



Module	Assessment	Assessment Type
Project and Professionalism (6CS007)	Project Report	FYP Proposal

## Project Proposal

### [Fitness Gym]

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## **Abstract**

In this generation, fitness is the most significant global issue. Exercises improve our health by supplying blood to every part of the body. People should be aware that poor health can cost them their lives. The “Fitness Gym” is the web application, developed on MERN stack. Members of the gym can login/signup, make payment, and hire online trainers. The admin can remove the registered member, see the payment deadline of the members and approve the online trainer. Product Owner is someone who is responsible for the result, Development Team is someone who is responsible for developing the product, and SCRUM master improves and streamlines the team's methods for achieving its objectives.

## **Acknowledgement**

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## **Introduction**

In this generation, fitness is the most significant global issue. Exercises improve our health by supplying blood to every part of the body. Not only fitness but also it provides confidence to the individuals. Gym is the key to making progress in fitness. Rather than workout in the gym, people can socialize, learn together, make friends, be wise with friends. Healthy individuals can be distinguished by the shape of the body. Additionally, having a stronger body boosts one's confidence. People should be aware that poor health can cost them their lives, time, discomfort, a lot of money, and other things. So, investment in fitness is great which cannot be comparable to anything like money. Thus, gyms are the most important factors, there need to be facilities in the gyms. To make work easier, the project “Fitness Gym” has been introduced.

The “Fitness Gym” is the web application, developed on MERN stack. It is created for the staff and members of the gym named ‘Fitness Gym’. The application can be useful for both the staff and the members of the gym. Thus, the website enhances the quality of services of the gym. Here, members of the gym can login/signup, make payment, and hire online trainers in the web application of the gym. While admin can remove the registered member, see the payment deadline of the members and approve the online trainer.

The tasks done by the web application are helpful for the gym. For payment, members do not need to visit the office of the gym. Also, staff can see the members whose membership needs to be renewed. It also saves the times, data of the gym. MERN stack and JavaScript is used to develop the application.

## **Aims and Objective**

### **Aims**

- To reduce documental use and save time at the gym.
- To make the payment of the user through online.
- To hire an online personal trainer of the gym.
- To keep the track of customer payment.

### **Objectives**

- Research on different websites to make it more efficient and user friendly.
- Research on online payment methods and chat systems with hired personal trainers.
- Selecting the best platform to develop the website i.e., MERN stack.

### **Problem Statement**

- Keeping the track of payment file in the document and membership expiration date.
- No online trainer for workout plans, consult and diet.
- Cannot make the membership payment through the online payment system.
- Customers have to visit the office for the gym subscription.

### **The project as a solution**

- The admin can see the payment of the member through our web application.
- Members can hire an online personal trainer regarding fat loss or muscle gain plan
- Fitness Gym has a feature where the user can pay their membership through an online system.
- The website has an easy online form for the members to save documents.

## **Scope and limitations**

### **Scope**

- Online payment system
- Authentication for users
- Personal Trainer (PT) hire
- Membership subscription

### **Limitations**

- No gym status like how many members is present at the gym at the current time.
- No calorie recommendation according to the different factors like height, weight, age, and so on.
- Useful for a particular organization.

### **Literature review**

As a result of the research, the website that comes closest to the proposal in terms of meeting all these requirements is as follows:

#### **The Physique Workshop:**

The website for a gym organization named “The Physique Workshop” situated in Kathmandu was studied. On the webpage, the addresses of each branch were provided. The website provides information on membership fees and various package options. The website primarily focused on branch details, offers costs, feedback, and blogs. Package pricing changes depending on the time of day, with low rates between 10 a.m. and 4 p.m. and high rates at other hours. It was not available to sign up for a gym membership online but to reserve a free trial there. There were no registration features for gym members. Furthermore, online gym stores to buy exercise equipment were unavailable.

#### **Gold Gym**

The website of the Gold Gym was studied which was located in India. We have a user authentication system on the website. Also, the user can have the personal training



option in the websites. After login users have the option to buy membership but there was no online payment system. The user interface was unusual to use. It was disappointing that there was no online trainer. Users cannot chat with the trainers. There were no trainers to choose from.

