and Dinner. This system aims to simplify the selection of suitable diets that meet individual nutritional requirements. [5]

Shubham Singh Kardam¹, Pinky Yadav², Prof Anand Ingle⁴ **Website on Diet Recommendation Using Machine Learning** International Research Journal of Engineering and Technology Volume 08 Issue: 04 — Apr 2021,

The paper addresses the alarming rate of fast-food consumption, which has resulted in unhealthy eating habits and, consequently, health issues like obesity, diabetes, and increased blood pressure. Given the fast-paced lifestyle, not everyone has the time or resources to engage a personal dietitian. The paper offers a solution to promote healthier lives by addressing these unhealthy eating habits. [6]

Bhimavarapu, U.; Sreedevi,M.; Chintalapudi, N.; Battineni, G. **Physical Activity Recommendation System Based on Deep Learning to Prevent Respiratory Diseases.Computers** Published: 11 October 2022

This paper delves into the relationship between excessive cooling, physical activity, and the human immune system. It highlights how a lack of physical activity during the influenza season can impact immunity and respiratory health. Excessive chilling makes individuals more susceptible to pathogens due to the increased energy required to maintain body temperature. The study underscores the role of exercise in enhancing both the immune system and overall fitness. The paper goes a step further by introducing a framework for predicting physical activity based on an individual's health lifestyle, preferences, calorie intake, race, and gender. it incorporates information about comorbidities, and exercise/eating habits to recommend exercises to the user's preferences. [7]

2.1 Conclusion From Literature Survey

From the literature survey, it is evident that various research studies are dedicated to enhancing fitness, health, and diet management through innovative solutions. These papers underscore the importance of technology and data-driven approaches to address contemporary health and lifestyle challenges. Here's a concise conclusion drawn from the literature survey: The literature survey reveals a growing interest in leveraging technology, and data-driven methodologies to address health and fitness challenges. Researchers are focused on automating and streamlining fitness and health management, offering personalized recommendations, and enhancing overall well-being. These studies emphasize the need for user-friendly and accessible solutions to improve health, manage dietary habits, and promote physical activity. As technology continues to advance, these approaches provide valuable insights into the development of more effective fitness and health management systems.

Chapter 3

Problem Definition and Scope

3.1 Problem Statement

In the modern era, maintaining a healthy and active lifestyle is increasingly challenging due to sedentary habits, unhealthy eating patterns, and a lack of personalized guidance. Individuals often struggle to achieve their fitness and wellness goals, leading to a rise in health issues such as obesity, diabetes, and cardiovascular diseases. The existing fitness and diet recommendation systems are often generic, not accounting for individual preferences, limitations, and health conditions. The "Personalized Exercise and Diet Plan Recommendation System for Gym" project seeks to provide an innovative and tailored solution to these problems, offering users a comprehensive platform that addresses their unique fitness and nutritional needs.

3.1.1 Goals and objectives

Goal : The primary goal of the "Personalized Exercise and Diet Plan Recommendation System for Gym" project is to empower individuals to achieve and maintain a healthy and active lifestyle by providing personalized fitness and nutrition guidance. Overall goals and objectives of software, input and output description with necessary syntax, format etc are described.

Objectives: These objectives collectively contribute to the overarching goal of improving individuals' health and well-being by guiding them toward healthier lifestyles through personalized fitness and dietary plans.

1. personalization : Develop a system that tailors exercise routines and dietary recommendations to individual user preferences, fitness levels, and health conditions.

2. Expert Guidance : Provide users with expert-level fitness and diet recommendations, bridging the gap between professional guidance and self-guided fitness.

3. Comprehensive Monitoring : Offer tools for users to track their fitness progress, monitor their dietary intake, and set and achieve wellness goals effectively.

4. Data-Driven Recommendations : Utilize data analysis and machine learning algorithms to offer evidence-based fitness and diet recommendations, continually improving the system's effectiveness.

5. User Engagement : Foster user engagement through feedback mechanisms, goal tracking, and a supportive community, enhancing motivation and commitment to fitness and wellness.

6. Promote Healthier Lifestyles : Encourage and enable users to embrace healthier lives by making informed choices, managing their fitness, and optimizing their nutrition.

7. Continuous Improvement : Remain open to user feedback, research findings, and evolving health and fitness insights to continually enhance the system's capabilities and offerings.

3.2 Software Context

The "Personalized Exercise and Diet Plan Recommendation System for Gym" is designed to cater to a specific business or application context. It serves as a comprehensive software solution for gyms and fitness centers. The software's primary focus is to enhance the services and experiences provided by fitness establishments, making it an invaluable tool for both gym owners and their clientele.

3.3 Major Constraints

1. Data Privacy and Security : Ensuring the privacy and security of sensitive health information is paramount. Compliance with data protection regulations (e.g., HIPAA) and robust security measures must be in place.

2. Interoperability : The software should be designed to seamlessly integrate with existing gym management systems, hardware, and equipment, ensuring compatibility and minimizing disruptions.

3. User Accessibility : User-friendly interfaces and mobile applications should be developed to accommodate users with varying levels of technical proficiency.

4. Diverse Member Base : The software must cater to a diverse group of gym members with varying fitness goals, physical conditions, dietary preferences, and age groups.

5. Regulatory Compliance : The software must adhere to local and international regulations and guidelines governing health and fitness data management and recommendations.

6. Feedback Mechanisms : Mechanisms for user feedback and issue resolution should be in place to address user concerns promptly and enhance the software's performance.

7. User Data Management : The software should facilitate easy management of user data, including the ability to edit or delete personal information and progress tracking.

3.4 Scenario in Which Multi-Core, Embedded and Distributed Computing Used

1. Multi-Core Computing :

- **Recommendation Algorithm Processing :-** The system employs multi-core processors to parallelize the complex recommendation algorithms, allowing for faster and more efficient processing of personalized exercise and diet recommendations for numerous users simultaneously.

- **Real-Time Feedback :-** Multi-core architectures facilitate real-time analysis of user data, enabling instant feedback on exercise techniques and dietary choices, enhancing user engagement and motivation.

2. Embedded Computing :

- **Wearable Fitness Devices :-** The software can be embedded in wearable fitness devices like smartwatches and fitness trackers, providing users with real-time exercise guidance, tracking, and monitoring directly on their wearables.

3. Distributed Computing :

- **Scalability :-** Distributed computing clusters are utilized to scale the system efficiently, accommodating a growing user base while maintaining performance. This is crucial as more gym members adopt the system.

- **Data Synchronization :-** Distributed computing is employed to synchronize user data across various platforms and devices, ensuring consistency in personalized recommendations, whether accessed via a mobile app, web interface, or wearables.

- **Load Balancing :-** The system employs distributed computing to distribute user requests evenly across multiple servers, balancing the system's load and ensuring responsiveness during peak usage times in the gym

3.5 Hardware Resources

Hardware Specifications.

1. Windows OS
2. intel i3 processor
3. Min 4gb ram
4. SmartPhone

3.6 Software Resources

Software Specifications.

