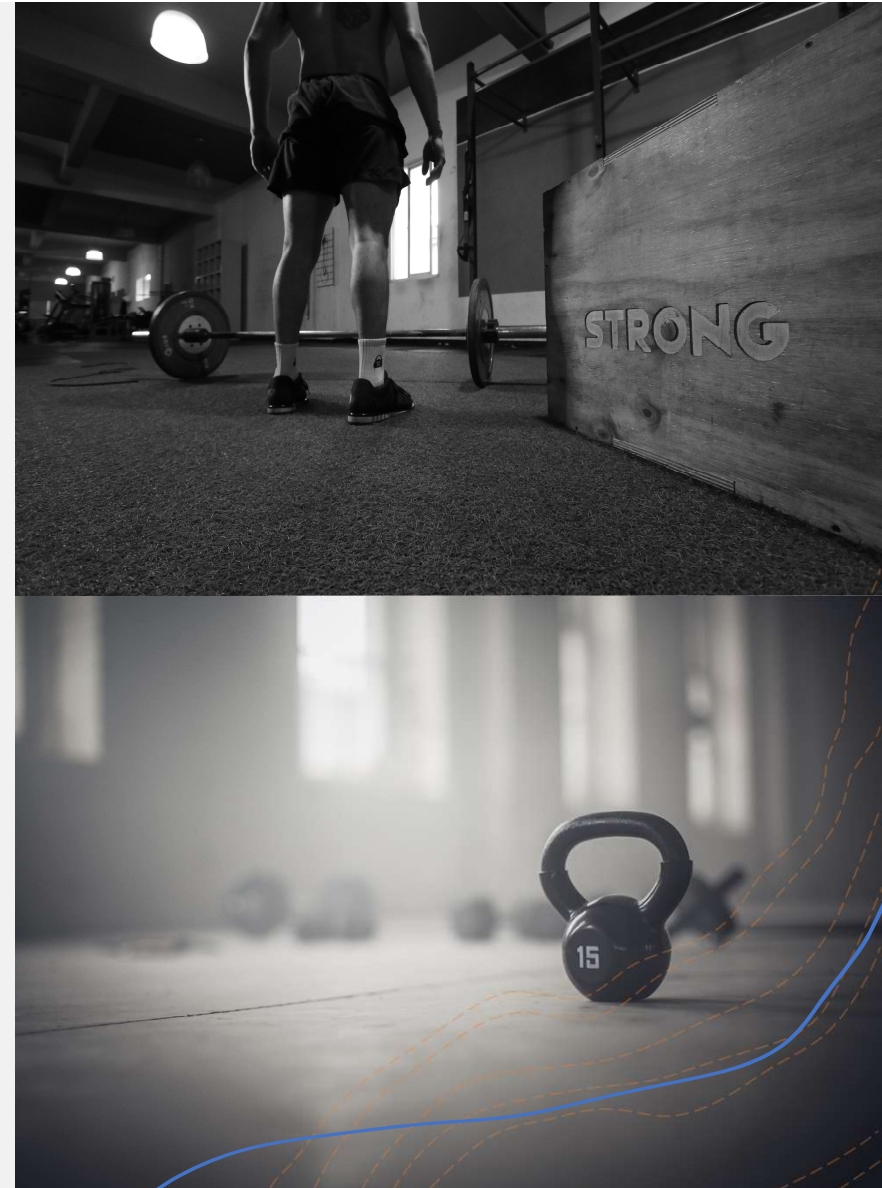# GYM MEMEBERSHIP AND CLASS BOOKING SYSTEM

+ Team Name: TEAM OOPS

Team Members:

Mahesh Peta, Hari Naga Venkata Sai Posani, Prajwal Garla, Guru Saran Reddy Busireddy.

Instructor: Erik Fredericks

Date: 12/06/2024

MEET OUR TEAM

+ **Prajwal Garla**

+ **Role**: Frontend Designer / Testing Lead

• Designed and developed the **user interface** of the website.

• Led **usability and performance testing**, ensuring smooth user experience across different devices and browsers.

+ **Guru Saran Reddy Busireddy**

+ **Role**: Database Designer & Backend Development

• Designed and implemented the **database schema** for efficient data storage and retrieval.

• Developed the **backend architecture**, integrating the system's core functionality with the database.

+ **Mahesh Peta**

+ **Role**: QA Testing & Backend Integration

• Ensured the **quality** of the product through **rigorous testing** and bug fixes.

• Integrated **backend services** to ensure seamless interaction between the frontend and database.

