# **CAPSTONE PROJECT**

# ONLINE GYM MANAGEMENT SYSTEM

JAVA FULL STACK-REACT(BATCH-1)

# **Presented by**

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GitHub:- " https://github.com/SumanthChaluvadi/Sumanth-wipro-capstoneonlinegymmanagement.git "

# ONLINEGYMMANAGEMENT:

The main aims of this project to develop a user-friendly web application that facilitates the Gym Management Software is a gym and health club membership management system.

# Architecture:

Here's a detailed architecture for your gym management system, covering all classes, their attributes, relationships, and required functionalities. This architecture ensures that the system can manage users, roles, permissions, branches, gyms, trainers, members, payments, and appointments effectively.

### Overview: -

The system is organized into several modules:

- 1. User Authentication and Registration
- 2. Gym Slot Scheduling Interface
- 3. Slot availability Management
- 4. Slot Booking Information Management
- 5. Feedback Management
- 6. Notification System
- 7. Admin Dashboard

TO create this project, I have used React and MySQL database, for crud operations post-man technologies and servers.

# Backend: - (Server.js)

The server folder contains the backend code of my application. This part is responsible for handling data processing, business logic, and database interactions. It serves as the intermediary between the client and the database.

```
const express = require('express');
const mysql = require('mysql2');
const bodyParser = require('body-parser');
const cors = require('cors');
require('dotenv').config();

const jwt = require('jsonwebtoken'); // For token-based authentication

const app = express();
app.use(cors());
app.use(bodyParser.json());

const secretKey = 'asdfghjkl'; // Replace with a secure key for token signing

// Endpoint to handle admin login
app.post('/admin/login', (req. res) => {
    const (username, password) = req.body;

// Replace with your actual authentication logic
if (username === 'admin' && password === 'password') {
    // Generate a token
    const token = jwt.sign({ username }, secretKey, { expiresIn: '1h' });
    res.json({ success: true, token });
} else {
    res.status(401).json({ success: false, error: 'Invalid credentials' });
}

// Middleware to verify token
app.use((req, res, next) => {
    const token = req.headers.authorization?.split(' ')[1];
}
```

```
app.use((req, res, next) => {
    const token = req.headers.authorization?.split(' ')[1];
         jwt.verify(token, secretKey, (err, decoded) => {
                  return res.status(403).json({ error: 'Unauthorized' });
              req.user = decoded;
              next();
         next();
app.get('/admin/protected', (req, res) => {
         res.json({ message: 'Protected data', user: req.user });
         res.status(401).json({ error: 'Unauthorized' });
const db = mysql.createConnection({
 host: process.env.DB_HOST,
  user: process.env.DB_USER,
 password: process.env.DB_PASSWORD,
  database: process.env.DB_NAME,
db.connect((err) => {
  if (err) throw err;
  console.log('MySQL connected...');
CONSOLETION LANGE CONNECTED. )
app.use('/api/register', require('./routes/registerRoutes'));
app.use('/api/login', require('./routes/loginRoutes'));
app.use('/api/bookings', require('./routes/slotsRoutes'));
app.use('/api/trainers', require('./routes/trainerRoutes'));
app.use('/api/user-trainers', require('./routes/userTrainerRoutes'));
app.use('/api/memberships', require('./routes/membershipRoutes'));
app.use('/api/payments',require('./routes/paymentRoute') );
app.use('/api/admin' , require('./routes/AdminRoutes'));
app.use((err, req, res, next) => {
     console.error(err.stack);
     res.status(500).json({ message: 'Internal Server Error' });
app.listen(process.env.PORT, () => {
 console.log(`Server running on port ${process.env.PORT}`);
```

# Db.js (to connect MySQL database): const MySQL = require('mysql2');

```
1 DB_HOST=localhost
2 DB_USER=root
3 DB_PASSWORD=Password
4 DB_NAME=gymdb
5 PORT=5000
6 JWT_SECRET=Sumanth
```

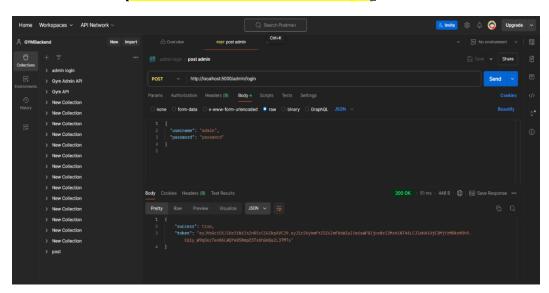
# Routes used: -

- 1. Registerroutes.js
- 2. Loginroutes.js
- 3. Adminroutes.js
- 4. Traineroutes.js
- 5. Slotroutes.js
- 6. Membershiproutes.js

