1. Introduction to Proposed System

a. Motivation: -

The main motivation of this project is to provide a system which handles the information of the people coming into the gym and maintaining their healthcare. It takes care of all their health information. It even maintains the data of health and all diet plan used by the people who join the gym. It provides lots of function such that entry of customer, keeping records of all things.

It is absolutely user-friendly website which will guide its member in every possible way. This website suggests you how to maintain your health, there are many ways to build our health like exercising, keeping good diet, etc. System must notify our daily diet and user see how their progress is increase much better for our fitness and health.

b. Problem Statement: -

- The problem statement of this project is many fitness centers in the world doesn't have website with full functionality like online registration, information about machineries, information about daily diet plan and so on, we proposed the gym management system.
- Time consuming as data entry which include calculations took lot of time
- Searching a particular data specific to particular requirements is also very difficult in such system.

c. Objectives: -

The objective of the "gym management system" is to provide a system which handles the information of the people coming into the gym and maintaining their health. It takes care of all their health information. It even maintains the data of what diet used by the people who join gym. Data will be store in the database.

The objective of the system is to provide best training from best trainer who has better experience. This system store daily workout routine which member performs in gym. Editing, updating of records is improved.

d. Project Scope: -

The scope of the system is defined on the basis of various functionalities provide by the system.

The scope of "gym management system" are:

- The admin can register and view the customer profile data.
- The admin can make announcement about anything.
- Customers can view the profile data and can update it by using his own account.
- Customers can get more updates from the system.
- It is easy to operates and understand.
- Transaction can be done via any payment method by the customer.

e. Limitations: -

There are some limitations about this system:

- Sometimes transaction from customer will not happen or he will not pay for the service
- In this proposed system only online communication and the total information about machinery and data of coaches is also stored online in it.
- Need more storage space.
- It is difficult to handle the whole system for admin.
- Software should support for all OS version.

2. System Analysis

a. Existing System: -

In Gym management system if we take the current system and compared it with the proposed system it is far behind. Every work in existing system is manual and done on paper for which more man power is needed. It is really hard to manage such complicated system.

In this system keeping record of customer and handling it is difficult. When we want information of particular customer it needed a lot of time. It is time consuming system. It does not have a proper system to make announcement. In this important information can be missed while writing on page. It is in efficient and slow to search.

b. Scope and Limitations of existing system: -

Scope of existing system is: -

Scope is a document that provides the objectives, schedule and tasks about the system. It also defines requirement of system. It gets offline plan in an understanding manner.

there are some limitations of existing system: -

- The existing system did not have a user-friendly interface.
- There was no system of paying fees online.
- The gym members were not notified regarding the fee payment that were outstanding.
- Required lots of paperwork and process takes time.
- The existing such as gym master/trainer is not as much as user-friendly as compare to our proposed system.
- Require more physical work and man power.

c. Stakeholder: -

Team Members :-

1. Pawar Pratiksha Dilip (Roll No. 40).
2. Shete Ruchika Manoj (Roll No. 41).
3. Vadnere Dhanashree Mukesh (Roll No. 42).
4. Pawar Mansi Nitin (Roll No. 85).
5. College

3. Requirement Analysis

a. Functional Requirements: -

They require software, which store data about members, employees, machines, salary, diet of members, etc. the system will check the validity of information provides by user for users-all users have an ability to create an account that is used to store user data. User can register and can create an account.

For creating account, it will notify the user if password or username is incorrect and if username or password is already used. Admin can add, update, delete records and manage transaction. It provides user-friendly interface.

b. Performance Requirements: -

Managing a fitness club involves a slew of administrative task such as payments, invoices, contracts, billing, cancellations, etc. Traditionally, you would need a whole team to look after different accounts.

However, one of the advantages of a gym management system is that you can see an overview of your club's finances on your online platform. This can bring your organization to a whole new level while saving you time, money, and stress.

c. Social Requirements: -

It maintains their fitness know about their diet plans and workout people can gain weight social responsibility plan often includes contributing to charities, volunteering and supporting the local environment.

Although generally there is always resistance, initially to any change in the system is aimed hat reliving the workload of the user's extent the system is going to facilitate user to perform operations. Thus, there is no reason to make system socially unfeasible.

Getting a gym management system should be thought of like an investment, but unlike a stock or new property. These can replay you in many different ways. A greater member experience, leading to increased and word of mouth. Longer lifetime of memberships.

d. Data Collection: -

Gym members have a set of information of their diet plan,equipements and their batch. Provider collects data to find out the most popular fitness machinery.users can use these equipments.

It also collects user information and trainer and their training concept and their batches.

e. Software/Hardware Specification: -

Hardware requirements: -
For the server: -

- Processor: Standard processor with a speed of 1.6GHz or more.
- RAM 256 MB RAM or more.
- Hard Disk:3GB or more.

For the client: -

- Processor: Standard processor with a speed of 1.6 GHz or more.
- RAM: 256 MB RAM or more.
- Hard Disk: 3 GB or more.

Software requirements: -
For the server: -

- Operating System: Linux.
- Frontend: PHP, CSS, JavaScript.
- Backend: PostgreSQL (Version 8).
- Server: Apache 2, Wamp Server, Zamp Server(any).

For the client: -

- Operating System: Linux.
- Browsers: any.

4. System Design

a. Data Dictionary: -

Sr no.	Table Name	Description
1.	User Table	User table contains user_id, user_name, user_pass, user_email, contact_no, user_add, pics and details.
2.	Admin Table	Admin table contains admin_id, admin_name, admin_pass, pics and details
3.	Trainer Table	Trainer table contains trainer_id, trainer_name, trainer_add, trainer_email, trainer_salary, pics and details.
4.	Equipment Table	Equipment table contains equipment_id, equipment_name, equipment_quantity, pics and details.
5.	Batch Table	Batch table contains batch_no, batch_time.
6.	Bill Table	Bill table contains bill_id, bill_amt.

1) User Table: -

Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	user_id	Integer	-	Primary Key	User id
2.	user_name	charactervaring	10	Not Null	User Name
3.	user_pass	charactervaring	10	Not Null	User Password
4.	user_email	charactervaring	30	Not Null	User Email
5.	user_age	Integer	-	Not Null	User Age
6.	user_gender	charactervaring	6	Not Null	User Gender
7.	contact_no	bigint	-	Not Null	User Contact no
8.	user_add	Text	-	Not Null	User Address
9.	user_fname	charctervaring	10	Not Null	User First Name
10.	user_lname	charctervaring	10	Not Null	User Last Name
11.	user_city	charctervaring	10	Not Null	User City

2) Admin Table: -

Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	admin_id	Int	-	Primary Key	Admin Id
2.	admin_name	charactervaring	20	Not Null	Admin name
3.	admin_email	charactervaring	20	Not Null	Admin Email
4	admin_age	integer	-	Not Null	Admin Age
5.	admin_gender	charctervaring	6	Not Null	Admin Gender
6.	admin_pass	charctervaring	10	Not Null	Admin Password
7.	acontact_no	bigint	-	Not Null	Admin Contact no
8.	admin_add	text	-	Not Null	Admin Address
9.	admin_fname	charctervaring	10	Not Null	Admin First name
10.	admin_lname	charctervaring	10	Not Null	Admin Last name
11.	admin_city	charctervaring	10	Not Null	Admin City

3) Trainer Table: -

Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	trainer_id	Integer	-	Primary Key	Trainer ID
2.	trainer_name	charactervaring	10	Not Null	Trainer Name
3.	trainer_email	charactervaring	20	Not Null	Trainer email
4.	trainer_age	integer	-	Not Null	Trainer Age
5.	trainer_gender	charactervaring	6	Not Null	Trainer Gender
6.	trainer_pass	charactervaring	10	Not Null	Trainer Password
7.	tcontact_no	bigint	-	Not Null	Trainer Contact no
8.	trainer_add	text	-	Not Null	Trainer Address
9.	trainer_fname	charactervaring	10	Not Null	Traner First Name
10.	trainer_lname	charactervaring	10	Not Null	Trainer Last Name
11.	trainer_city	charctervaring	10	Not Null	Trainer City

4) Equipment Table: -

Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	eq_id	Integer	-	Primary Key	Equipment ID
2.	eq_name	charactervaring	20	Not Null	Equipment Name
3.	eq_img	bytea	-	Not Null	Equipment image
4.	eq_info	text	-	Not Null	Equipment Information

