VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

A MINI PROJECT REPORT ON

" CULT - FIT MANAGEMENT SYSTEM"

A Mini Project Report Submitted in Partial Fulfilment of Requirement for the 5th Semester B.E Course during the academic year 2019-2020

Submitted by

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CERTIFICATE

This is to certify that the mini project work entitled "**CULT-FIT MANAGEMENT SYSTEM**" is a bonafied work carried out by **Pranathi Shetty A K 1AJ21CS078, Srinivas Charan 1AJ21CS084, Madhu Sudhan K R 1AJ21CS058 , Supritha 1AJ21CS102** in partial fulfilment of the requirements for the Bachelor's degree in COMPUTER SCIENCE AND ENGINEERING of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2019-2020. It is certified that this Mini Project Report has been approved as it satisfies the academic requirements.

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Declaration

We, Pranathi Shetty A K , Srinivas Charan , Madhu sudhan K R , Supritha hereby declare that the dissertation entitled, **CULT – FIT Management System** is completed and written by us under the supervision of my guide BANDHAVYA, Assistant Professor, Department of Computer Science and Engineering, Cambridge Institute of Technology North Campus, kundana, Bengaluru, of the Visvesvaraya Technological University, Belagavi, during the academic year 2023-2024. The dissertation report is original and it has not been submitted for any other degree in any university.

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CHAPTER - 1
INTRODUCTION

The two main sections:
Backend: codes that are written in python, PHP, ASP .net to name but a few by the developer
Frontend: which is markup showed by clients or users browsers, and for doing this we should use HTML (Hyper Text Markup Language), it just shows some elements for users and doesn't run any functions. When you go to a specific URL, your request is sent to your desired server and it'll render for your HTML of the site, in fact, the server runs any server-side functions.

The Front-End used in this project is HTML along with the CSS language.

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of Web pages using markup
- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
- Browsers do not display the HTML tags, but use them to render the content of the page

1.1 Advantages of HTML:

1. The first advantage it is widely used.
2. Every browser supports HTML language.
3. Easy to learn and use.
4. It is by default in every window so you don't need to purchase extra software.
5. You can integrate HTML with CSS, JavaScript, PHP etc.

The back-end database used in this project is MySQL

It is a language used to interrogate and process data in a relational database. Originally developed by IBM for its mainframes, SQL commands can be used to interactively work with a database or can be embedded within a script or programming language as an interface to a database. Programming extensions to SQL have turned it into a full-blown database programming language, and all major database management systems (DBMSs) support it. ANSI standardized SQL.

But most DBMSs have some proprietary enhancement, which if used, makes SQL non-standard. Moving an application from one SQL database to another sometimes requires tweaking, the age-old problem in this business!

1.2 Advantages of MySQL:

1. SQL Queries can be used to retrieve large amounts of records from a database quickly.
2. SQL is used to view the data without storing the data into the object
3. SQL joins two or more tables and show it as one object to user
4. SQL databases use long-established standard, which is being adopted by ANSI & ISO. Non-SQL databases do not adhere to any clear standard.
5. Using standard SQL, it is easier to manage database systems without having to write substantial amount of code

CHAPTER – 2
PROJECT FEATURES & OBJECTIVES

2.1 About the Project:

CULT-FIT Management System operates a fitness platform that integrates various wellness aspects including gym memberships. They partnered with many fitness centers , allowing users to access a wider range of workout options through the CULT-FIT . This developed using PHP is an excellent solution for gyms with a large/growing number of members, or ones serving elite clientele. This solution helps to identify the user and manage their timely memberships.

In its working, each member is issued a membership card which is valid for a fixed number of gym sessions, or for a particular period of time, or a combination of the two, totally based on the payment policy. In this they provide a wide range of classes to suit different fitness levels and interests like yoga , Strength training , cardio , Dance fitness , Boxing etc.., Once the time-frame or number of sessions expire, the machine notifies the member about the payment of renewal.

Hence, the system reduces hassle and any chances of quarrels between the members and the gym management. It can also generate multiple reports like monthly, weekly, daily, session wise.