### **Crunch**

The crunch website for the gym organization where people can buy the membership for the different branches. So, there was an online payment system for the membership. There was an option to use the websites in different languages as per needs, which was exciting. There was a page for personal training but there was no feature to hire them. Also, there was the absence of online trainers. User authentication is also available on the website.

### **Fitness First**

It is a website of the gym which is located in India. We can get the membership from the website. We can see the different branches of the gym at different location. There were lots of offered prices for the membership. But there was no online payment for the membership of the gym. Also, we have a “Train with us” section on the website. But there no any facilities for personal training or online personal trainers. There is no user authentication for the customer.

## Functional Decomposition Diagram

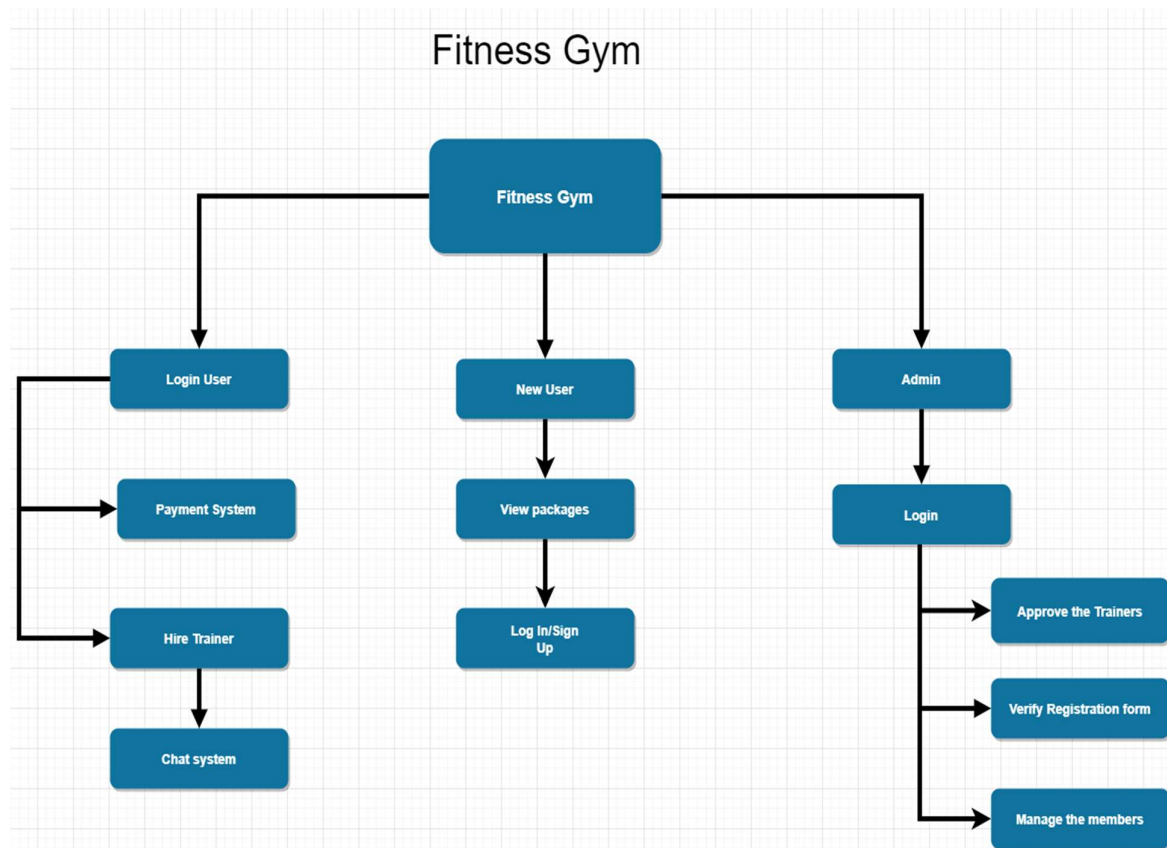


Figure 1 FDD

### Artifacts

The “Fitness Gym” will be the website application for the gym. The web application has been divided into 4 main artifacts which are described in the following.

#### Authentication for user

Users can login or sign up in the application. Users can login and can access the different features of the application like payment of the membership, hiring the available online trainer. Also, users can chat with the trainer in the same application after hiring.

#### Personal trainer management

The duty of the gym is to provide the brilliance trainer for the customer. Trainer should have the quality to help the client to achieve their dream shape and size. So, to be the

online trainer, they need the admin approval. The admin filters the best online trainer for the gym. Online Personal trainers are available in the application. Admin can add and remove the trainer for the job.