5) Batch Table: -

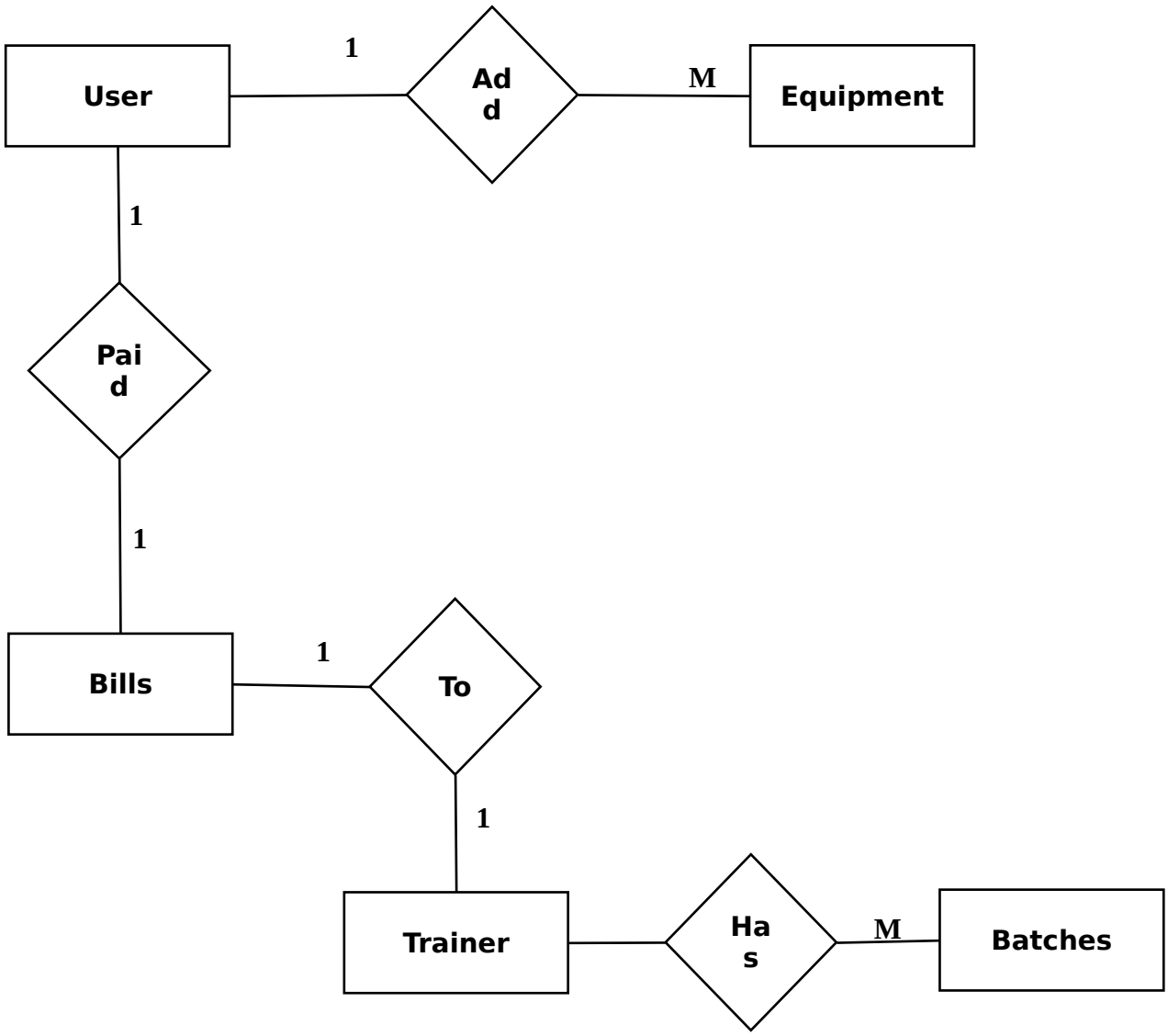
Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	batch_id	Integer	-	Primary Key	Batch ID
2.	batch_time	charactervaring	50	Not Null	Batch Time
3.	user_fname	charactervaring	10	Not Null	User First Name
4.	user_lname	charactervaring	10	Not Null	User Last Name
5.	user_age	Integer	-	Not Null	User Age
6.	user_gender	charactervaring	6	Not Null	User Gender

6) Bill Table: -

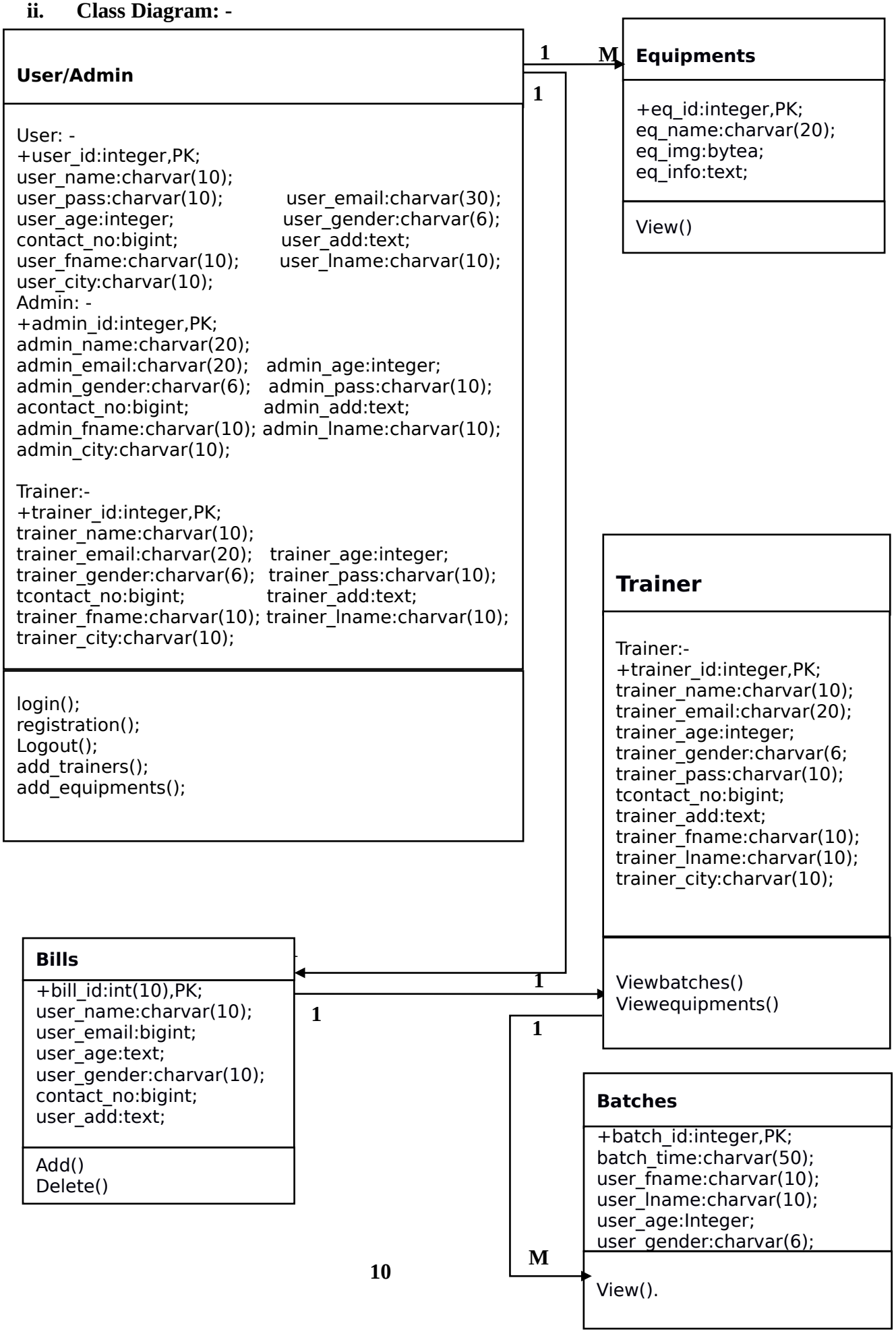
Sr no.	Attributes	DataTypes	Size	Constraints	Description
1.	bill_id	Integer	-	Primary Key	Bill ID
2.	user_name	charactervaring	10	Not Null	User Name
3.	user_email	bigint	30	Not Null	User Email
4.	user_age	text	-	Not Null	User Age
5.	user_gender	charactervaring	6	Not Null	User Gender
6.	contact_no	bigint	-	Not Null	Contact No
7.	user_add	text	-	Not Null	User Address
8.	user_fname	charactervaring	10	Not Null	User First Name
9.	user_lname	charactervaring	10	Not Null	User Last Name
10.	user_city	charactervaring	10	Not Null	User City
11.	joindate	charactervaring	50	Not Null	Joining Date
12.	expirydate	charactervaring	50	Not Null	Expiry Date
13.	fees	charactervaring	50	Not Null	Fees