2.1.2 Main features are:

1. CULT-FIT Management
2. CULT-FIT Members Management
3. Payment Management
4. Trainers Management

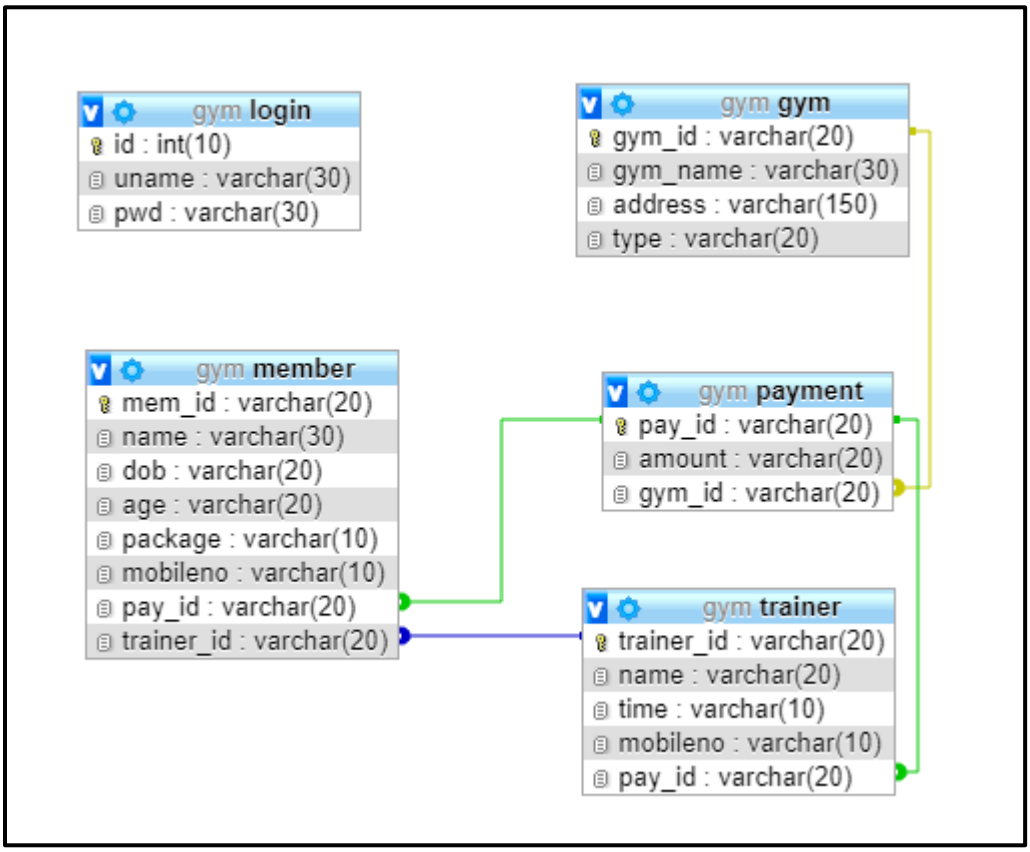
2.1.3 Objectives:

1. Create different CULT-FIT.
2. Create payment areas.
3. Create members to CULT-FIT.
4. Create different trainers of CULT-FIT.
5. Select different CULT-FIT.
6. Select payment areas.
7. Select members to CULT-FIT.
8. Select different trainers of CULT-FIT.
9. Update and delete different values of CULT-FIT, payments made, CULT-FIT member’s details and trainer’s information.

CHAPTER - 3
DESIGN & CONNECTIVITY

3.1 BACK-END DESIGN

3.1.1 Conceptual Database Design (Schema - Diagram)



3.1.2 ER DIAGRAM

An ER diagram shows the relationship among entity sets. An entity set is a group of similar entities and these entities can have attributes. In terms of DBMS, an entity is a table or attribute of a table in database, so by showing relationship among tables and their attributes, ER diagram shows the complete logical structure of a database.

Guidelines For Drawing ER Diagram:- When gathering information I have to

- Identify the entity in the system
- Identify the attributes of the system
- Identify the relationship between the entity

Entity:

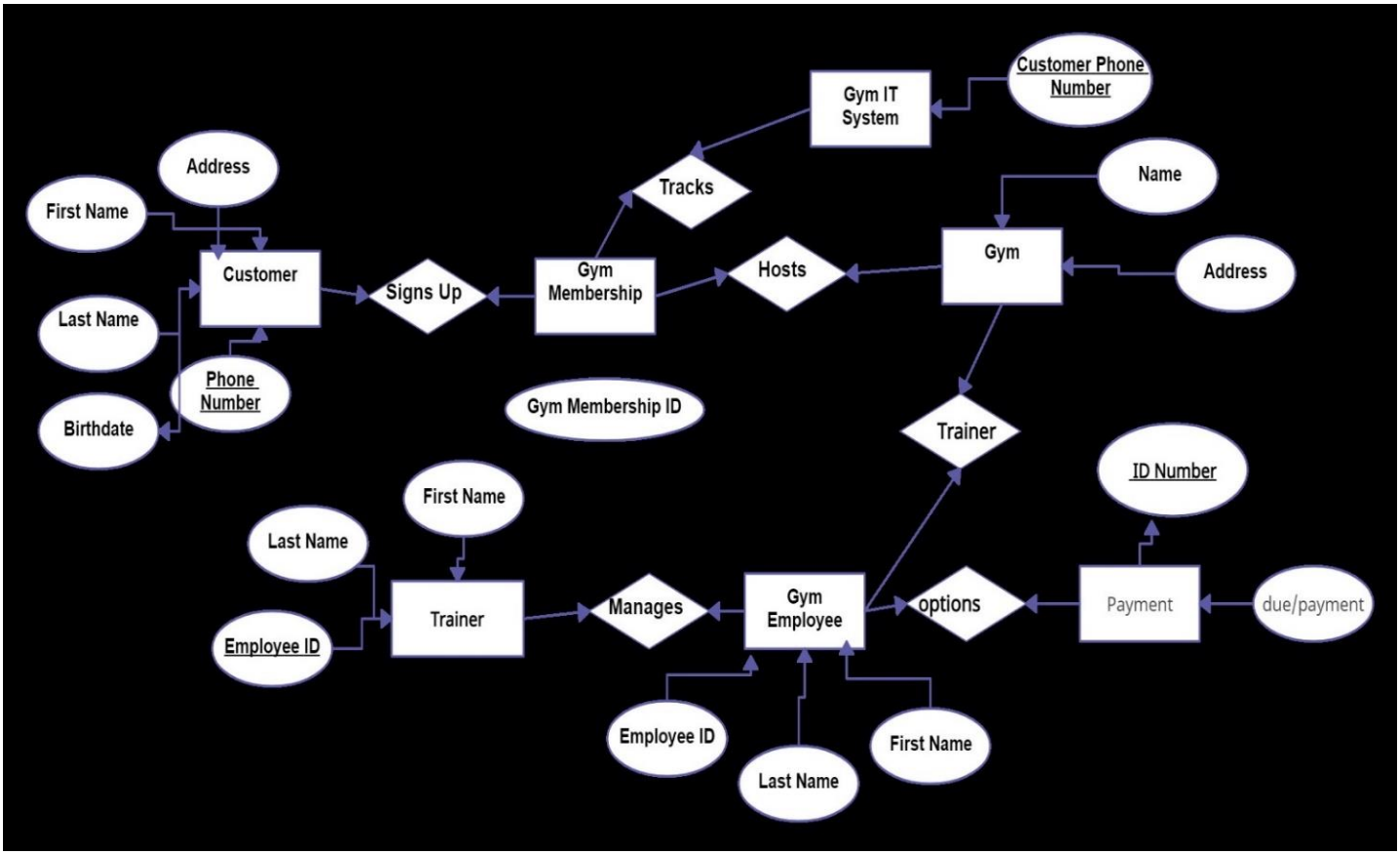
Entity is the distinguishable object that has a conceptual or physical existence in the system. Each entity has some specific attributes. An entity is a fundamental thing of an organization and it has its own identity, which distinguishes it from other entity. An entity type is the description of all entities to which a common definition and common relationship and attribute apply.