1. Visual studio
2. ASP.netcore
3. Android studio
4. VS code

3.6.1 Hosting Platform

- Web hosting(shared)

3.6.2 Technologies Used

- **Front-end :-** Html, CSS, JavaScript , React-js
- **Back-end :-** ASP.net, Python , Flask

3.6.3 Database

- **Microsoft SQL server**

Chapter 4

Software Requirement Specification

4.1 Introduction

The SRS document is organized into several sections, each focusing on specific aspects of the "Personalized Exercise and Diet Plan Recommendation System for Gym." These sections include the overall description, specific requirements, external interfaces, non-functional requirements, and other critical considerations. The document is intended to serve as a comprehensive guide for developers, designers, and stakeholders to understand the system's functionality and requirements. In summary, the "Personalized Exercise and Diet Plan Recommendation System for Gym" represents an innovative solution to the challenges faced by gym-goers in their pursuit of a healthier lifestyle. The following sections of this SRS document will provide a detailed breakdown of the system's requirements, user interfaces, functionality, and other crucial aspects to facilitate the development and implementation of this transformative fitness and health management platform.

4.1.1 Purpose and Scope of Document

The purpose of this Software Requirements Specification (SRS) document is to define the detailed requirements and specifications for the "Personalized Exercise and Diet Plan Recommendation System for Gym." It serves as a vital communication tool between stakeholders, including project managers, developers, designers, and quality assurance teams, ensuring a common understanding of the system's objectives and functionality.

4.1.2 Overview of responsibilities of Developer

The responsibilities of a software developer in the context of developing the "Personalized Exercise and Diet Plan Recommendation System for Gym" can vary depending on the developer's role and the specific tasks assigned.

1. Requirement Analysis : Collaborate with business analysts and stakeholders to understand and clarify project requirements. Ensure a deep understanding of the system's functional and non-functional requirements.

2. System Design : Contribute to the design of the software system, including architecture, data models, and user interfaces. Work closely with system architects and designers to create detailed technical designs.

3. Development : Write high-quality code, adhering to coding standards and best practices. Implement the software system's features, modules, and components according to the design specifications.

4. Testing : Participate in the creation of test cases and testing strategies. Debug and resolve issues and defects identified during testing. Ensure that the developed software functions correctly and meets the specified requirements.

5. Documentation : Maintain and update technical documentation related to code, system architecture, and APIs. Collaborate with technical writers to create user and developer documentation as needed.

6. Integration : Work on integrating third-party services, APIs, or components when required. Ensure smooth interactions with external systems and data sources.

7. Quality Assurance : Ensure that the developed software meets the quality and performance standards defined in the project requirements. Collaborate with the quality assurance team to resolve issues efficiently.

8. Adherence to Deadlines : Work within specified timeframes and deadlines to deliver project milestones.

9. Communication : Maintain effective communication with team members, project managers, and stakeholders. Keep all relevant parties informed of progress and challenges.

10. Code Maintenance : Regularly maintain and update code as needed to adapt to changing requirements or to address issues discovered post-launch.

4.2 Functional Requirements

1. User Management : User management is a fundamental component of the system. It involves the registration, authentication, and management of different types of users, including gym members, trainers, and administrators.

2. Membership Plans : The system should display available membership plans, including their descriptions, features, and pricing. Users can select a membership plan and subscribe to it.

3. Billing and Payment : Users can view their billing statements, including a detailed breakdown of charges. The system supports multiple payment methods (credit card, online transfer, etc.). It should securely process payments and provide payment confirmation to users.

4. Attendance Tracking : Users can check in when they arrive at the gym through a mobile app or on-site kiosk. The system will log attendance data, including date and time. Users can view their attendance history and receive attendance-related notifications.

5. Reporting and Analytics : The system generates reports on various aspects, such as membership statistics, revenue, and user engagement. Administrators can access dashboards with real-time analytics, highlighting key performance indicators. Trainers can view member progress reports, including workout achievements and attendance.

4.3 Non Functional Requirements

1. Ensure the Service Is On-Demand : The system should be designed to handle user requests promptly and efficiently. It must be available 24/7, ensuring that users can access the service at any time.

2. Ensure Reliability : The system should be highly reliable, with minimal downtime or service disruptions. It must be resilient to hardware failures, network issues, and other potential disruptions.

3. Feedback and Reviews : The system should include mechanisms for users to provide feedback on exercise routines, dietary plans, and overall user experience. Users should have the ability to rate and review the effectiveness of the recommendations. Feedback channels should be user-friendly and easily accessible, encouraging users to share their opinions.

4.4 System Requirements

System requirements specify the necessary hardware, software, and infrastructure that the "Personalized Exercise and Diet Plan Recommendation System for Gym" needs to function effectively.

- 1. Operating System :** The server infrastructure should run on a reliable and secure operating system, such as Linux or Windows Server, to support the application.
- 2. Web Server :** A web server (Apache, Nginx) is needed to serve web-based content and APIs to users, ensuring seamless access to the system.
- 3. Database Management System (DBMS) :** A relational database management system (MySQL, PostgreSQL, or equivalent) is essential for data storage and retrieval. The DBMS should support data encryption and access control for security.
- 4. Programming Languages :** The development of the system may require programming languages like Java, Python, or Ruby, depending on the technology stack chosen.
- 5. Web Frameworks :** Web frameworks (Ruby on Rails, Django, or equivalent) are needed to build the web-based user interfaces and application logic.

4.4.1 Database Requirements:

Database requirements for the "Personalized Exercise and Diet Plan Recommendation System for Gym" are crucial for storing, managing, and retrieving user data, exercise routines, dietary plans, and other essential information. The system should utilize a robust and reliable relational database management system (RDMS) such as MySQL, PostgreSQL, or an equivalent. The DBMS should support data integrity, transaction management, and concurrent access.

4.5 Analysis Models: SDLC model to be applied

The choice of a Software Development Life Cycle (SDLC) model plays a crucial role in the development process of the "Personalized Exercise and Diet Plan Recommendation System for Gym." Different SDLC models offer distinct approaches to project management, development, and testing. The choice of the appropriate SDLC model depends on the project's specific requirements, goals, and constraints. [Agile SDLC , Waterfall SDLC]