Backend: - (Using postman)

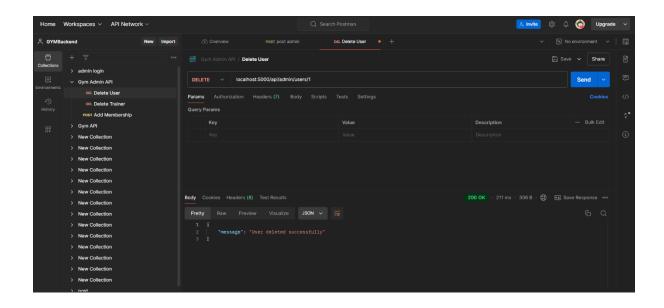
### 1.1 ADMIN LOGIN:

1.1.1 Method: - POST (<a href="http://localhost:5000/admin/login">http://localhost:5000/admin/login</a>)



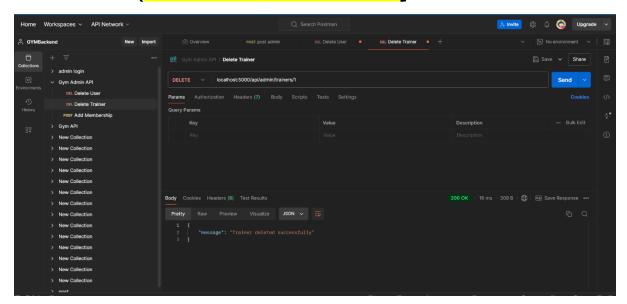
### 1.1.2 Delete user

Method: - DELETE (localhost:5000/api/admin/users/1)



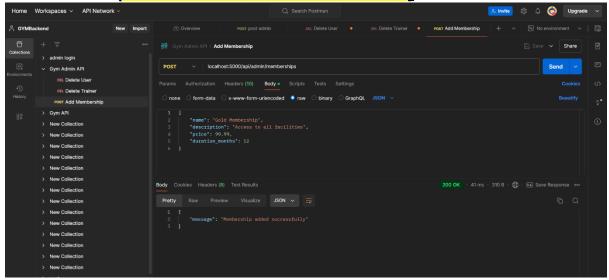
# 1.1.3 Delete user

Method: - Delete (localhost:5000/api/admin/trainers/1)



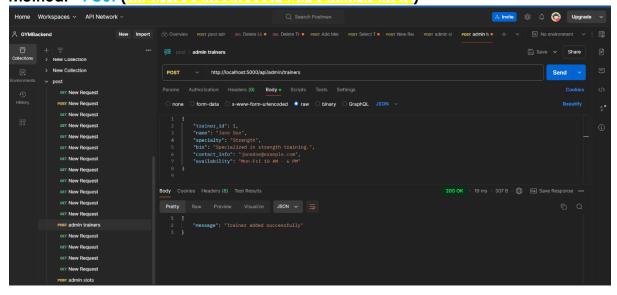
### 1.1.4 Post Member

Method: - POST (localhost:5000/api/admin/memberships)

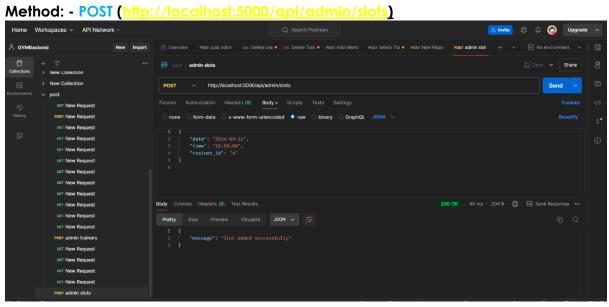


### 1.1.5 Post trainer

Method: - POST (http://localhost:5000/api/admin/trainers)