Relationship:

A relationship is an "association among entities" Relation is the link between objects through which a entity is related with other entity.

Attribute:

An attribute is the property or characteristic of an entity. Each entity type has a set of attribute associated with it.



3.2 FRONT-END DESIGN

3.2.1 Front-end web development details

- ✓ **HTML** provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript.
- ✓ **CSS** is used to control presentation, formatting, and layout.
- ✓ **JavaScript** is used to control the behaviour of different elements.

HTML

HTML is at the core of every web page, regardless the complexity of a site or number of technologies involved. It's an essential skill for any web professional. It's the starting point for anyone learning how to create content for the web. And, luckily for us, it's surprisingly easy to learn.

CSS

CSS stands for Cascading Style Sheets. This programming language dictates how the HTML elements of a website should actually appear on the frontend of the page.

JavaScript

JavaScript is a more complicated language than HTML or CSS, and it wasn't released in beta form until 1995. Nowadays, JavaScript is supported by all modern web browsers and is used on almost every site on the web for more powerful and complex functionality.

3.2.2 Connectivity (front end and Back end):

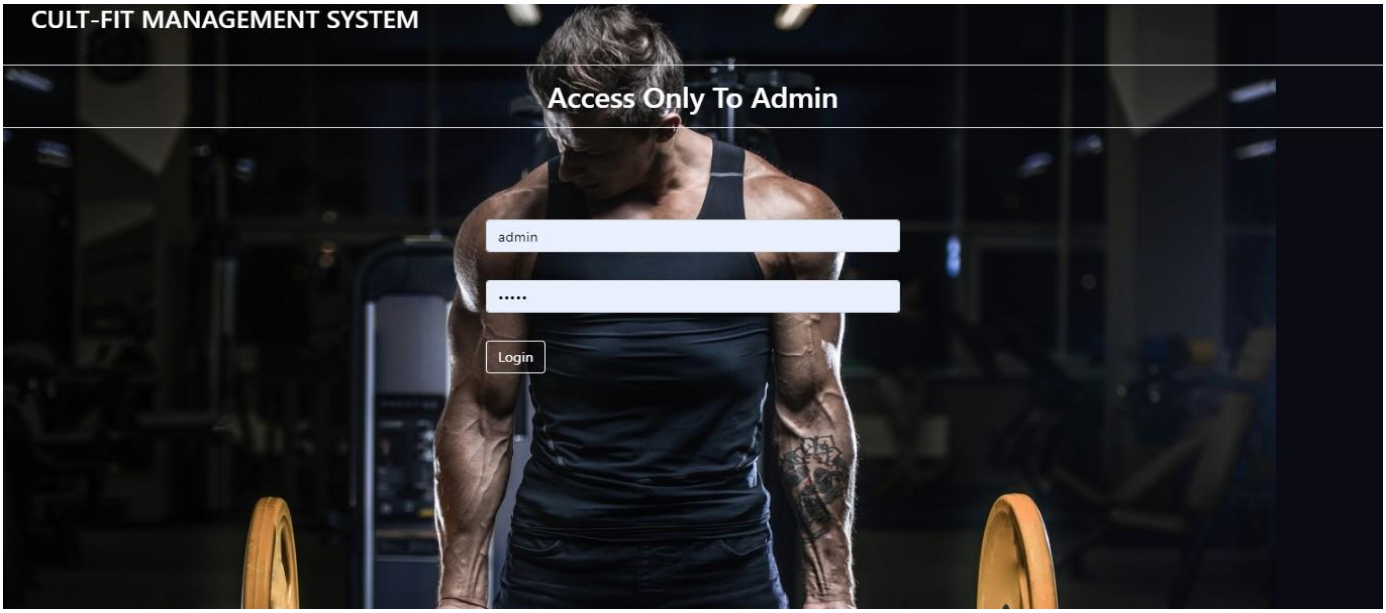
PHP is an amazing and popular language!