Chapter 5

System Design

5.1 System Architecture

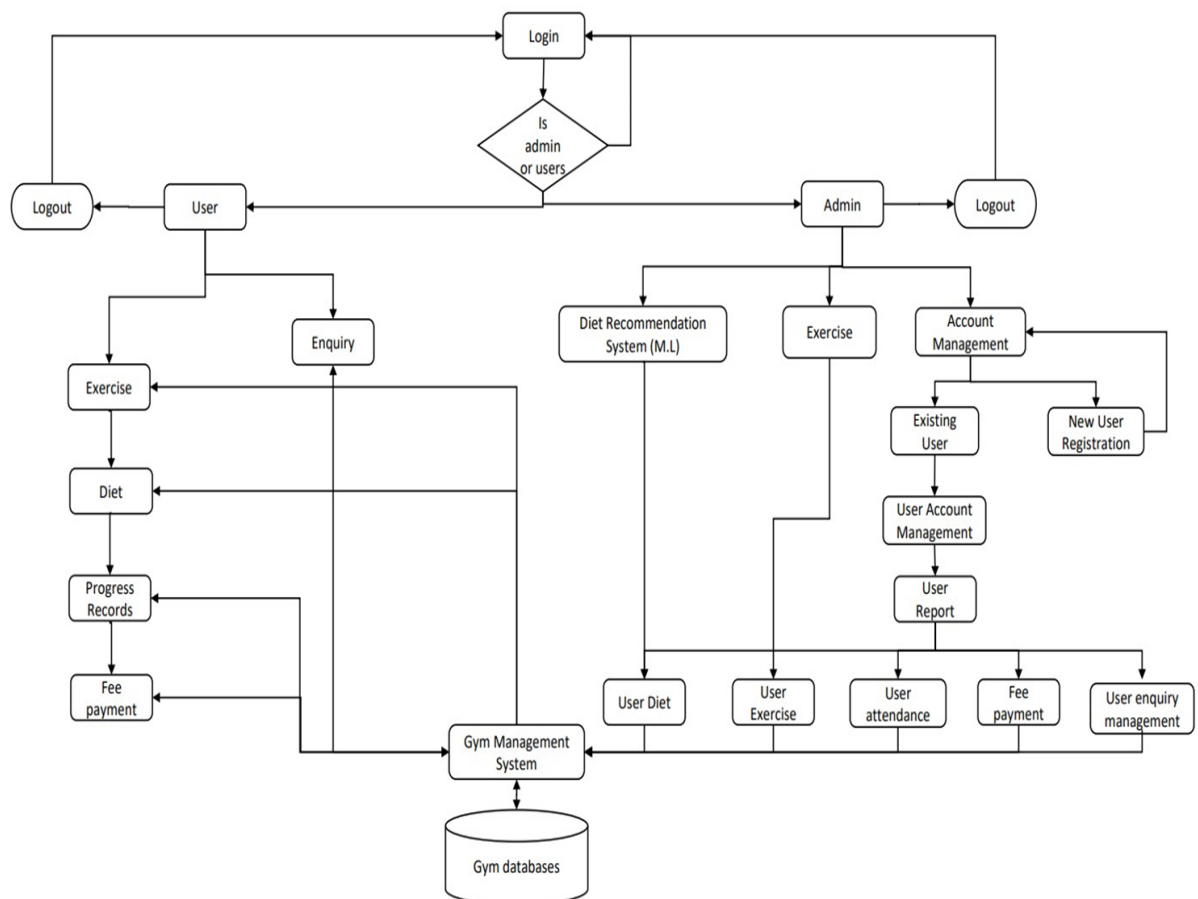


Figure 5.1: System Architecture

5.2 Data Flow Diagrams

A data flow diagram (DFD) maps out the flow of information for any process or system.

DFD Level 0

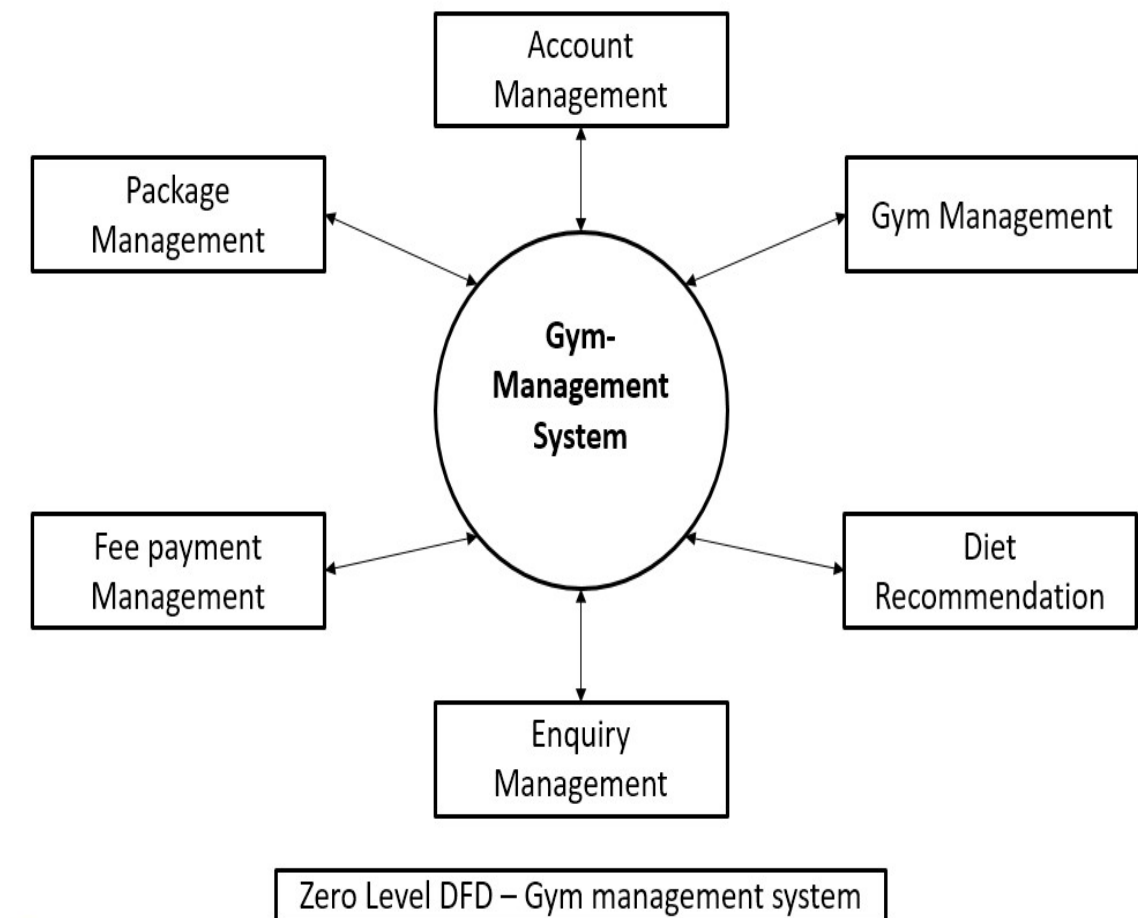


Figure 5.2: System Architecture

DFD Level 1

A data flow diagram (DFD) maps out the flow of information for any process or system. A Data Flow Diagram (DFD) Level 1 provides an overview of the system's major processes and how data flows between them, offering a high-level perspective on information exchange within the system.