b. System Diagram: -

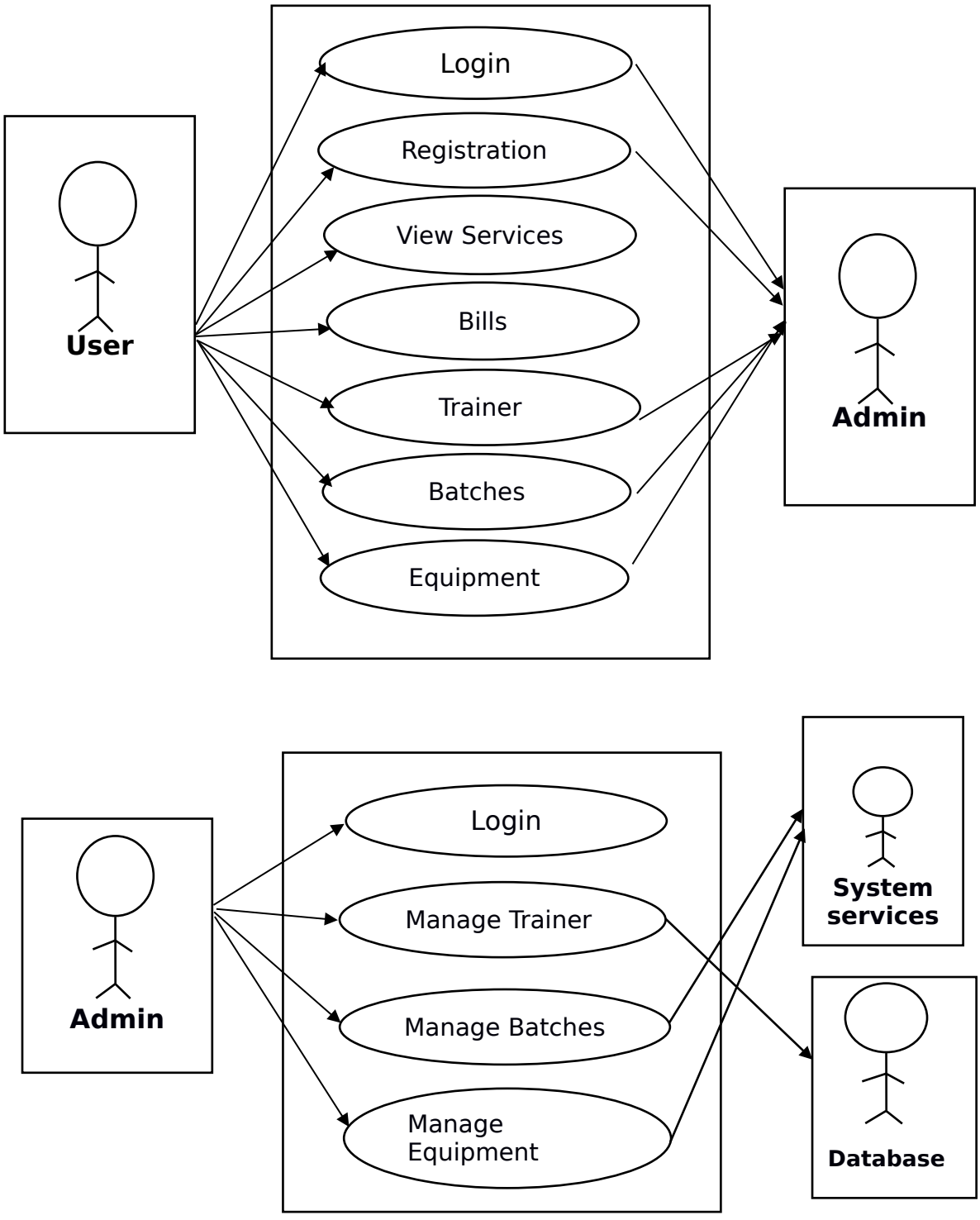
i. Entity Relationship Diagram: -



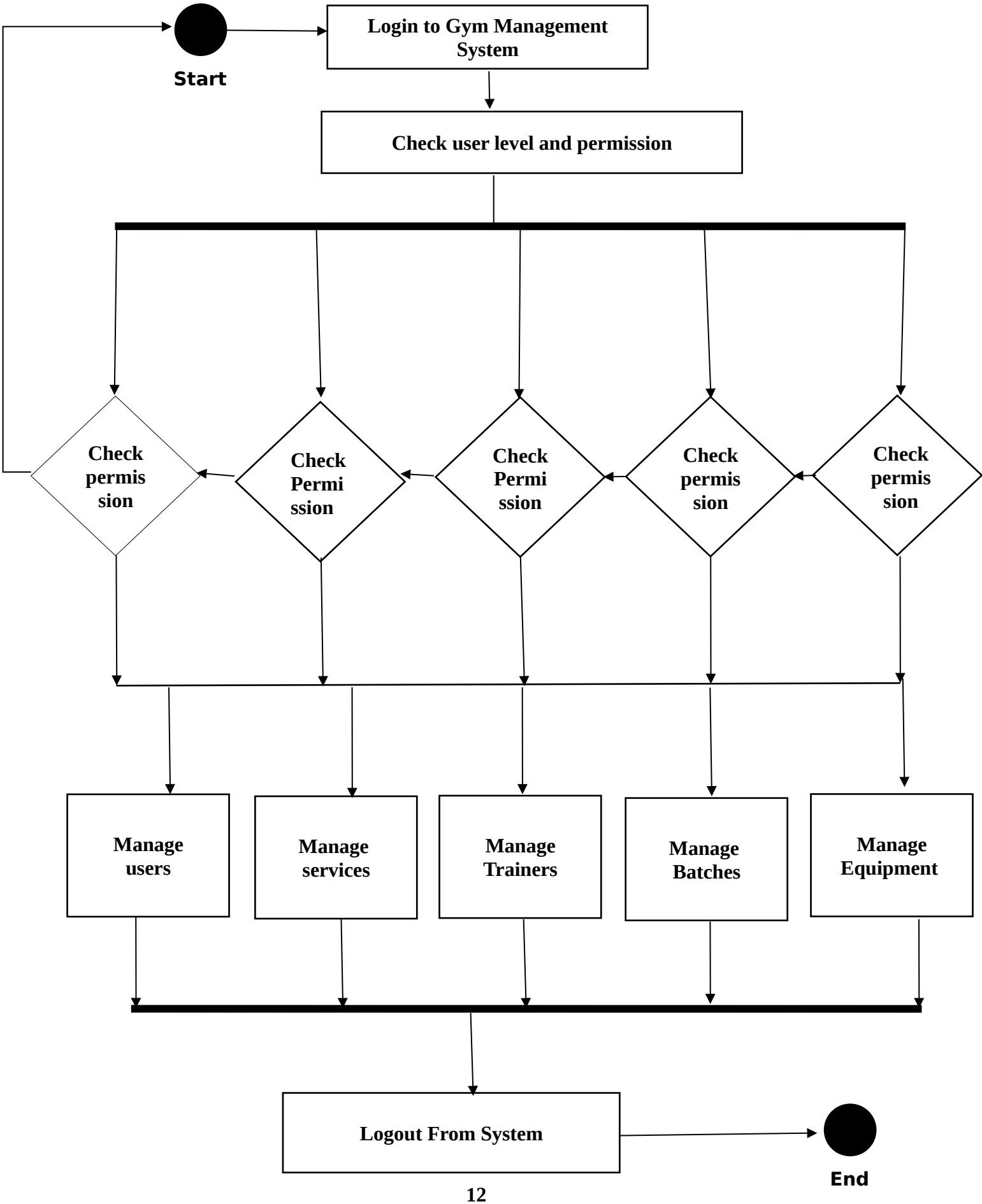
ii. Class Diagram: -



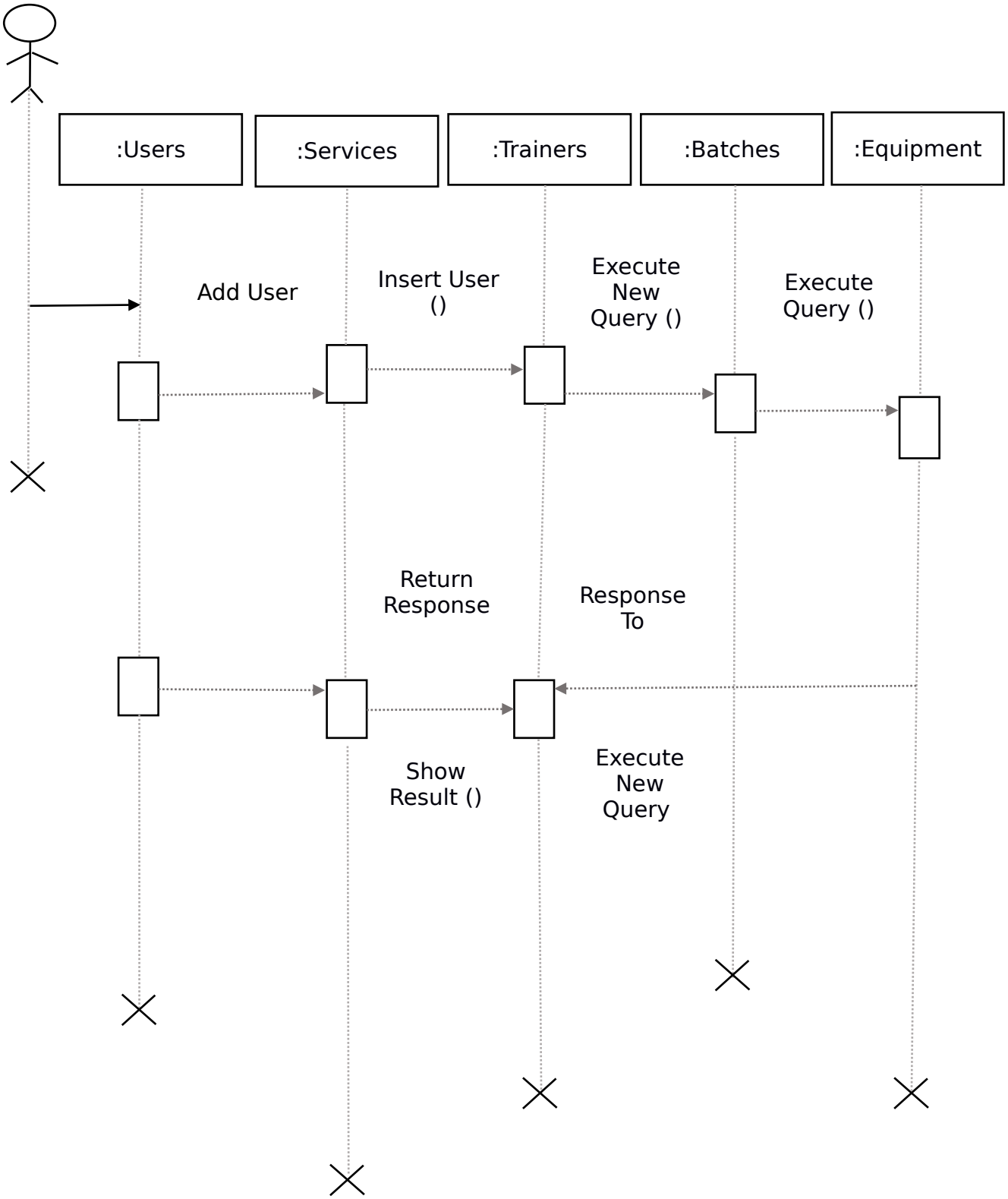
iii. Use Case Diagram: -



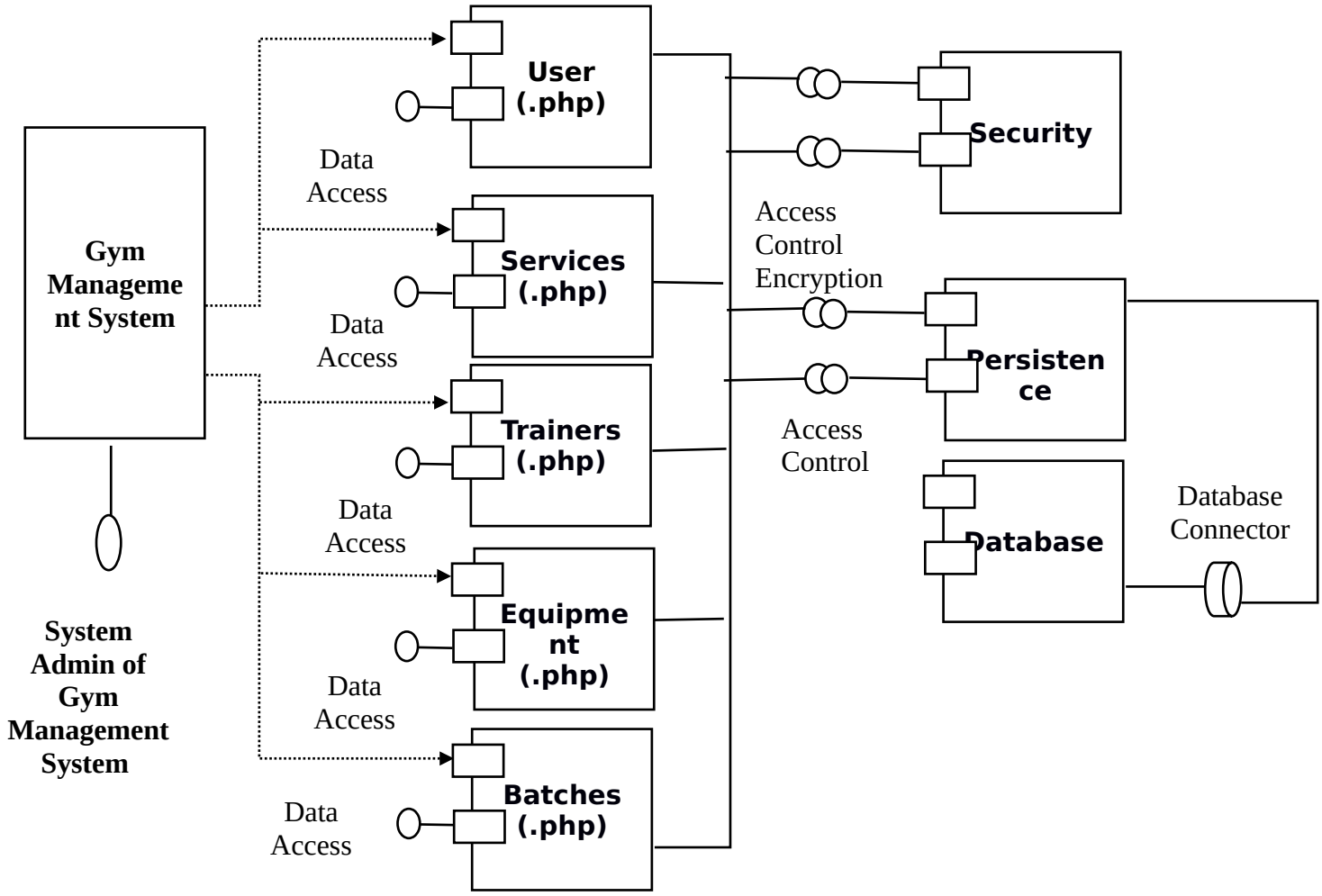
iv. Activity Diagram: -



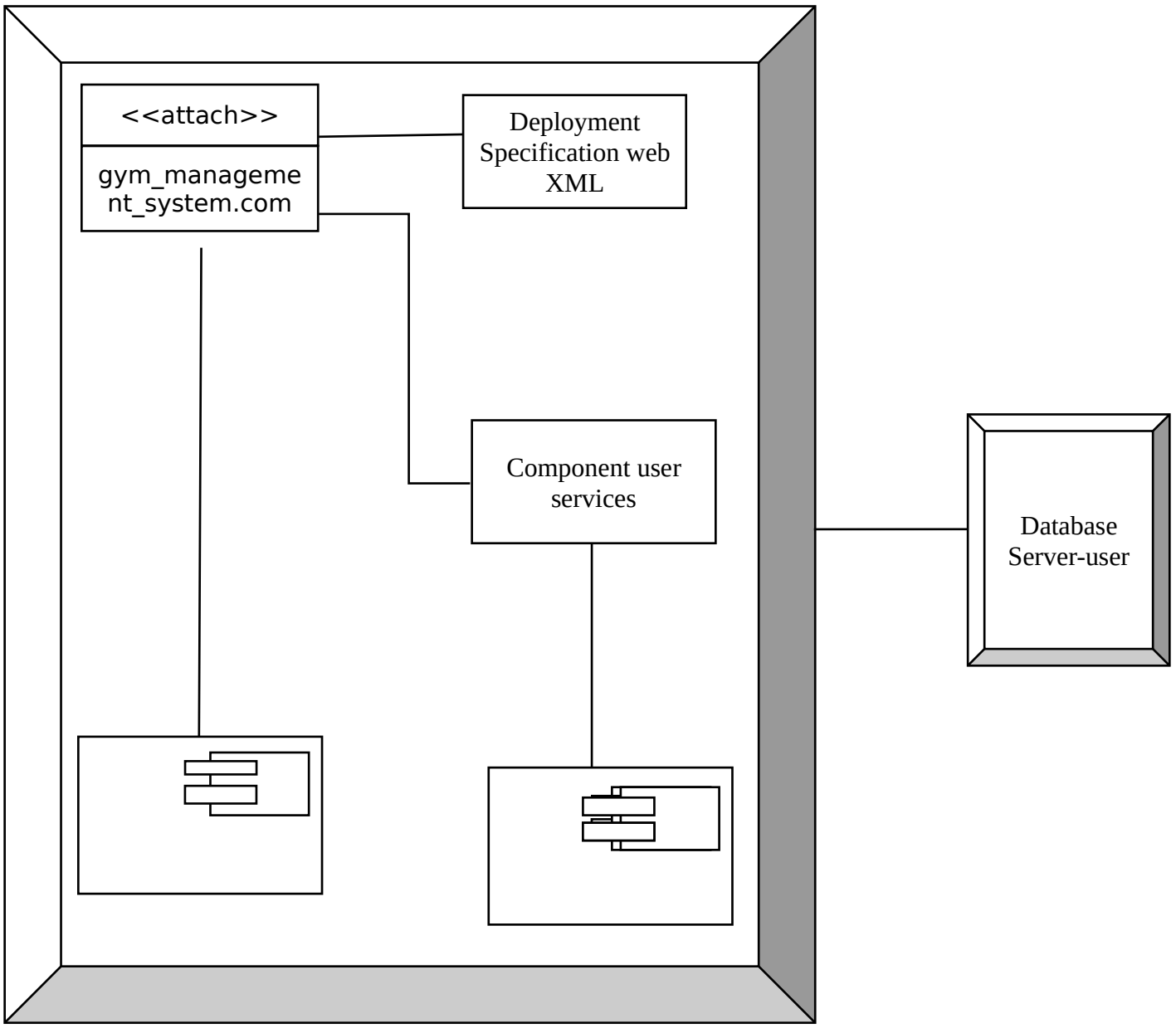