It is powerful enough to be at the core of the biggest blogging system on the web (Word Press)! It is deep enough to run the largest social network (Facebook)! It is also easy enough to be a beginner's first server side language!

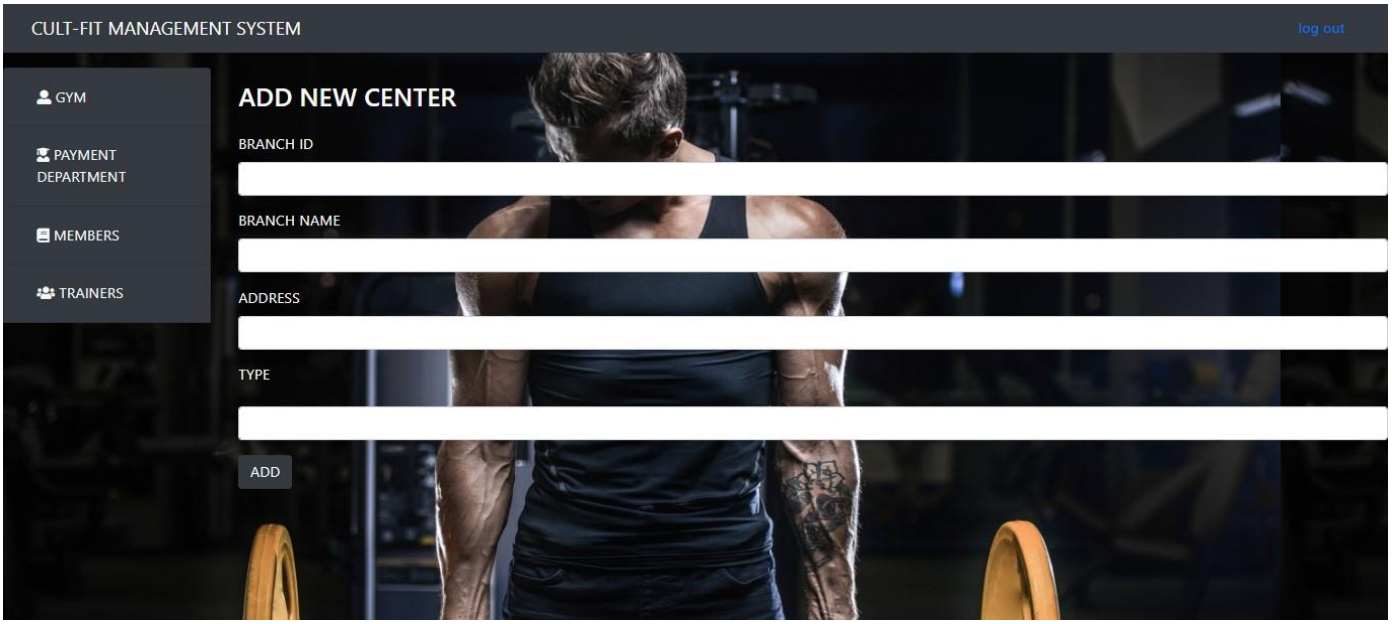
- PHP is an acronym for "PHP: Hypertext Pre-processor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use
- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code are executed on the server, and the result is returned to the browser as plain HTML
- With PHP you are not limited to output HTML. You can output images, PDF files, and even flash movies. You can also output any text, such as XHTML and XML.