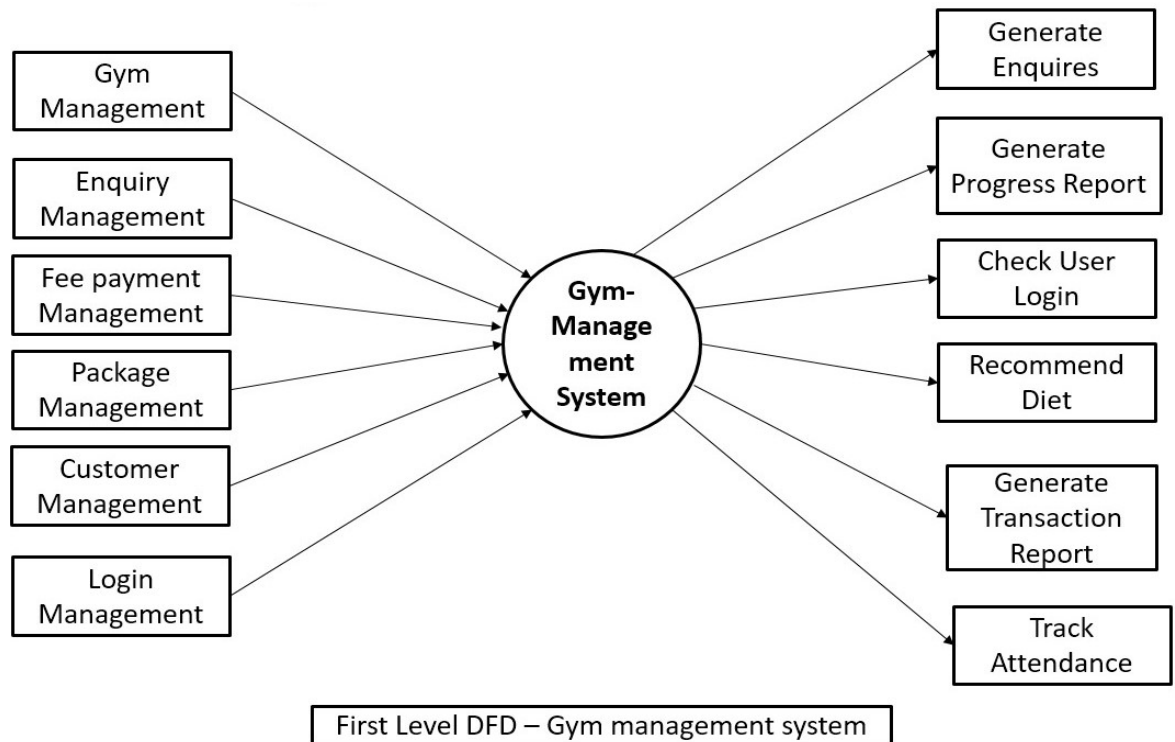


Figure 5.3: Dataflow Diagram

DFD Level 2

A Data Flow Diagram (DFD) Level 2 provides a more detailed view than Level 1, breaking down major processes into subprocesses. It offers a deeper understanding of data flow within the system.

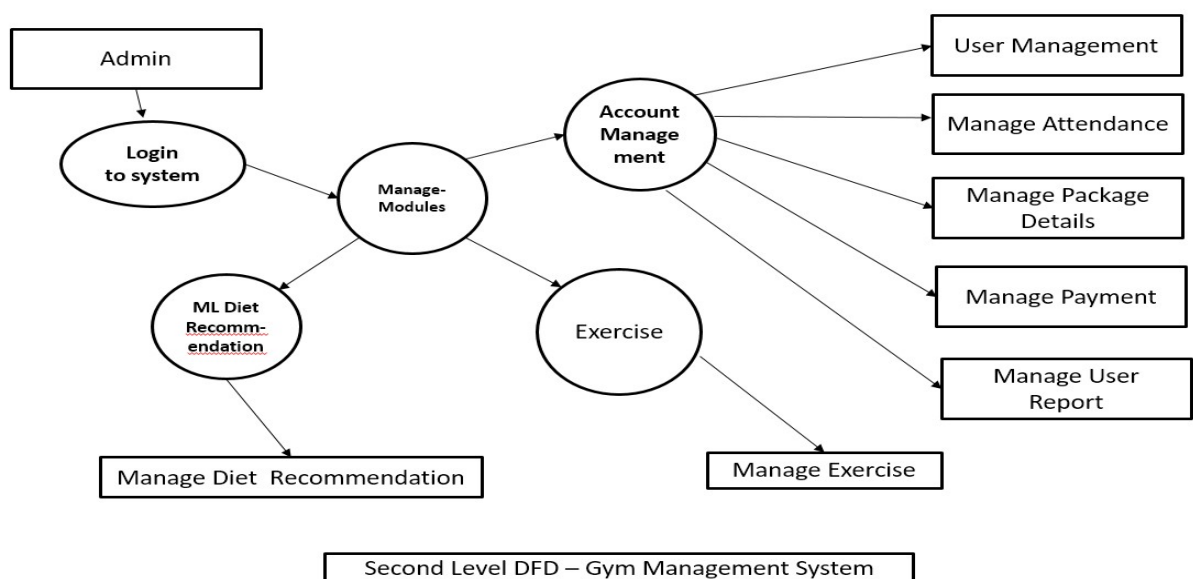


Figure 5.4: Dataflow Diagram

5.3 Entity Relationship Diagrams

The entity-relationship model is widely used for designing databases and can also be used to describe the data of a system and their structure.

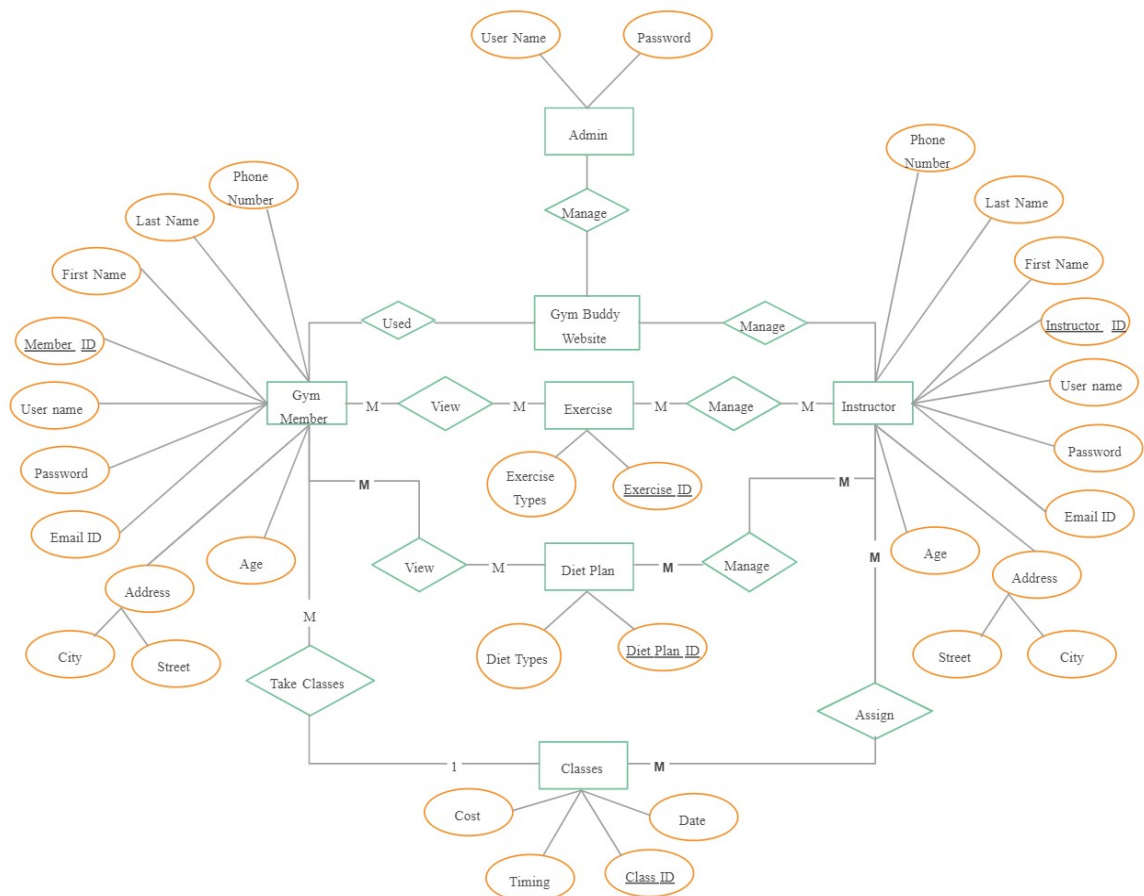


Figure 5.5: ER Diagram

5.4 UML Diagrams

5.4.1 Activity Diagram

We use Activity Diagrams to illustrate the flow of control in a system.