+ **Hari Naga Venkata Sai Posani**

+ **Role**: Payments & Notification Integration

• Integrated **payment systems** for membership renewals and class bookings, ensuring secure transactions.

• Managed **email notification services** for booking confirmations, class reminders, and payment updates.

PROJECT OVERVIEW

+ **Gym Membership and Class Booking System**

• Our project is a **Gym Membership and Class Booking System** designed to make gym management easier for both users and administrators. The system allows users to **sign up**, **view available classes**, **book classes**, and **make payments** securely.

• Admins can manage **class schedules**, **view reports**, and handle all the **payments** to keep the gym running smoothly.

+ **Main Features:**

• **User Registration**: Allows users to sign up with personal details.

• **Class Booking**: Users can browse available classes and book them.

• **Payment Integration**: Secure payment gateway for class bookings and membership renewals.

• **Admin Dashboard**: Admins can manage class schedules, view reports, and process payments.

+ **Technologies Used:**

• **Django, Python**

• **HTML, CSS**

• **SQLite, PyCharm, AWS, ec2 , S3 buckets**

DID WE HIT OUR PROJECT GOALS?

Project Milestones:

•**Frontend Design**:

- **Goal**: Complete the design of the user interface for the website.
- **Status**: Met.
  - *Description*: "The UI design was completed on schedule. We successfully implemented the homepage, class browsing page, and user profile page."

•**Backend Development**:

- **Goal**: Build the backend systems, including database integration and user authentication.
- **Status**: Met.
  - *Description*: "We successfully developed the backend services required to support the core functionality (class booking, user management, etc.) without significant delays."

•**Testing & Deployment**:

- **Goal**: Thoroughly test the system for bugs and deploy it to a hosting platform.
- **Status**: Delayed.
  - *Description*: "The testing phase took longer than expected due to troubleshooting issues related to the **payment system integration**. Although the majority of testing was completed, this caused delays in the deployment stage."

Reflection on Delays:

•**Key Issues**:

- The **payment system integration** had to be revisited multiple times to ensure it was secure and functioning as expected. This was essential to the overall system functionality but took longer than anticipated.

•**Solution**:

- We allocated extra time in the final weeks of the project to complete the necessary testing and fixes for the payment system, ensuring a smooth final deployment.

THINGS CHANGED AFTER MIDTERM

+ **1. Added Admin Dashboard:**

• **New Feature**:
  • Introduced a centralized Admin Dashboard.

• **Benefits**:
  • Allows gym managers to modify class schedules, manage memberships, and process payments in one place.
  • Improved usability for admins to handle gym operations more efficiently.

+ **3. Backend Optimizations:**

• **Improvement**:
  • Optimized database queries and backend processes to enhance system performance.