CHAPTER - 4
OUTPUT SNAPSHOTS

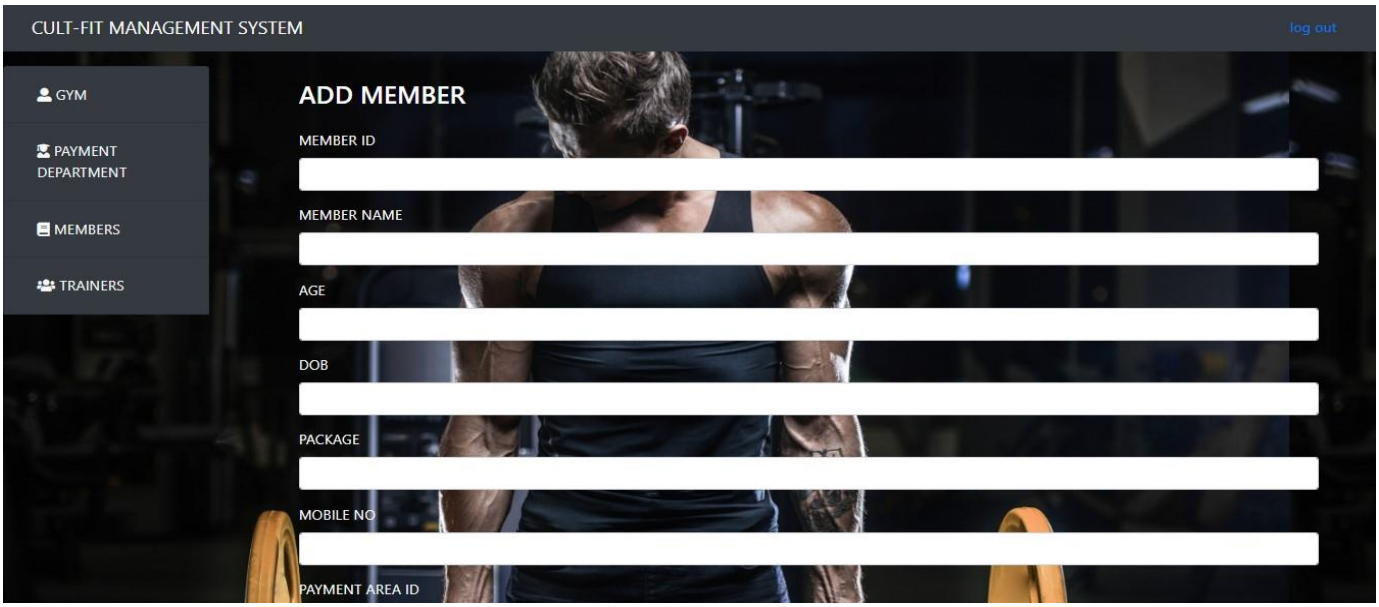
4.1.1 ADMIN PAGE



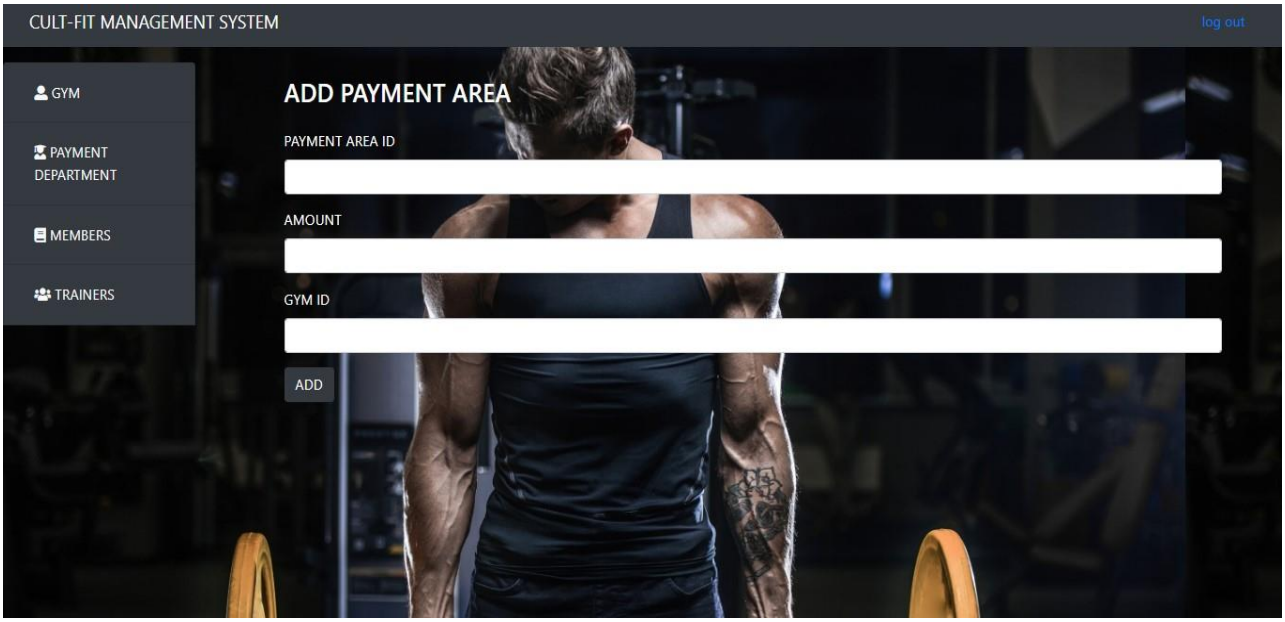
4.1.2 ADD NEW CENTER



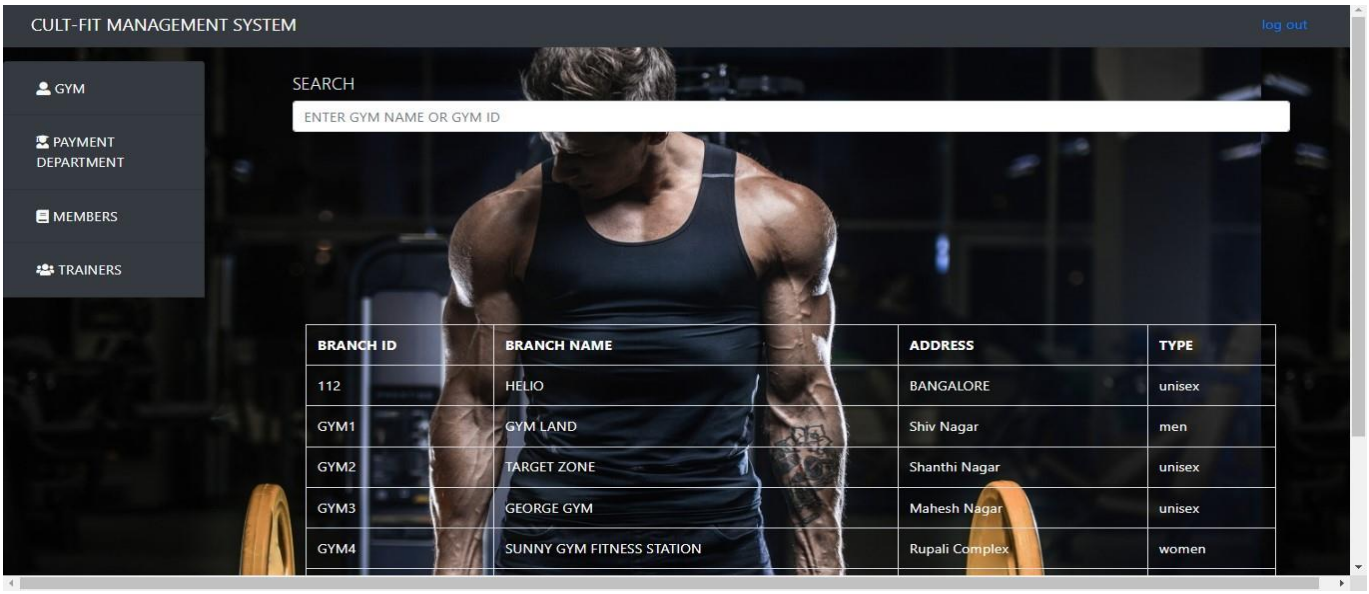
4.1.3 ADD MEMBER



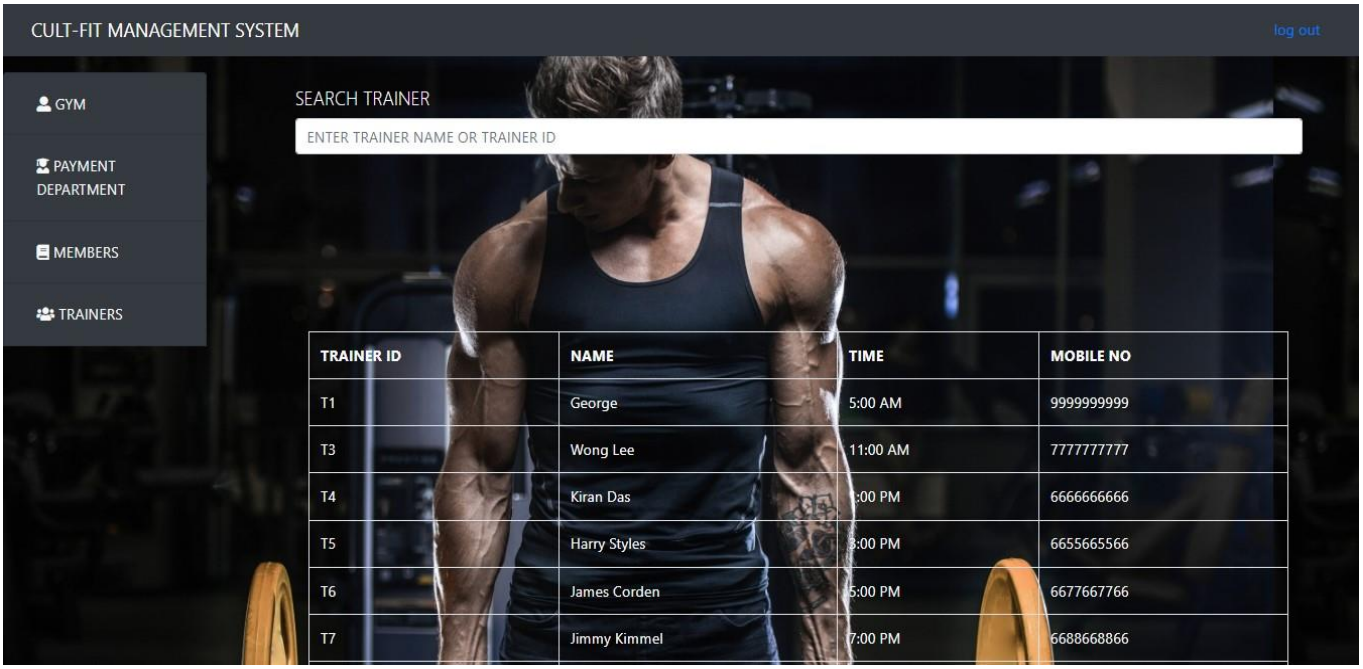
4.1.4 ADD PAYMENT AREA



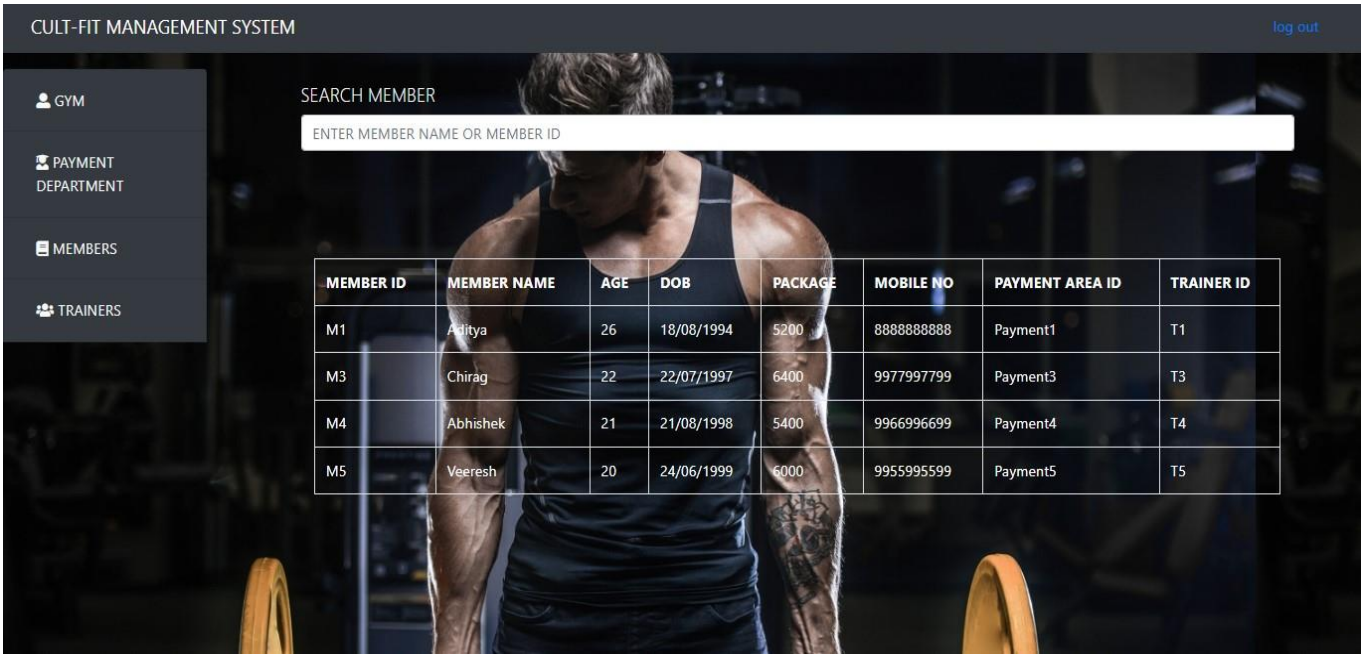
4.1.5 UPDATE MEMBER AREA



4.1.6 ADD TRAINERS AREA