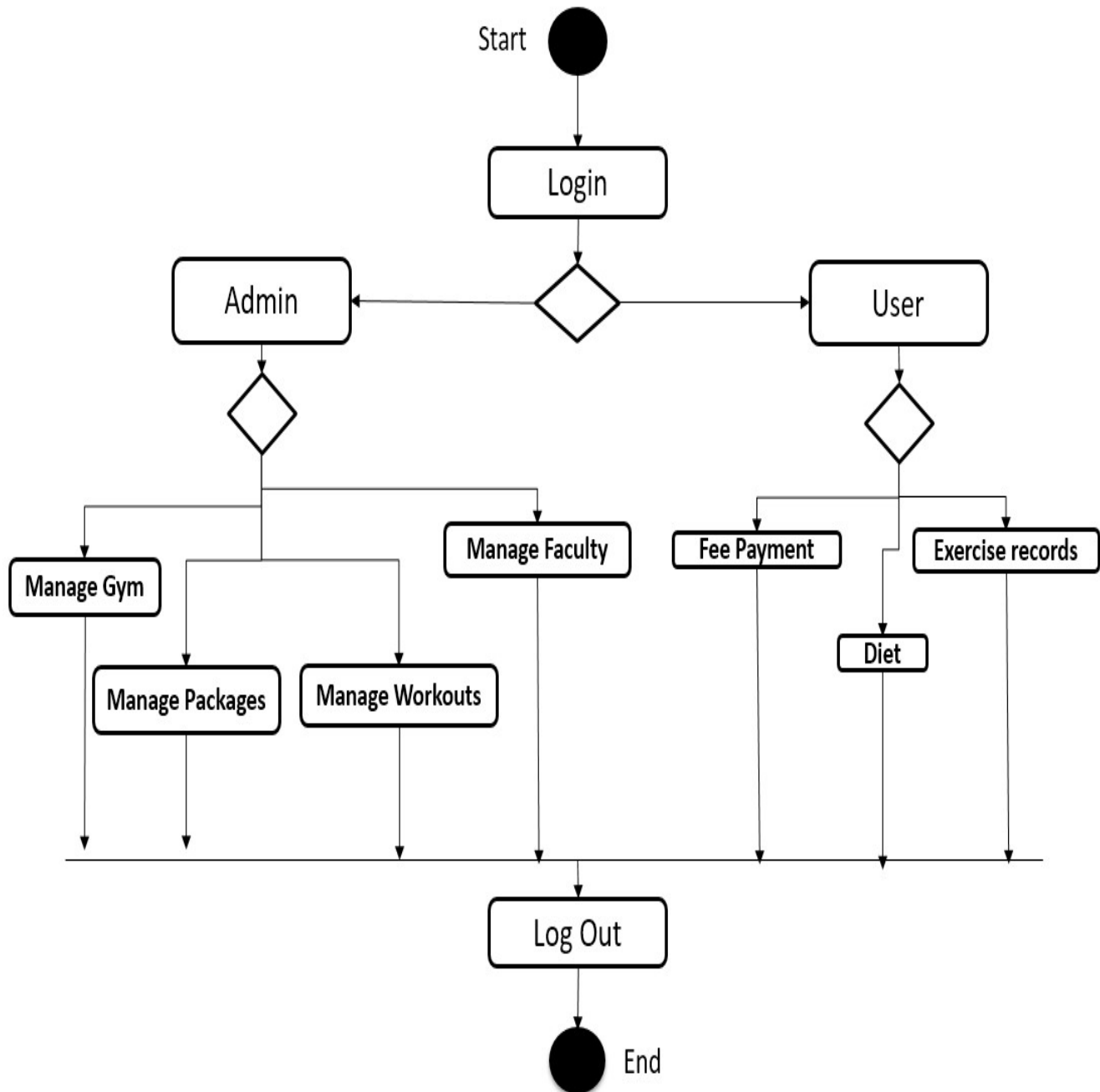


Figure 5.6: Activity Diagram

5.4.2 Use Case Diagram

Use Case Diagrams depict the functionality of a system or a part of a system.