• **Benefits**:
  • Faster load times and improved performance, especially during peak times.
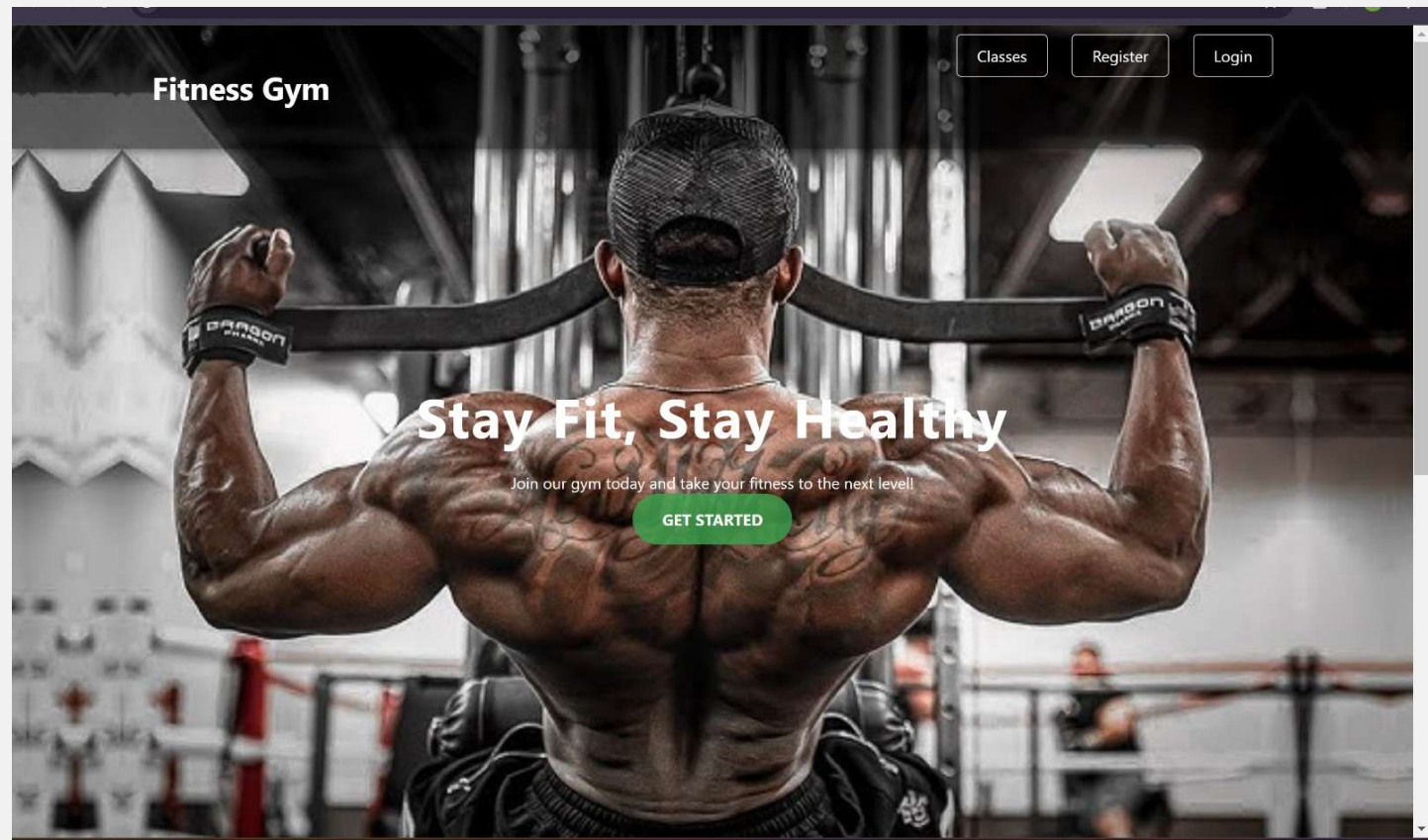
+ **2. UI Improvements:**

• **Improvement**:
  • Streamlined the class booking process, simplifying class selection and improving responsiveness of website.

• **Benefits**:
  • Enhanced user experience with a smoother, intuitive flow that reduces friction.

+ **4. Focused Payment Integration:**

• **Improvement**:
  • Integrated **secure card payment transactions** as the primary payment method.

• **Details**:
  • Initially considered adding **PayPal integration** but decided to focus solely on **card transactions** to simplify the implementation and better align with user needs.

• **Benefits**:
  • Secure and streamlined payment system for membership renewals and class bookings.
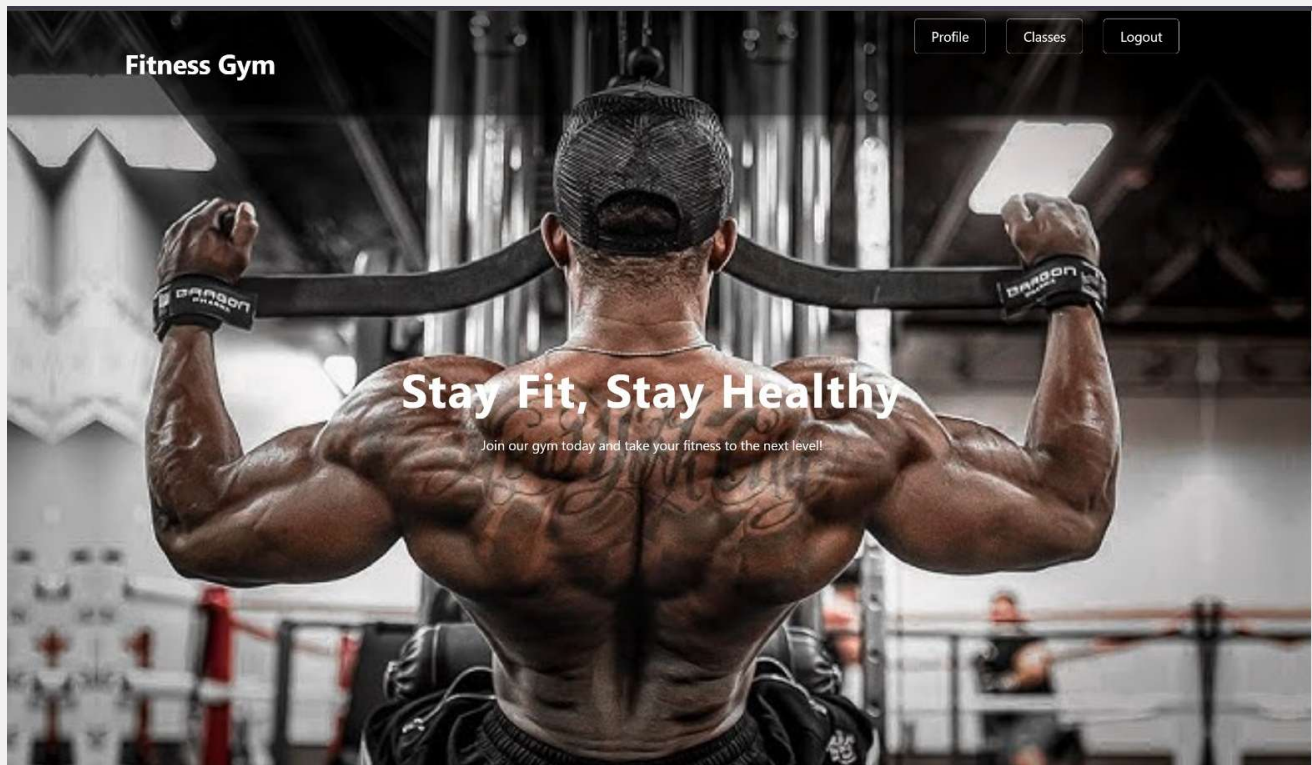
FINAL IMPLEMENTATION