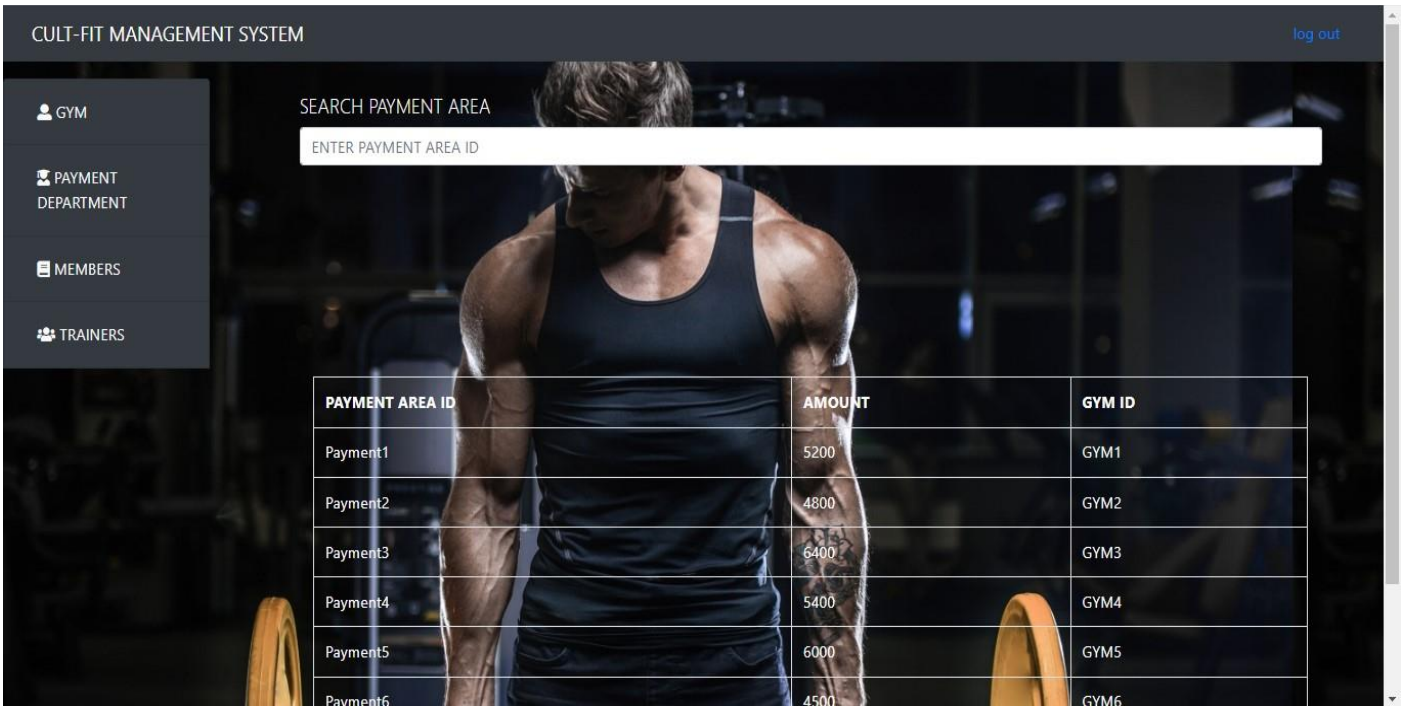


4.1.7 MANAGE MEMBERS



MEMBER ID	MEMBER NAME	AGE	DOB	PACKAGE	MOBILE NO	PAYMENT AREA ID	TRAINER ID
M1	Aditya	26	18/08/1994	5200	8888888888	Payment1	T1
M3	Chirag	22	22/07/1997	6400	9977997799	Payment3	T3
M4	Abhishek	21	21/08/1998	5400	9966996699	Payment4	T4
M5	Veeresh	20	24/06/1999	6000	9955995599	Payment5	T5

4.1.8 SEARCH PAYMENT AREA



PAYMENT AREA ID	AMOUNT	GYM ID
Payment1	5200	GYM1
Payment2	4800	GYM2
Payment3	6400	GYM3
Payment4	5400	GYM4
Payment5	6000	GYM5
Payment6	4500	GYM6

CHAPTER - 5
SYSTEM REQUIREMENTS

Software Requirement:

1. Front End: Chrome or Any Search Engine
2. Xampp x64 bit
3. Back End: Visual Studio Code or any Text Editor

Visual Studio Code: also commonly referred to as **VS Code**, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality.