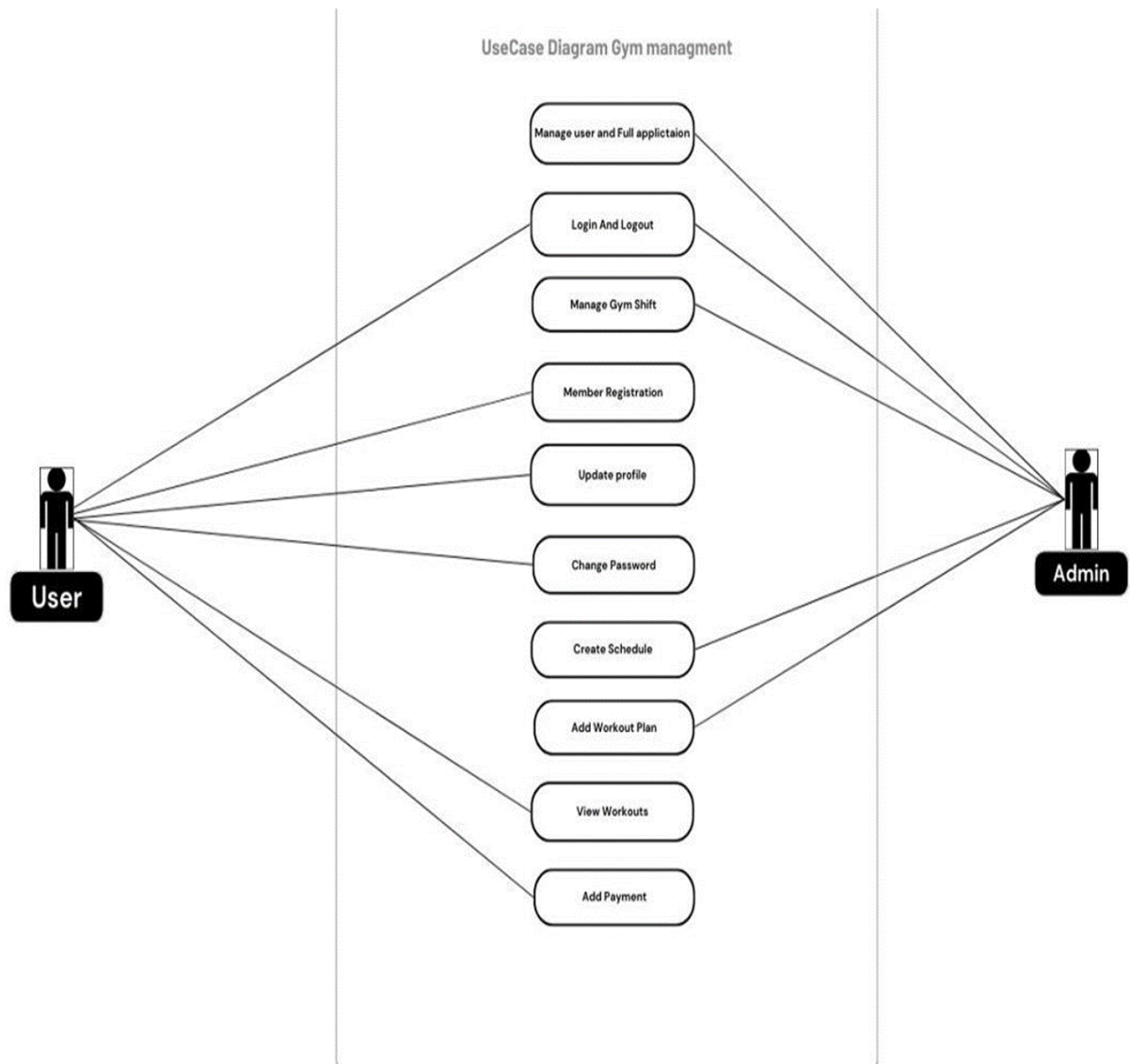


Figure 5.7: Use Case Diagram

5.4.3 Class Diagram

Class diagrams are the blueprints of your system or subsystem.

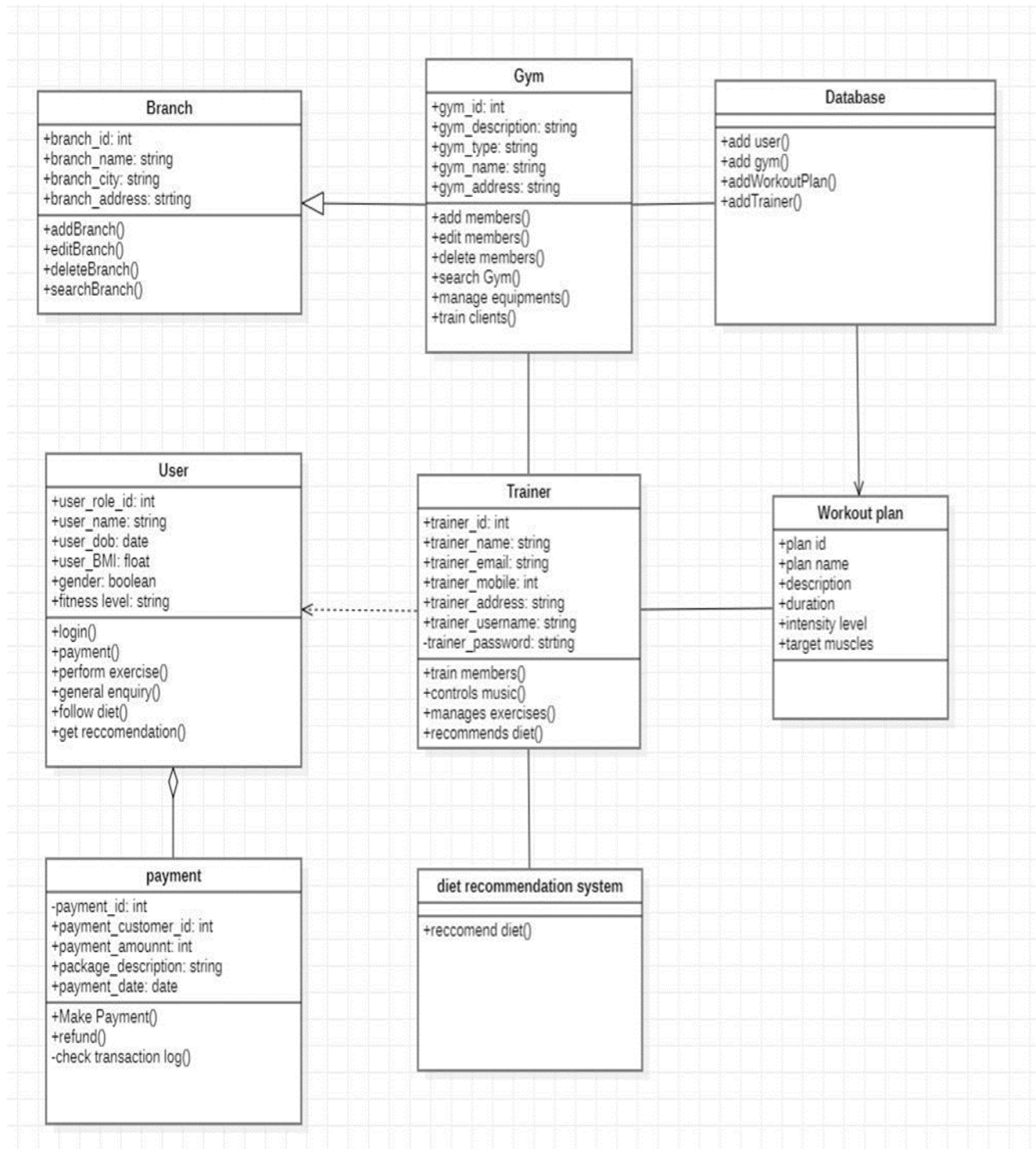


Figure 5.8: Class Diagram

5.4.4 Sequence Diagram

A sequence diagram depicts the interaction between objects in a sequential order i.e. the order in which these interactions take place.