v. Sequence Diagram: -



vi. Component Diagram: -

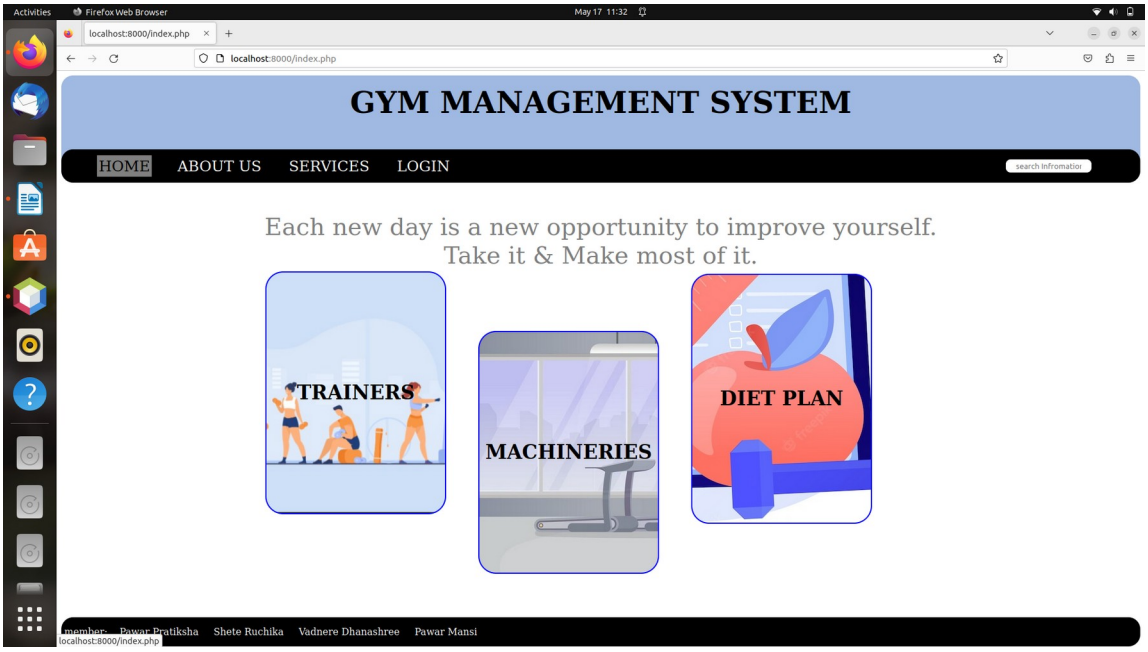


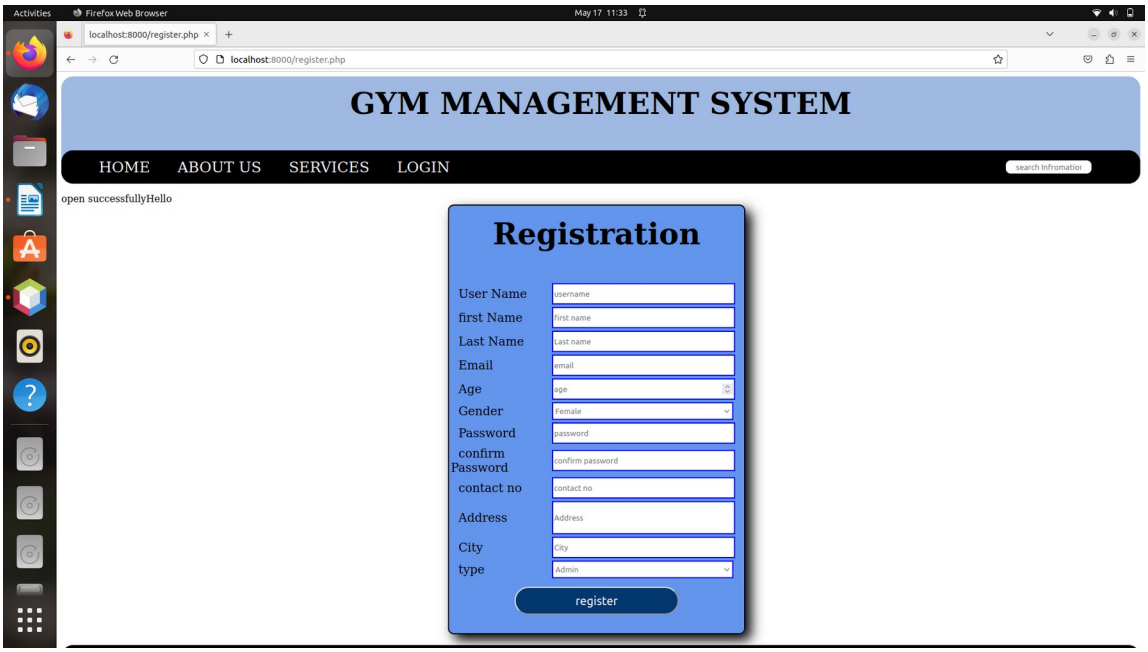
vii. Deployment Diagram: -

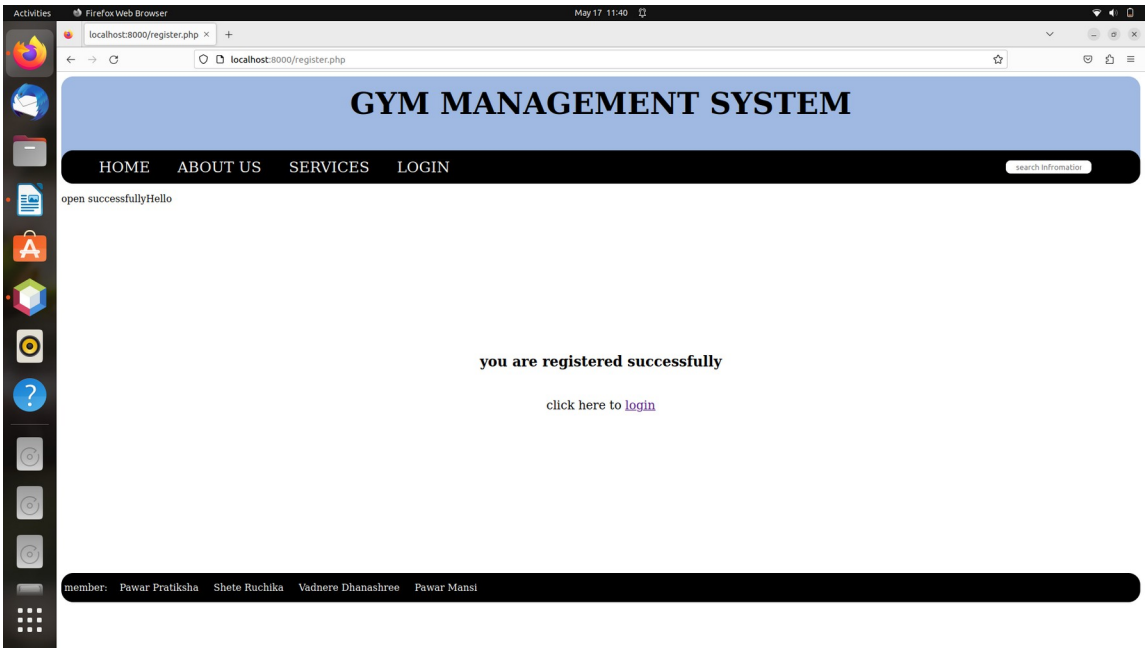


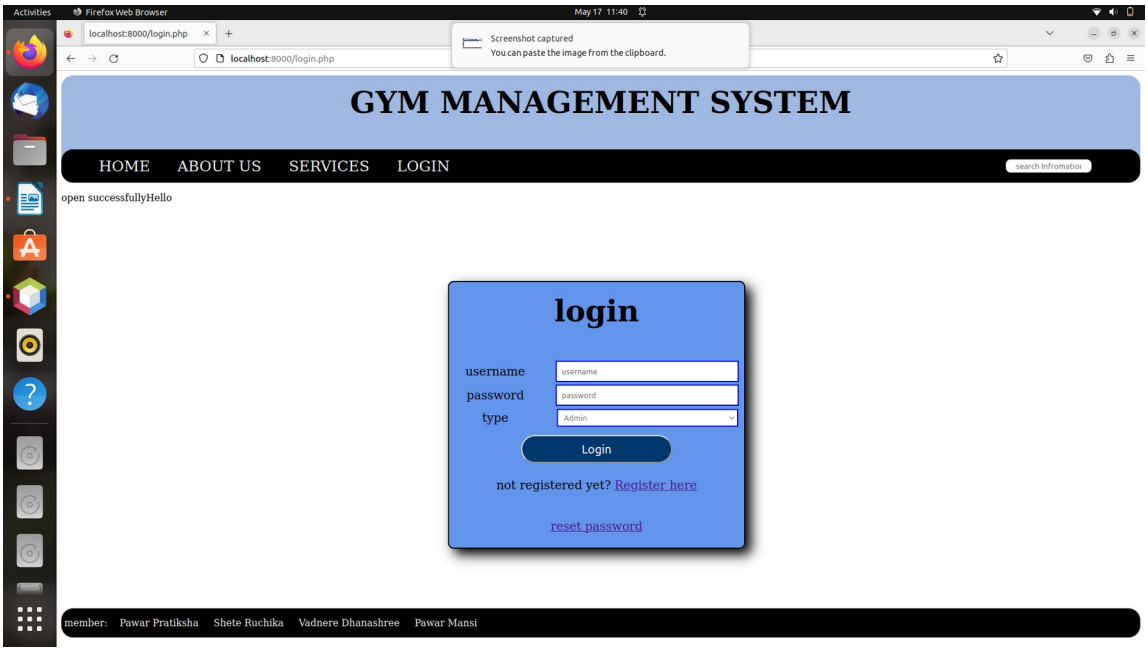
5. System Implementation

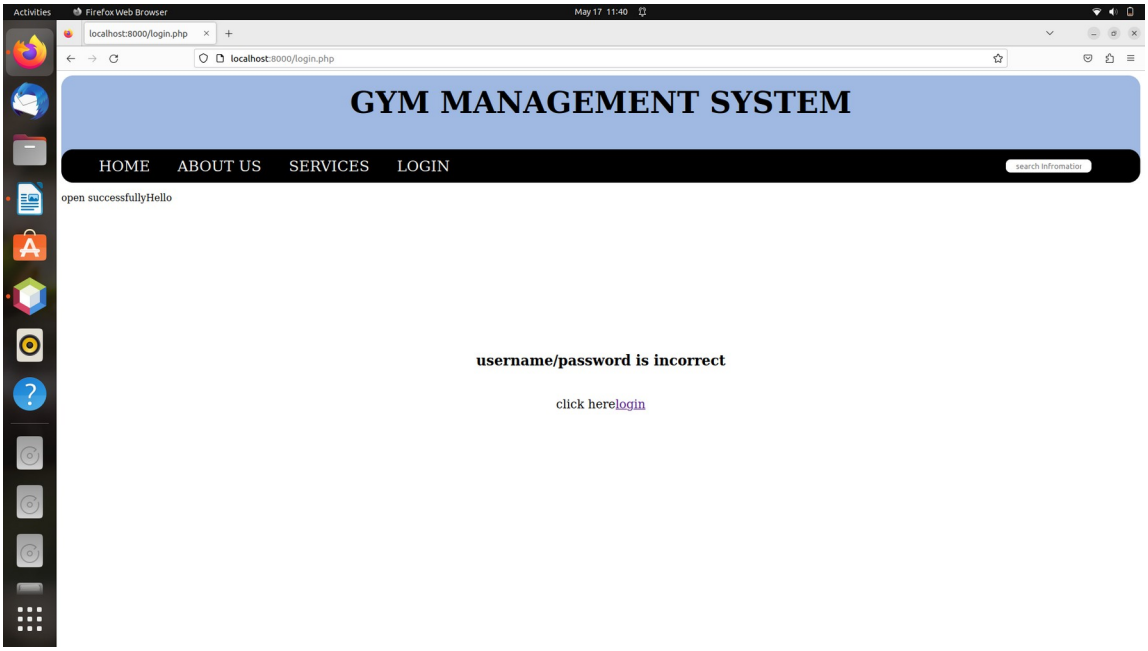
a. User Input Inteface: -