HOME PAGE

AFTER LOGIN

SIGN-UP

Register for Gym Membership

Login   Home

Register

Username:
Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

Firstname:

Lastname:

Phone:

Email:

Password:

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation:
Enter the same password as before, for verification.

Register

LOGIN

USER PROFILE

Fitness Gym   Profile   Classes   Logout

User Profile

Update Profile

Name: Prajwal Garla

Phone: 6163155763

Address: 252, Manzana CT NW, APT 1B

Height: 198.00

Weight: 198.00

Membership: gold

CLASS BOOKING

Classes

All Gym Classes

Class Name	Instructor	Start Time	End Time	Max Capacity	Created At	Price	Actions
Yoga	SARA ALLISON	2024-12-10 18:00	2024-12-10 19:00	20	2024-12-04 16:27	20.00	Proceed to Payment
HITT	BROCK TENSON	2024-12-13 06:00	2024-12-13 12:00	30	2024-12-04 16:28	20.00	Proceed to Payment
Yoga	SARA ALLISON	2024-12-13 18:00	2024-12-13 19:00	30	2024-12-04 16:28	20.00	Proceed to Payment

PAYMENT PAGE

Fitness Gym

Class Name: Yoga
Instructor: SARA ALLISON
Start Time: 2024-12-10 18:00
End Time: 2024-12-10 19:00

Card Number

1234 5678 9101 1121

Cardholder Name

John Doe

Expiration Date

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CVV

123

Billing Address

1234 Main St

City

City

Zip Code

12345

Submit Payment

BOOKING CONFIRMATION

Fitness Gym   Home Classes Logout

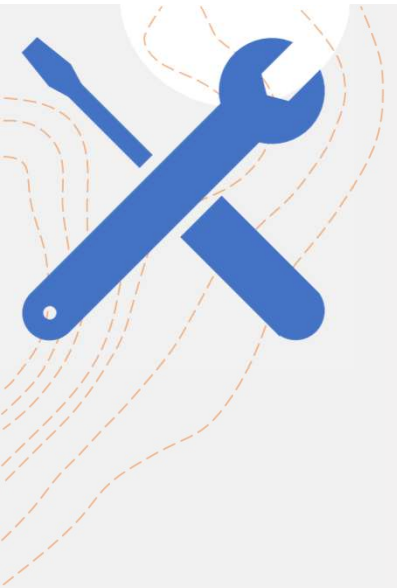**Booking Confirmed!**

Class: Yoga
Instructor: SARA ALLISON
Status: Confirmed
Amount Paid: 20.00

Back to Home

HOW TO INSTALL/DEPLOY OUR PROJECT?

- **Prerequisites**: Install Python (3.x), Git, and Django (pip install django).
- **Clone the Project**:

bash

git clone https://github.com/Prajwal148/OOPS.git

- **Set Up Virtual Environment**:

bash

python -m venv venv source venv/bin/activate # For Linux/Mac

venv\Scripts\activate # For Windows

- **Install Dependencies**:

bash

pip install -r requirements.txt

- **Set Up the Database**:

bash

python manage.py migrate python manage.py createsuperuser

- **Run the Server**:

bash

python manage.py runserver

THANK YOU