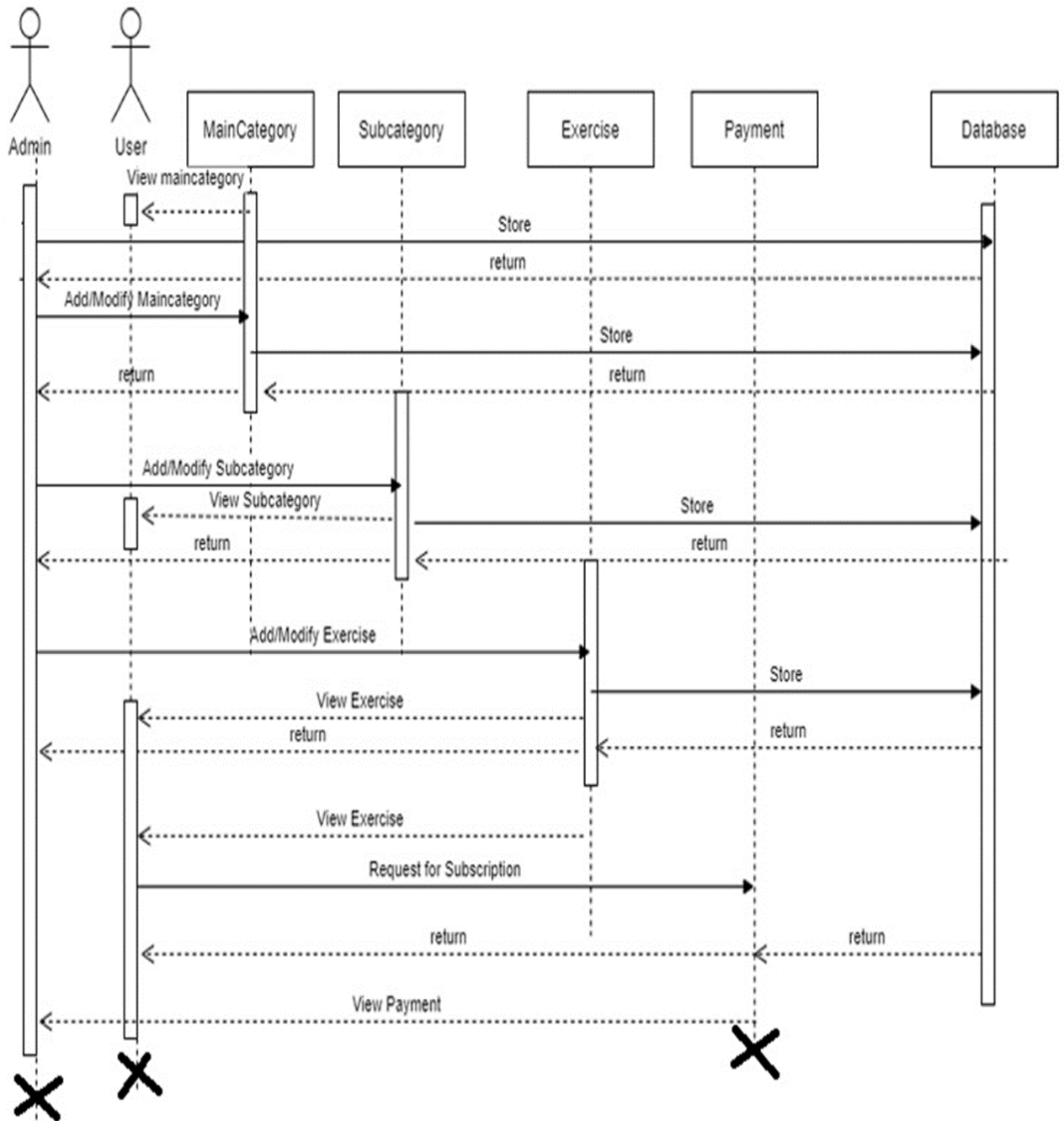


Figure 5.9: Sequence Diagram

5.4.5 Object Diagram

Object Diagrams.

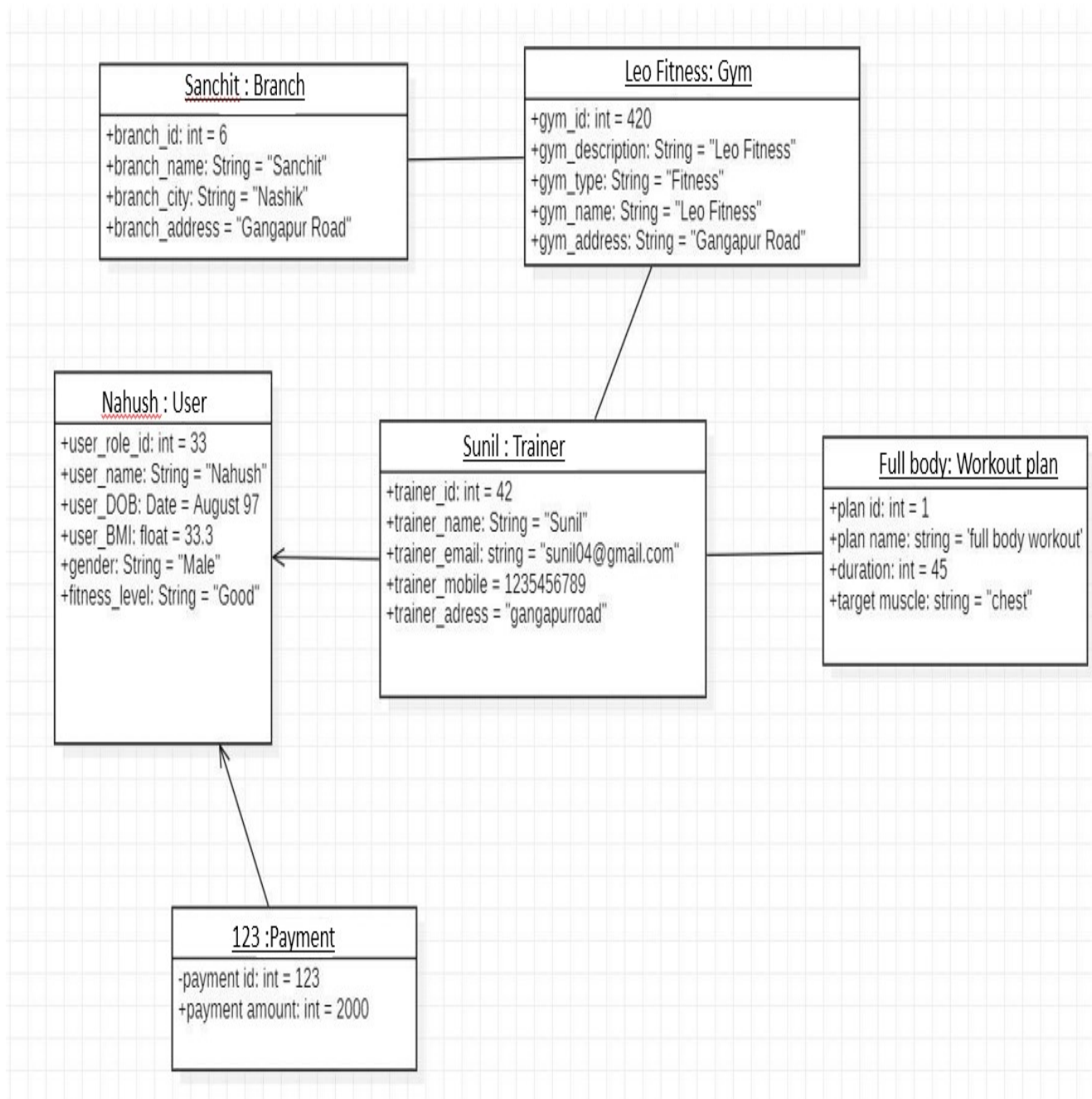


Figure 5.10: Object Diagram

Chapter 6

Other Specifications

6.1 Advantages

1. Customization : Tailored Fitness and Nutrition: The system provides personalized exercise and diet plans, considering individual fitness goals, health conditions, dietary preferences, and restrictions. This customization leads to more effective and user-specific recommendations.