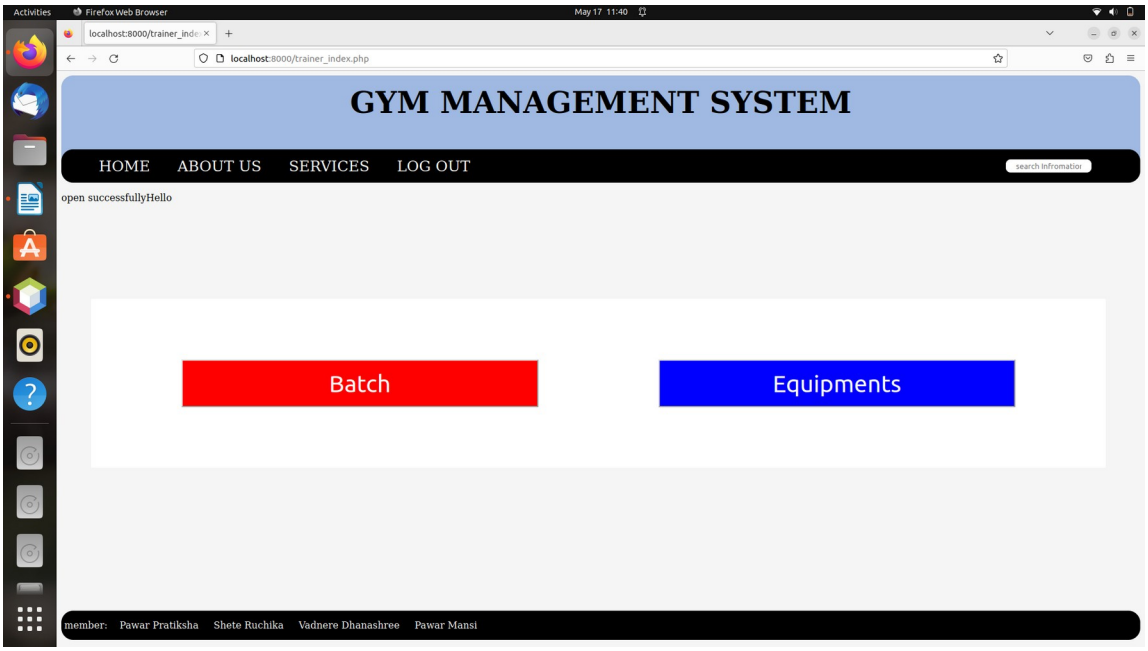


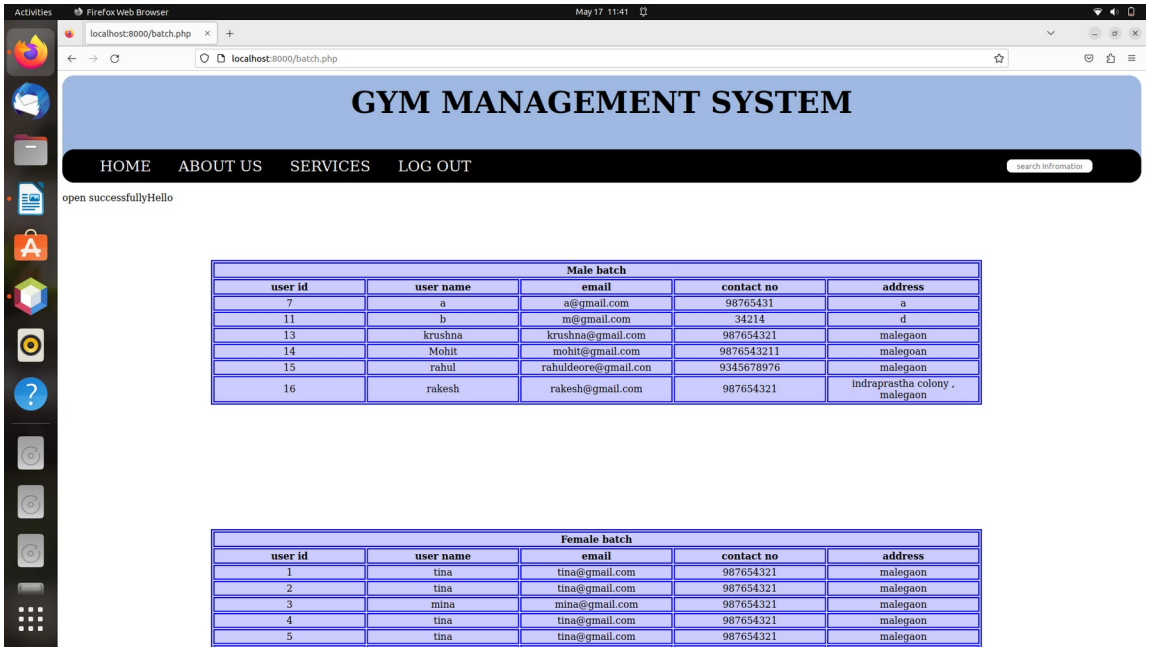



Activities
Firefox Web Browser
May 17 11:40
localhost:8000/register.php
localhost:8000/register.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOGIN
search infromation
open successfullyHello
you are registered successfully
click here to login
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi


Activities
Firefox Web Browser
May 17 11:40
localhost:8000/login.php
Screenshot captured
You can paste the image from the clipboard.
localhost:8000/login.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOGIN
search infromation
open successfullyHello
login
username
password
type
Admin
Login
not registered yet? Register here
reset password
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi

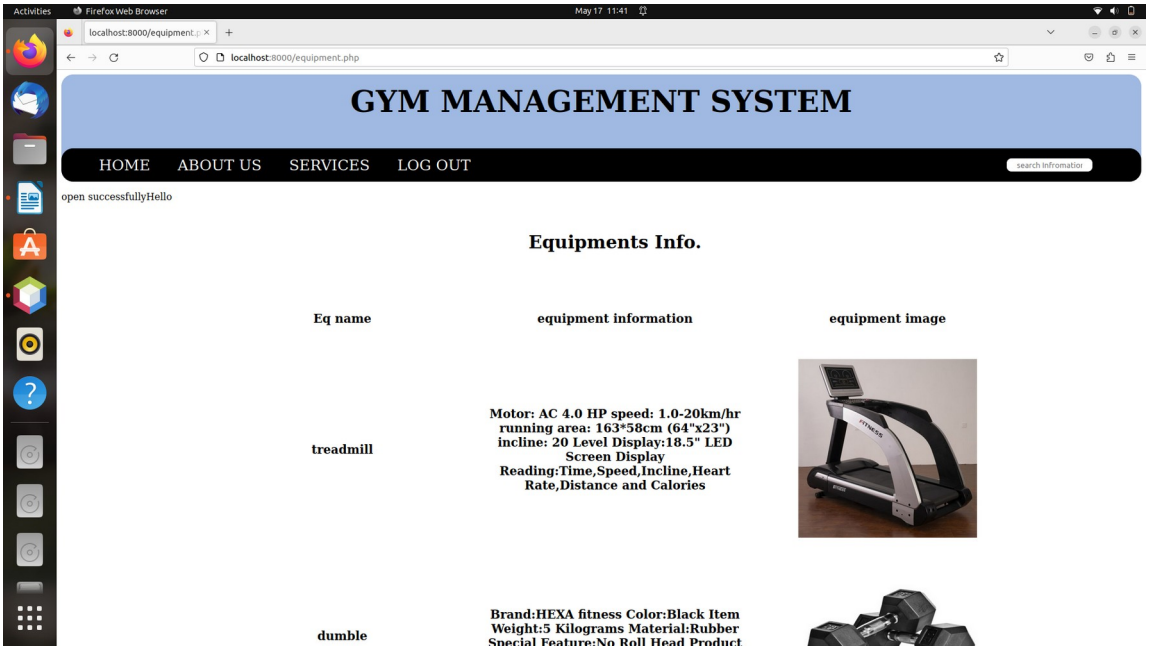

Activities
Firefox Web Browser
May 17 11:40
localhost:8000/login.php
localhost:8000/login.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOGIN
search Infromation
open successfullyHello
username/password is incorrect
click herelogin