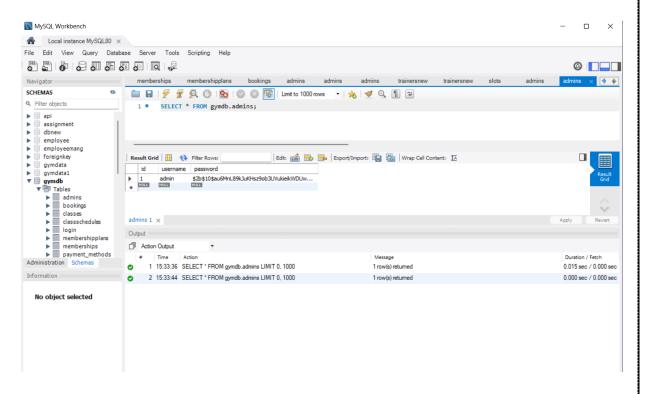


### 1.1.6 Post Slot

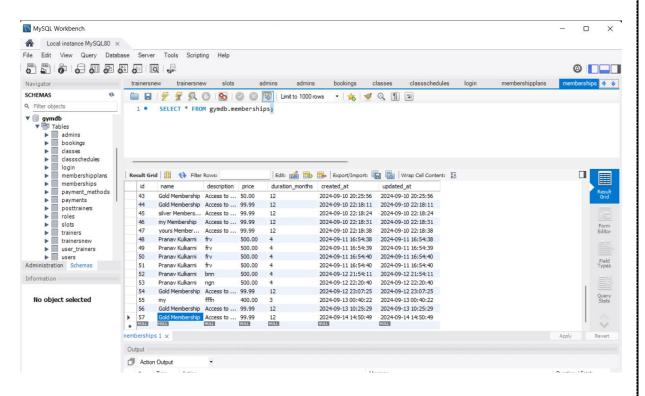


**MySQL** 

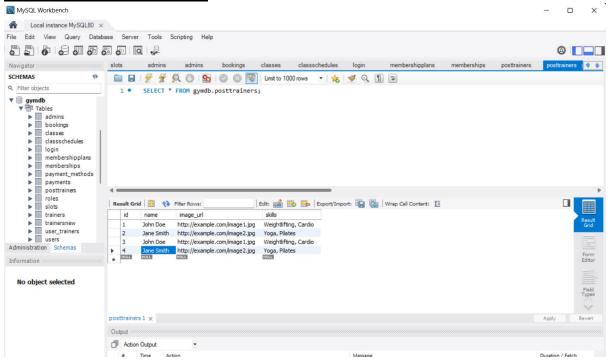
1.ADMIN TABLE: -



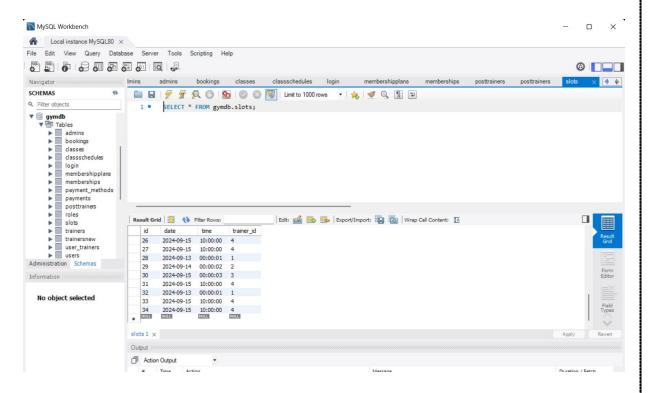
### 2.MEMBERSHIP TABLE: -



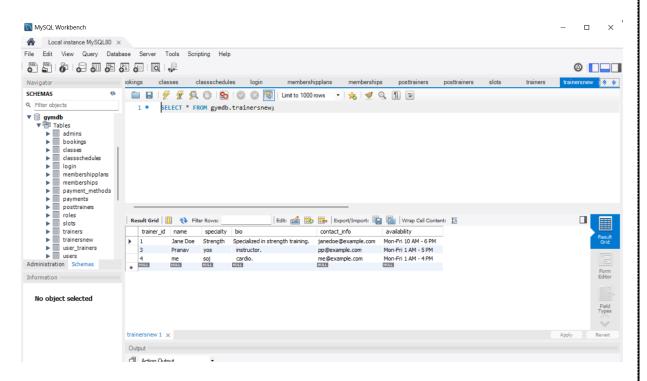
# 3.POST TRAINERSSLOT TABLE: -



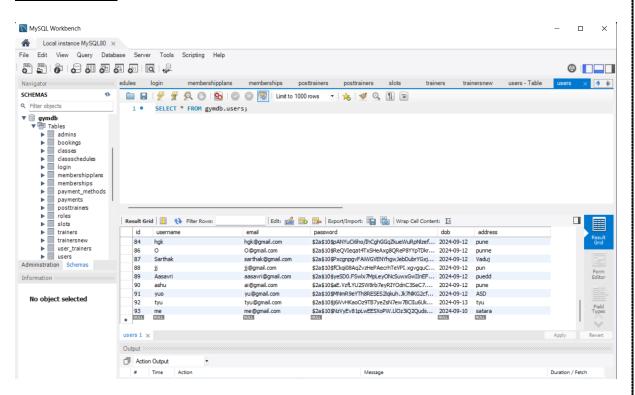
### 4.SLOT TABLE: -



### **5.TRAINERS TABLE: -**



### 6.USER TABLE: -



### **OUTPUT FOR BACKEND: -**

The output is the persistent storage of the data in the MySQL database. After I submit data through Swagger UI, it is successfully processed by My API and stored in MySQL, where it can be accessed, modified, or queried as needed.

# FRONTEND (React.js)

- I Run the **npm start-react-app client** command to create a new React project
- **cd my-project** is used to navigate to project directory.

# Src(components):

- 1.register.js
- 2.login.js
- 3.Admin.js
- 4.AdminLogin.js
- 5.BookSlot.js
- 6.Contact.js
- 7.gallery.js
- 8.ManageSlot.js
- 9. Membership Form. js
- 10.TrainerList.js [TL.JS]

# Main files: -

- 1.App.js
- 2.index.js
- 3.axiosConfig.js

```
import React, { useState } from 'react'; //returns the values
            import { BrowserRouter as Router, Route, Routes, Link } from 'react-router-dom';
import './App.css';
            import facebookIcon from './1384005.png';
           import instagramIcon from './1384015.png';
            import twitterIcon from './1384017.png';
            import youtubeIcon from './1384012.png';
            import linkedinIcon from './1384007.png';
            import cp from './corporate-membership.jpg';
import pt from './personal-training.jpg';
            import gp from './group-programs.jpg';
           import Register from './Register';
           import Login from './Login';
           import ManageSlots from './ManageSlots';
           import BookSlot from './BookSlot';
           import UserDashboard from './UserDashboard';
import MembershipForm from './MembershipForm';
            import PaymentForm from './PaymentForm';
           import Gallery from './gallery';
import Contact from './Contact';
           import Admin from './Admin';
            import AdminLogin from './AdminLogin';
            function App() {
              const [clientSecret] = useState('');
              const [membershipId] = useState('
return (
 <Router>
  <div className="App">
    <header className="App-header">
     <div className="header-top">
      <div className="contact-info">
       <span>Email: Titans@gmail.com :: </span>
       <span>Phone: +919876543211</span>
      </div>