XAMPP: It is one of the widely used cross-platform web servers, which helps developers to create and test their programs on a local webserver. It was developed by the Apache Friends, and its native source code can be revised or modified by the audience. It consists of Apache HTTP Server, MariaDB, and interpreter for the different programming languages like PHP and Perl. It is available in 11 languages and supported by different platforms such as the IA-32 package of Windows & x64 package of macOS and Linux.

SQL COMMANDS AND QUERIES

- SQL stands for Structured Query Language.
- SQL commands are the instructions used to communicate with a database to perform tasks, functions, and queries with data.
- SQL commands can be used to search the database and to do other functions like Creating ,tables, adding data to tables, modifying data, and dropping tables.

- Snapshots mentioned below are SQL Commands and Queries used in this Project

Hardware Requirement:

1. Processor- Intel i3 or more
2. RAM- 2 GB or more
3. Hard Disk- 500GB or more

```
--
-- Table structure for table `Trainer`
--

CREATE TABLE `Trainer` (
  `Trainer_id` int(20) NOT NULL,
  `Name` varchar(40) NOT NULL,
  `phone` int(100) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `Trainer`
--

INSERT INTO `Trainer` (`Trainer_id`, `Name`, `phone`) VALUES
(101, 'Rakesh', 12365489),
(102, 'Ravi', 21365789),
(103, 'wasim', 123564789),
(104, 'Sameer', 12536987);
```

ADD DATA (SAVE)

This is the Python SQL queries and commands used in this project. This queries and Commands will help the admin to add/save the data in the database.

Before adding we have to first get connected to the database by providing the Username and Password of the Database application. And also specify the database name.

```
--
-- Table structure for table `Payment`
--

CREATE TABLE `Payment` (
  `Payment_id` int(10) NOT NULL,
  `Amount` int(20) NOT NULL,
  `customer_id` varchar(20) NOT NULL,
  `payment_type` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `Payment`
--

INSERT INTO `Payment` (`Payment_id`, `Amount`, `customer_id`, `payment_type`) VALUES
(301, 1500, '201', 'cash'),
(302, 800, '202', 'card'),
(303, 1000, '203', 'cheque'),
(304, 1500, '204', 'cash');

-- --------------------------------------------------------
```

UPDATE DATA (UPDATE)

This is the Python SQL queries and commands used in this project. This queries and Commands will help the admin to update the existing data in the database.

Before updating we have to first get connected to the database by providing the Username and Password of the Database application. And also specify the database name.

```
-- delete table
--
<?php
require('db.php');


$inf=$_GET['id'];



  $sql_query="DELETE FROM member WHERE mem_id='$inf'";
  $delete=mysqli_query($conn,$sql_query);
  if ($delete) {
    header("location:home.php?info=manage_member");
  }else{
    echo "error".mysqli_error($conn);
  }

?>
--
```

DELETE DATA (DELETE)

This is the Python SQL queries and commands used in this project. This queries and Commands will help the admin to delete the data in the data base.
Before deleting we have to first get connected to the database by providing the Username and Password of the Database application. And also specify the database name .

CHAPTER - 6
COST ESTIMATION OF PROJECT

PROJECT NAME: **CULT-FIT MANAGEMENT SYSTEM**

Sl. NO	PHASE	PROGRAMMING DAYS	ESTIMATED DAYS (in INR)
1	Requirements	5	1200
2	Design	7	1500
3	Implementation	10	1800
4	Testing	3	1500
5	Installation	5	1000
6	Documentation	8	1800

Total Cost: 8800 INR

CHAPTER - 7
CONCLUSION

While developing this project we have learnt a lot about HTML/CSS/JS/PHP/MySQL and working with database management, we have also learnt how to make the application user-friendly (easy to use and handle) by hiding the complicated parts of it from the users.

Data modeling for fitness facilities to gain experience designing tables to store information about member details , gym memberships , class schedules , and exercise options.

Relational database queries helps to write the SQL queries to retrive relevant data , such as finding members enrolled in specific yoga classes or generating reports on gym membership trends.

Data integrity and constraints of the project will involve implementing constraints to ensure data accuracy , like preventing duplicate memberships or scheduling conflicts .

Database security consider security measures to protect sensitive member information and control access to different functionalities with in the system .

During the development process, we studied carefully and understood the criteria for making a software more demanding, we also realized the importance of maintaining a minimal margin for errors.

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1. GeeksforGeeks:
2. Alan D. Moora, “Python GUI programming with Tkinter”.
3. https://code.visualstudio.com
4. James R Groff and Paul N Weinberg, “Complete reference SQL”.Second Edition