2. Improved Health and Fitness : Users receive recommendations that align with their health and fitness objectives, increasing the likelihood of achieving their goals, whether it's weight loss, muscle gain, or improved overall well-being

3. Health Monitoring : It allows users to track their progress, monitor health parameters, and adjust their plans as needed. This monitoring can contribute to better health outcomes and prevention of health issues.

4. User Engagement : Personalized recommendations, progress tracking, and feedback mechanisms engage users more actively in their fitness journey, leading to higher motivation and adherence to the plans

5. Feedback and Improvement : The system can collect user feedback and data on the effectiveness of exercise and diet plans, enabling continuous improvement and fine-tuning of recommendations.

6.2 Limitations

1. Complex Health Conditions : Some health conditions may be complex and require more specialized guidance than the system can provide. Users with specific medical needs may still require consultation with healthcare professionals.

2. Continuous Updates : The system's exercise and diet recommendations should be regularly updated to reflect the latest health and fitness research. Failure to do so may result in outdated recommendations.

6.3 Applications

1. User Profile Creation : Users can create profiles by providing information about their fitness goals, health conditions, dietary preferences, and other relevant details.

2. Personalized Exercise Plans : The application generates customized exercise routines based on the user's profile. These routines may include strength training, cardio, flexibility exercises, and more.

3. Dietary Recommendations : Users receive personalized dietary recommendations, including meal plans and nutritional guidelines. These recommendations consider the user's dietary preferences and health goals.

4. Progress Tracking : Users can monitor their fitness progress, including weight loss, muscle gain, and other health parameters. The application may include features for tracking workouts, dietary intake, and body measurements.

5. Cross-Platform Accessibility : The application is available on various devices, including smartphones, tablets, and desktop computers.

6. Support and Assistance : Users can provide feedback and seek guidance from fitness professionals or customer support within the app.

Chapter 7

Project Plan

7.1 System Implementation Plan

Sr.No	Task	Start Date	End Date	Status
1	Introduction and Problem Definition	11/07/2023	05/08/2023	Completed
2	Literature Survey	12/09/2023	17/09/2023	Completed
3	System Requirement Gathering	20/09/2023	25/09/2023	Completed
4	Feasibility Study	00/00/2023	00/00/2023	Completed
5	System Analysis	00/00/2023	00/00/2023	Completed
6	System Design	11/07/2023	00/00/2023	Completed
7	Conclusion	00/00/2023	00/00/2023	Completed

Table 7.1: System Implementation Plan

7.2 Gantt Chart

Prepare Gantt chart it typically includes two sections: the left side outlines a list of tasks, while the right side has a timeline with schedule bars that visualize work.(Weekly)

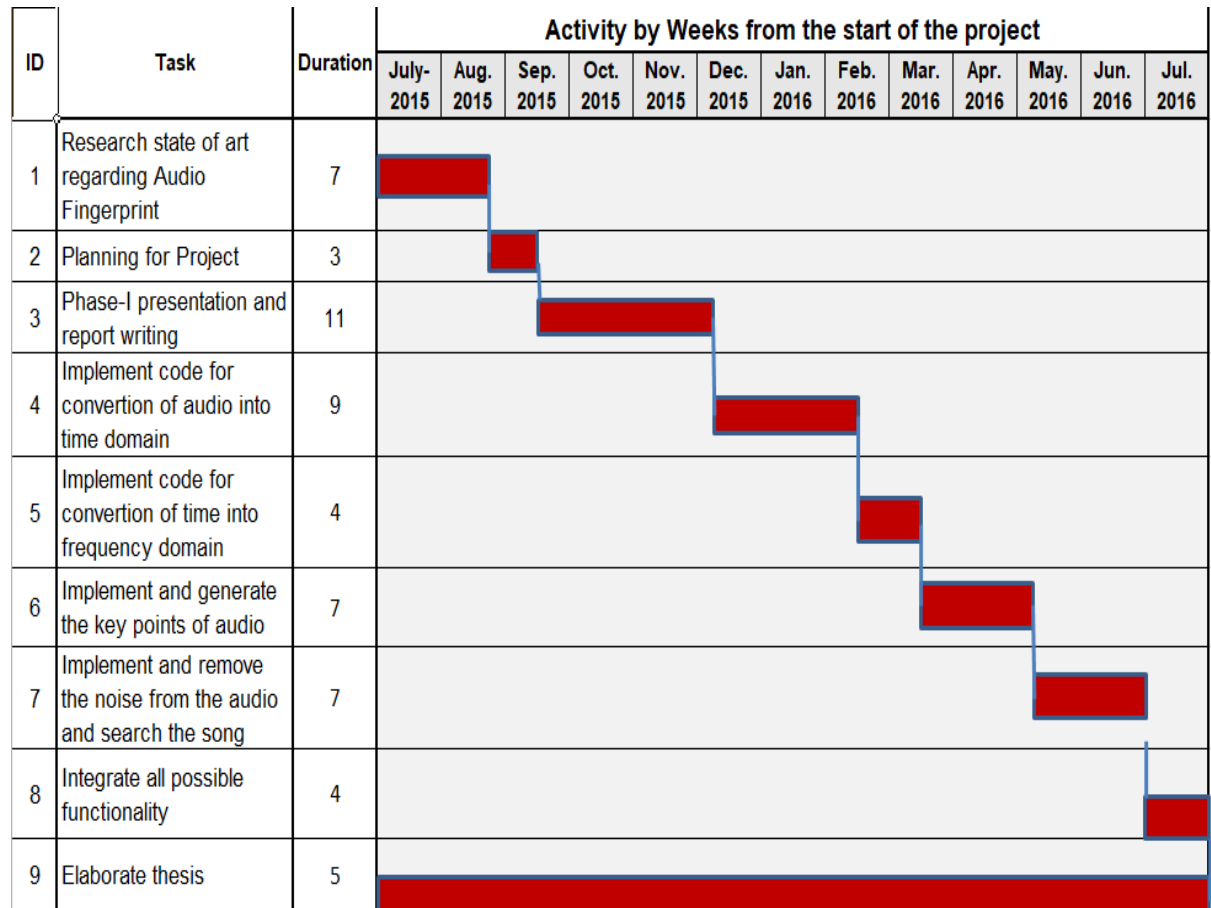


Figure 7.1: Gantt Chart

Chapter 8

Conclusion

The "Personalized Exercise and Diet Plan Recommendation System for Gym" project is a pioneering endeavor that redefines the landscape of fitness and health management. By seamlessly integrating personalization, data-driven decision-making, and user-centered design, it offers individuals a powerful tool to take charge of their well-being. This application stands out for its holistic approach, addressing both exercise and nutrition, and thus fostering healthier lifestyles.

Furthermore, the project excels in tracking fitness progress, offering motivation, and guaranteeing the privacy and security of user data. Its cross-platform accessibility and cost-effectiveness ensure that a wider audience can benefit from personalized fitness and nutrition guidance.

In essence, this project serves as a testament to the harmonious fusion of technology and wellness, successfully bridging the divide between fitness aspirations and their realization. It is a milestone in promoting healthier lives for individuals across the spectrum.

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Annexure A

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