      <div className="gym-name">
       <h1>PEAK PERFORMANCE GYM</h1>
      </div>
      <div className="social-media">
       <a href="https://facebook.com" target="_blank" rel="noopener noreferrer">
```

```
<img src={facebooklcon} alt="Facebook" />
   </a>
   <a href="https://instagram.com" target="_blank" rel="noopener noreferrer">
    <img src={instagram|con} alt="Instagram" />
   </a>
   <a href="https://twitter.com" target="_blank" rel="noopener noreferrer">
    <img src={twitterlcon} alt="Twitter" />
   </a>
   <a href="https://youtube.com" target="_blank" rel="noopener noreferrer">
    <img src={youtubelcon} alt="YouTube" />
   </a>
   <a href="https://linkedin.com" target="_blank" rel="noopener noreferrer">
    <img src={linkedinlcon} alt="LinkedIn" />
   </a>
  </div>
 </div>
 <nav>
  ul className="nav-list">
   <Link className="nav-link" to="/">Home</Link>
   <Link className="nav-link" to="/register">Register</Link>
   Link className="nav-link" to="/login">Login</Link>
   <Link className="nav-link" to="/book-slot">Book Slot</Link>
   <Link className="nav-link" to="/TL">Trainer List</Link>
   <Link className="nav-link" to="/gallery">Gallery</Link>
   <Link className="nav-link" to="/contact">Contact Us</Link>
   <me>ClassName="nav-link" to="/MembershipForm">MembershipForm</m>
   Link className="nav-link" to="/AdminLogin">AdminLogin</Link>
  </U|>
 </nav>
</header>
<main>
 <Routes>
  <Route path="/" element={<Home />} />
  <Route path="/register" element={<Register />} />
  <Route path="/login" element={<Login />} />
```

```
<Route path="/manage-slots" element={<ManageSlots />} />
      <Route path="/book-slot" element={<BookSlot />} />
      <Route path="/UD" element={<UserDashboard />} />
      <Route path="/MembershipForm" element={<MembershipForm />} />
      <Route path="/TL" element={<TL/>} />
      <Route path="/gallery" element={<Gallery/>} />
      <Route path="/Contact" element={<Contact/>}/>
      <Route path="/Admin" element={<Admin/>}/>
      <Route path="/AdminLogin" element={<AdminLogin />} />
     </Routes>
     {clientSecret && membershipId && (
      <PaymentForm clientSecret={clientSecret} membershipId={membershipId} />
     )}
    </main>
   </div>
  </Router>
);
}
function Home() {
return (
  <div className="Home">
   <div className="background-image">
    <div className="content-overlay">
     <h1>Welcome to Our Gym</h1>
     Your journey to fitness starts here!
    </div>
   </div>
   <div className="tabs">
   </div>
   <section className="unique-features">
    <h2>What Makes Us Different</h2>
     State-of-the-Art Equipment
```