### **Chat system**

The customer can chat with the trainer after they are being hired. The client can chat anytime with the trainer to consult. Chat system is the main key to take the online personal training (PT). Here, the client gets the diet chart, workout plan by the trainer.

### **Payment system**

Payment system is the main goal for making the application. The customers of the gym can make the payment of their membership online. Customers can pay their gym fee or the trainer fee online.

## **Methodology**

We are using SCRUM methodology to build this web application. Scrum is a simple framework that transforms into a technique with a set of guidelines, responsibilities, and regular meetings (THE AGILE COMPANY, n.d.). There are 3 roles in the SCRUM i.e., Product Owner, Development Team and SCRUM Master. Product Owner is someone who is responsible for the result, Development Team is someone who is responsible for developing the product, and SCRUM master improves and streamlines the team's methods for achieving its objectives (The Home of Scrum, n.d.). The reasons for using SCRUM are as follows:

- Quick and effective approach to completing the assignment within the allotted timeframes
- Frequent consumer interaction in small sprints that are quick to adapt to changes.
- Given that the scrum team and scrum master communicate often, regular monitoring of the project's status is simple.
- Scrum is benefited with quality products due to its daily meetup (The Scrum Master, n.d.).

Work Breakdown Structure (WBS)

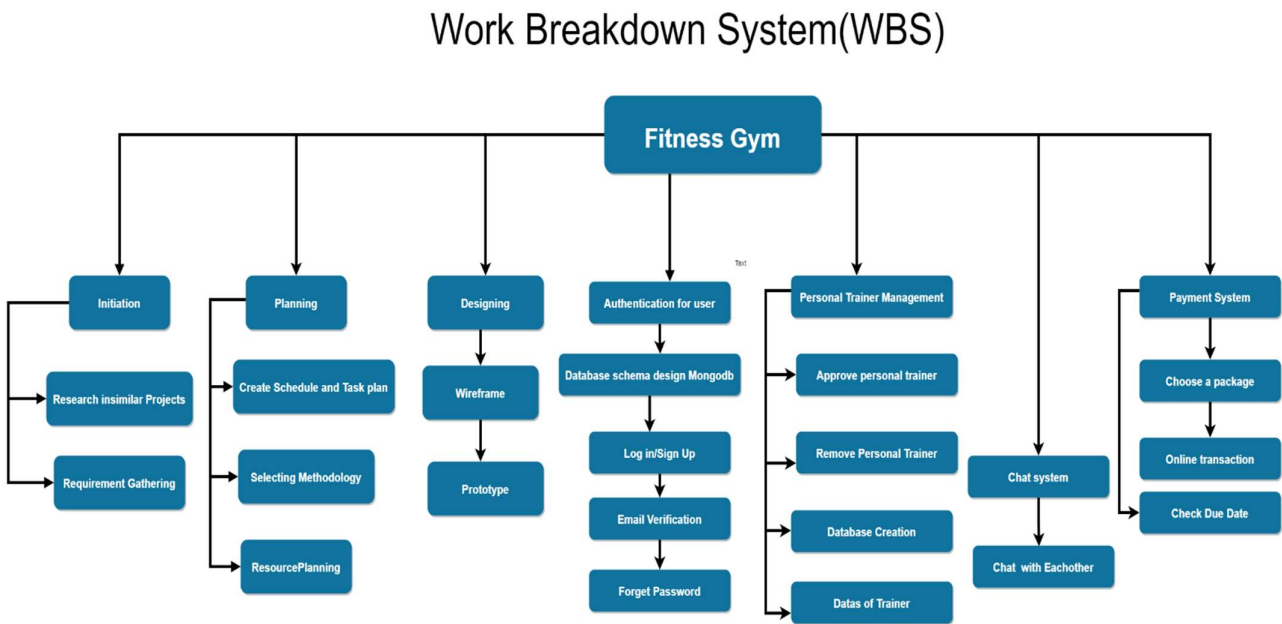


Figure 2 WBS

# Gantt Chart

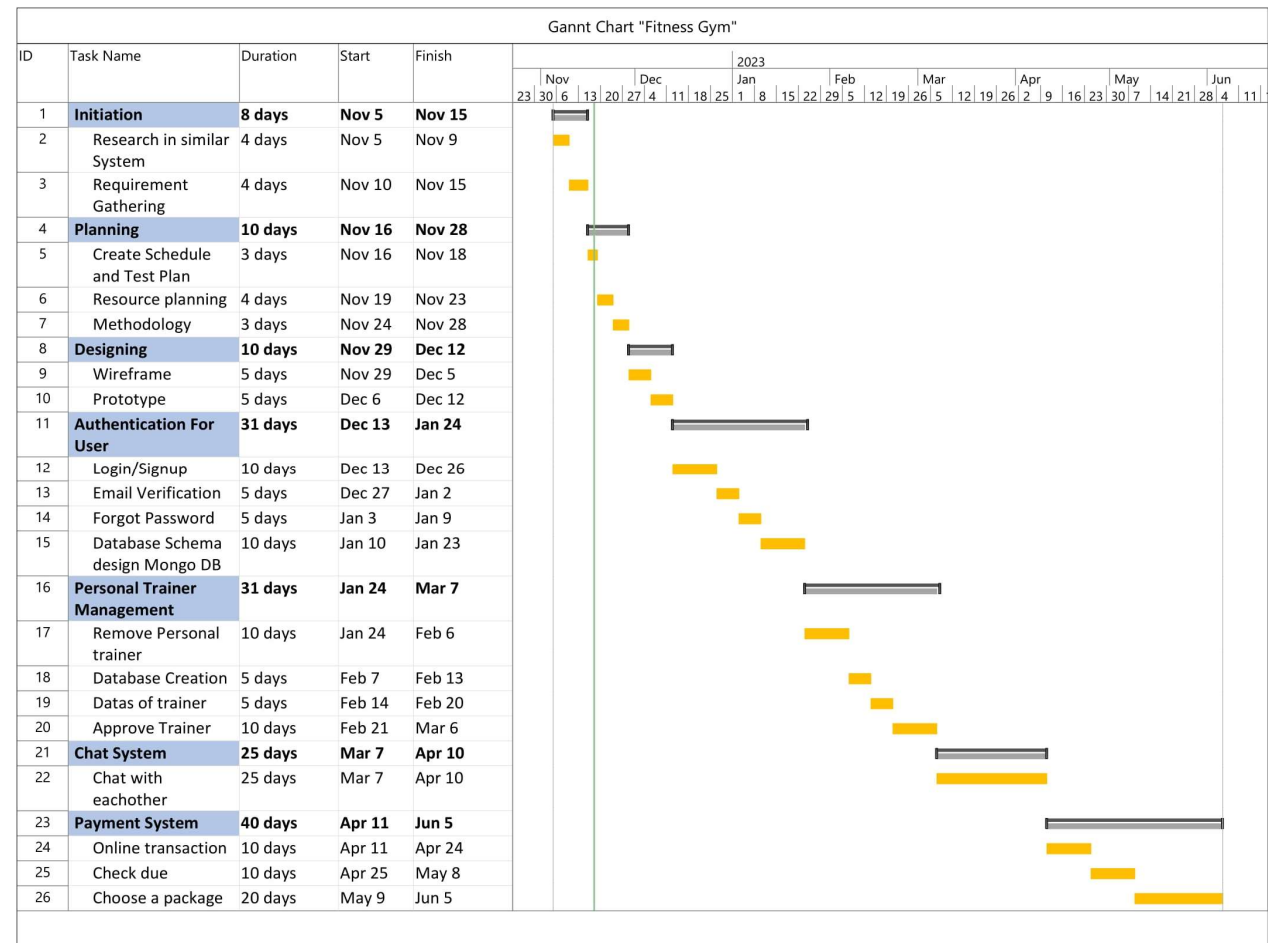


Figure 3 Gantt chart

## **Tools and technologies**

The tools and technologies that are used to create this project are listed below:

**Balsamiq:** Used for making wireframes.

**Figma:** Used for making Prototype.

**Draw.io:** Used for making diagram charts like FDD, WBS, UML and so on.

**Project Libre:** Used for making the Gantt chart.

**Programming platform software (IDE):** Visual Studio code for MERN stack.

**React JS:** For Frontend.

**Express and NodeJS:** For backend.

**MongoDB:** For Database.

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