At Peak Performance Gym, we pride ourselves on offering the latest in fitness technology and equipment. Our state-of-the-art machines, free weights, and cardio equipment are meticulously maintained and regularly updated to ensure you have access to the best tools for achieving your fitness goals. Whether you're a seasoned athlete or just starting your fitness journey, our cutting-edge equipment provides the versatility and support you need to succeed.

### Personalized Training Programs

We understand that every individual has unique fitness goals and needs. That's why our certified personal trainers work closely with you to design personalized training programs tailored specifically to your objectives. From weight loss and muscle building to sports-specific training and injury rehabilitation, our trainers use their expertise to create customized plans that maximize your results and keep you motivated.

### **Expert Guidance and Support**

Our team of fitness professionals includes certified trainers, nutritionists, and wellness coaches who are dedicated to your success. We provide ongoing guidance and support to help you navigate your fitness journey with confidence. Our trainers offer one-on-one coaching, group classes, and workshops that cover various aspects of health and wellness, ensuring you have access to expert advice every step of the way.

### Community and Motivation

At Peak Performance Gym, we believe in the power of community to drive motivation and success. Our supportive environment fosters a sense of camaraderie among members, creating an encouraging space where you can connect with like-minded individuals. We regularly host fitness challenges, group classes, and social events that bring our members together, making your fitness journey not only effective but also enjoyable.

### Comprehensive Wellness Services

We go beyond traditional gym services to offer a holistic approach to wellness. Our facility includes amenities such as a wellness center, massage therapy, and nutrition counseling. We provide a full spectrum of services designed to enhance your overall well-being, helping you achieve a balanced and healthy lifestyle both inside and outside the gym.

### Flexible Membership Options

We recognize that everyone's lifestyle and fitness needs are different. That's why we offer a variety of membership options to suit your individual preferences and schedule. Whether you prefer a short-term commitment or a long-term plan, we have flexible memberships that provide access to our extensive facilities and services, making it easier for you to stay consistent and achieve your fitness goals.

```
</section>
<section className="legacy">
<h2>Our Legacy</h2>
```

<strong>Founded in 2000:</strong> Peak Performance Gym has established itself as a leader in fitness and wellness, becoming a trusted name in the community.

<strong>Building a Strong Community:</strong> We have fostered a supportive environment through various events and workshops, creating lasting relationships and a sense of belonging.

<strong>Pioneering Fitness Innovations:</strong> We continually integrate the latest equipment and innovative training programs, ensuring our members benefit from cutting-edge solutions.

<strong>Celebrating Achievements:</strong> We take pride in our members' success stories and transformative journeys, celebrating milestones that reflect the effectiveness of our programs.

```
<strong>Future Aspirations:</strong> We are dedicated to evolving and enhancing our facilities
and services to inspire and support individuals towards a healthier and more fulfilling life. 
 </UI>
</section>
   <section className="programs">
    <h2>Our Programs</h2>
    <div className="program">
     <img src={cp} alt="Corporate Membership" />
     <h3>Corporate Membership</h3>
     Enhance your employee wellness with our corporate membership packages. Enjoy exclusive
benefits and discounts for your company.
    </div>
    <div className="program">
     <img src={pt} alt="Personal Training" />
     <h3>Personal Training</h3>
     Our certified personal trainers will work with you to create a customized fitness plan that helps
you achieve your personal goals.
    </div>
    <div className="program">
     <img src={gp} alt="Group Programs" />
     <h3>Group Programs</h3>
     Join our group classes to stay motivated and fit. We offer a variety of classes, including yoga,
HIIT, and strength training.
    </div>
   </section>
   <section className="contact-form">
    <h2>Get in Touch</h2>
    <form>
     <label>Name:</label>
     <input type="text" name="name" placeholder='Enter name'required />
     <label>Email:</label>
     <input type="email" name="email" placeholder='Enter emial'required />
     <label>Phone:</label>
     <input type="tel" name="phone"placeholder='Enter phone number' required />
     <label>State:</label>
     <input type="text" name="state" placeholder='Enter State'required />
```

```
<label>City:</label>
            <input type="text" name="city" placeholder='enter City'required />
            <label>Gym:</label>
            <input type="text" name="gym" required placeholder='from which gym' />
            <a href="mailto:label"><a href="mailto:label">mailto:label"><a href="mailto:label">mailto:label"><a href="mailto:label">mailto:label"><a href="mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">mailto:label">ma
            <textarea name="message" placeholder='Enter Your Massage'required></textarea>
            <div className="captcha">
               <label>Prove you are not a robot:</label>
               {/* Replace with a real CAPTCHA implementation */}
               <input type="checkbox" name="captcha" required />
            </div>
            <button type="submit">Submit</button>
         </form>
      </section>
      <footer className="footer">
<div className="footer-content">
  <div className="footer-logo">
  </div>
  <div className="footer-links">
      <h2>Quick Links</h2>
      <l>
         <a href="/">Home</a>
         <a href="/register">Register</a>
         <a href="/login">Login</a>
         <a href="/manage-slots">Manage Slots</a>
         <a href="/book-slot">Book Slot</a>
         <a href="/UD">Trainer List</a>
         <a href="/gallery">Gallery</a>
         <a href="/contact">Contact Us</a>
      </U|>
  </div>
   <div className="footer-contact">
      <h2>Contact Us</h2>
```

```
Email: info@Titansgym.com
   Phone: +919876543211
   Address: 123 Fitness Lane, Muscle City, USA
  </div>
  <div className="footer-social">
   <h2>Follow Us</h2>
   <a href="https://facebook.com" target="_blank" rel="noopener noreferrer">
    <img src="https://via.placeholder.com/24x24.png?text=F" alt="Facebook" />
   </a>
   <a href="https://instagram.com" target="_blank" rel="noopener noreferrer">
    <img src="https://via.placeholder.com/24x24.png?text=1" alt="Instagram" />
   </a>
   <a href="https://twitter.com" target="_blank" rel="noopener noreferrer">
    <img src="https://via.placeholder.com/24x24.png?text=T" alt="Twitter" />
   </a>
   <a href="https://youtube.com" target="_blank" rel="noopener noreferrer">
    <img src="https://via.placeholder.com/24x24.png?text=Y" alt="YouTube" />
   </a>
   <a href="https://linkedin.com" target="_blank" rel="noopener noreferrer">
    <img src="https://via.placeholder.com/24x24.png?text=L" alt="LinkedIn" />
   </a>
  </div>
 </div>
 <div className="footer-bottom">
  © Titan's Gym. All rights reserved. 
 </div>
</footer>
  </div>
);
export default App;
```

}

# AxioConf.js: -

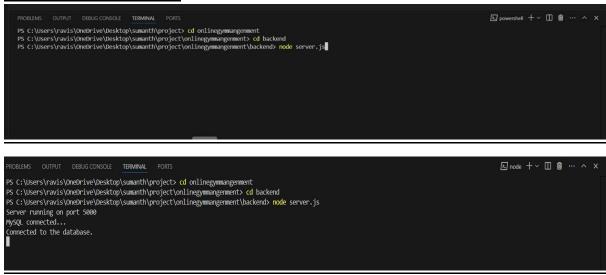
# Admin.js

# Admin login.js

```
import React, { useState } from 'react';
import axios from './axiosConfig'; // Ensure this path is correct
import './Admin.css';
    st Admin = () => {
  const [userId, setUserId] = useState('');
  const [slot, setSlot] = useState({ date: '', time: '', trainer_id: '' });
  const [trainer, setTrainer] = useState({ trainer_id: '', name: '', specialty: '', bio: '', contact_info: '', availability: '' });
  const [membership, setMembership] = useState({ name: '', description: '', price: '', duration_months: '' });
  const [selectedTrainerId, setSelectedTrainerId] = useState('');
      const handleDeleteUser = async () => {
            if (!userId) {
    alert('Please enter a User ID.');
                  const response = await axios.delete(`/admin/users/${userId}`); // Ensure this matches your backend route
alert(response.data.message);
                  acct (error) {
  console.error('Error deleting user:', error.response?.data?.error || error.message);
  alert('Failed to delete user: ' + (error.response?.data?.error || error.message));
     const handleAddSlot = async () => {
   if (!slot.date || !slot.time || !slot.trainer_id) {
      alert('Please fill out all fields.');
             setLoading(true);
            try {
   const response = await axios.post('/admin/slots', slot); // Note the URL should match your backend route
   alert(response.data.message);
            } catch (error) {
   console.error('Error adding slot:', error.response?.data?.error || error.message);
         const handleAddSlot = async () => {
    const handleAddSlot = async () => {
        console.error( Error adding slot: , error.response?.dataf.error || error.message);
        alert('Failed to add slot: ' + (error.response?.dataf.error || error.message));
                       setLoading(false);
         const handleAddTrainer = async () => {
    if (!trainer.trainer_id || !trainer.name || !trainer.specialty) {
                     alert('Please fill out all fields.');
                setLoading(true);
                       alert(response.data.message);
                     console.error('Error adding trainer:', error.response?.data?.error || error.message);
alert('Failed to add trainer: ' + (error.response?.data?.error || error.message));
                       setLoading(false);
         const handleDeleteTrainer = async () => {
                      const response = await axios.delete(`/admin/trainers/${selectedTrainerId}`); // Ensure this matches your backend route
                       alert(response.data.message);
                      console.error('Error deleting trainer:', error.response?.data?.error || error.message);
alert('Failed to delete trainer: ' + (error.response?.data?.error || error.message));
```

### TERMINALS: -

# **BACKEND COMMANDS:**

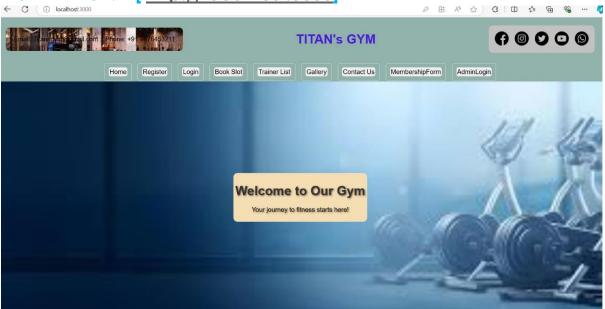


# FRONTEND COMMANDS:

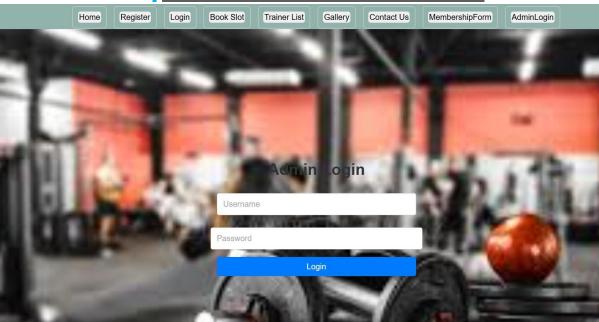


# FRONTEND WEBSITE: -

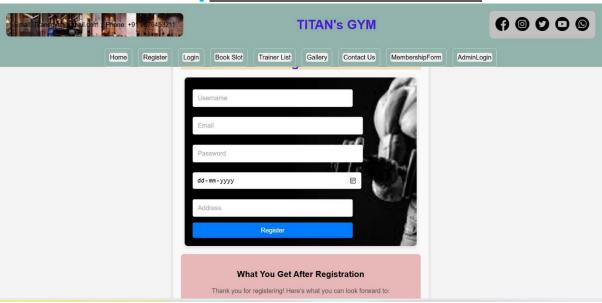
# HOME PAGE: - [ http://localhost:3000]



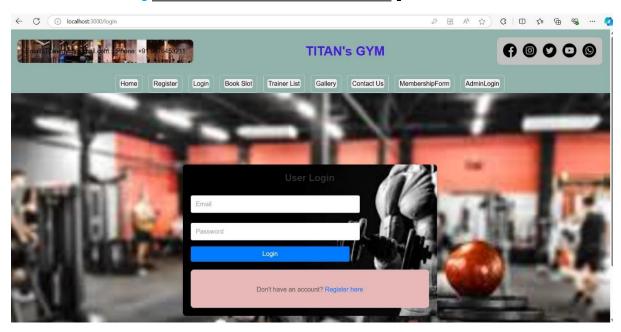
# ADMIN LOGIN: - [ http://localhost:3000/ADMINLOGIN]



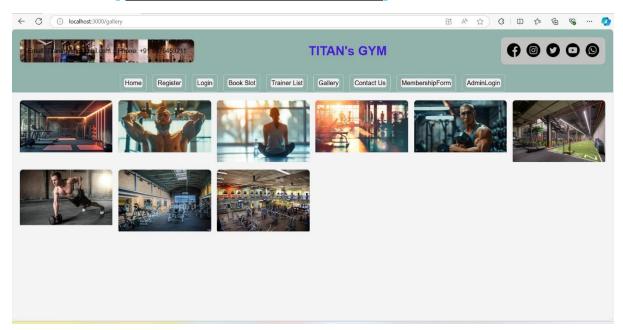
# USER REGISTRATION: - [ http://localhost:3000/register ]



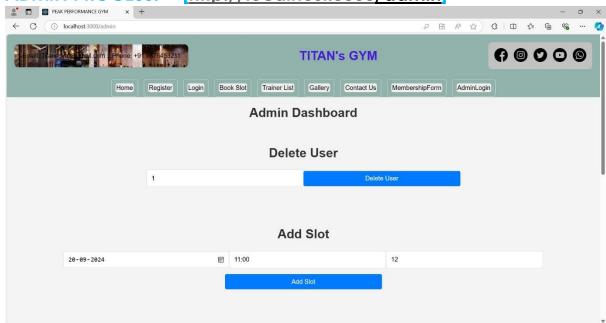
# USER LOGIN: - [ http://localhost:3000/login ]

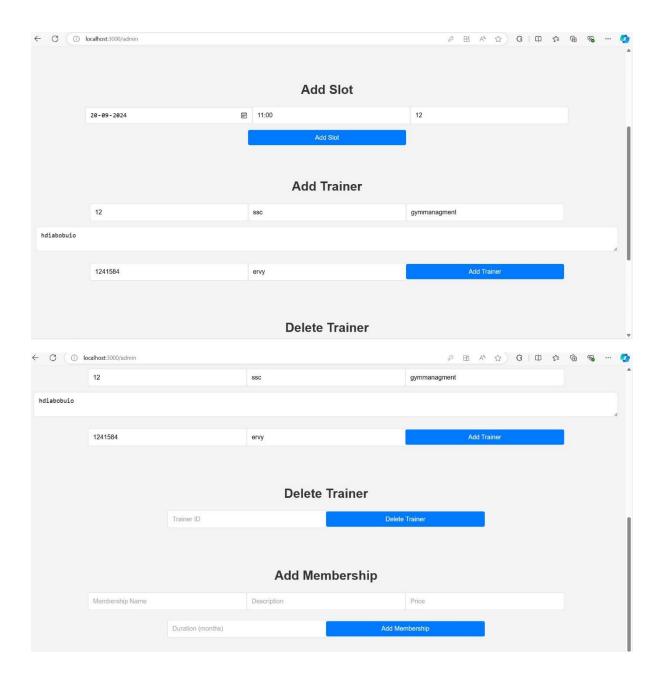


# GALLERY: - [http://localhost:3000/gallery]



# ADMIN PROCESS: - [http://localhost:3000/admin]





Here, is the overview of Frontend webpage that includes admin login, user login, trainer login, new registration, existed deleting and other modules includes notification.

# Thanking you.,

Presented by: - Chaluvadi Saisumanth

Email: - saisumanthchaluvadi@gmail.com

GitHub: - "https://github.com/SumanthChaluvadi/Sumanth-wipro-

capstone-onlinegymmanagement.git"