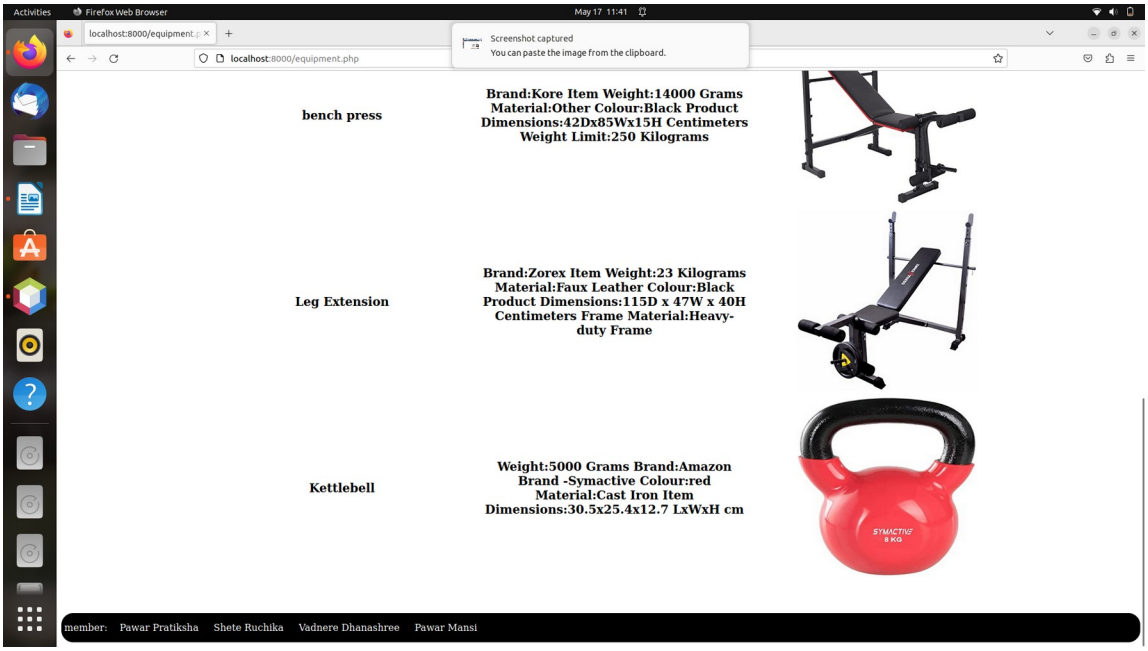

Activities
Firefox Web Browser
May 17 11:40
localhost:8000/trainer_index.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOG OUT
search Infromation
open successfullyHello
Batch
Equipments
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi

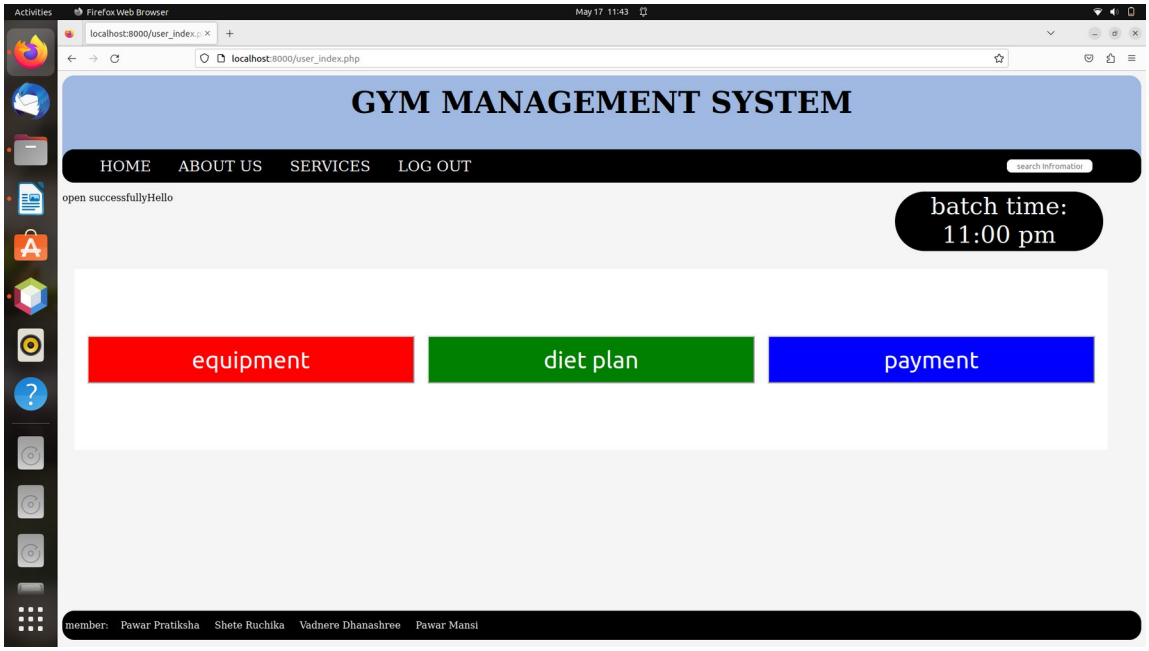


Male batch				
user id	**user name**	**email**	**contact no**	**address**
7	a	a@gmail.com	98765431	a
11	b	m@gmail.com	34214	d
13	krushna	krushna@gmail.com	987654321	malegaon
14	Mohit	mohit@gmail.com	9876543211	malegoan
15	rahul	rahuldeore@gmail.con	9345678976	malegaon
16	rakesh	rakesh@gmail.com	987654321	indraprastha colony , malegaon

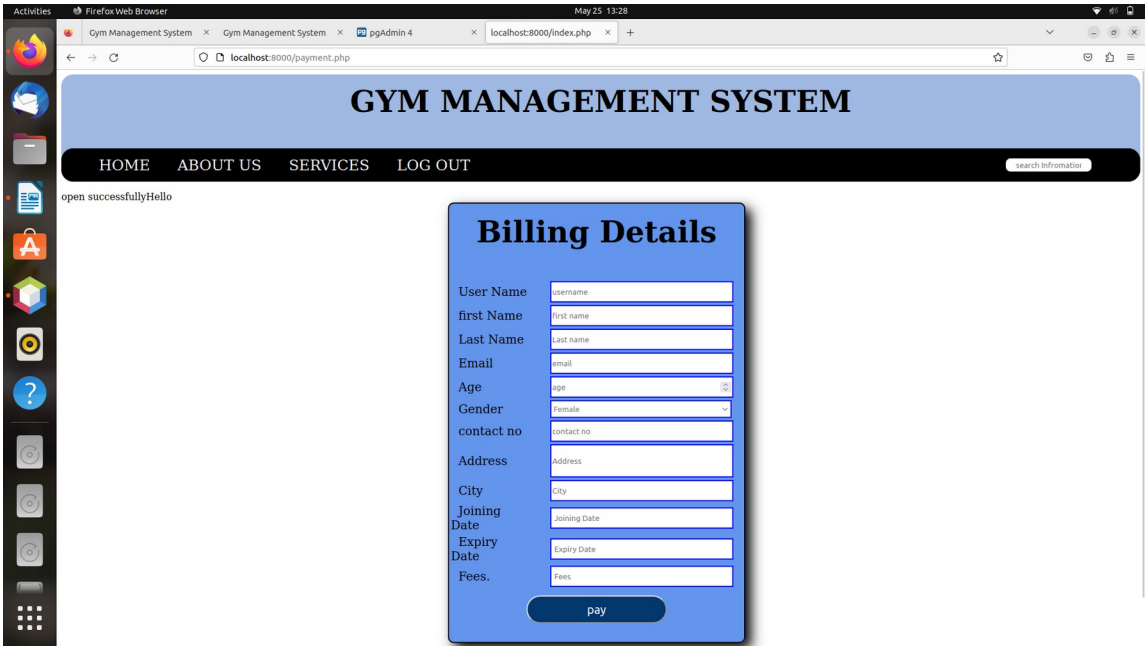
Female batch				
user id	**user name**	**email**	**contact no**	**address**
1	tina	tina@gmail.com	987654321	malegaon
2	tina	tina@gmail.com	987654321	malegaon
3	mina	mina@gmail.com	987654321	malegaon
4	tina	tina@gmail.com	987654321	malegaon
5	tina	tina@gmail.com	987654321	malegaon




Activities
Firefox Web Browser
May 17 11:41
localhost:8000/equipment.php
Screenshot captured
You can paste the image from the clipboard.
bench press
Brand:Kore Item Weight:14000 Grams Material:Other Colour:Black Product Dimensions:42Dx85Wx15H Centimeters Weight Limit:250 Kilograms
Leg Extension
Brand:Zorex Item Weight:23 Kilograms Material:Faux Leather Colour:Black Product Dimensions:115D x 47W x 40H Centimeters Frame Material:Heavy-duty Frame
Kettlebell
Weight:5000 Grams Brand:Amazon Brand -Symactive Colour:red Material:Cast Iron Item Dimensions:30.5x25.4x12.7 LxWxH cm
SYMACTIVE
8 KG
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi


Activities
Firefox Web Browser
May 17 11:43
localhost:8000/user_index.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOG OUT
search Infromatior
open successfullyHello
batch time:
11:00 pm
equipment
diet plan
payment
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi

Activities
Firefox Web Browser
May 17 11:43
localhost:8000/dietplan.php
localhost:8000/dietplan.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOG OUT
search infromation
open successfullyHello
DIET PLAN
Time
Meal
Food Items
8.00 AM-9.00 AM
breakfast
Oat Meal Porridge+ 4 egg White
11.00 AM 12.00 PM
Mid Morning
Papaya(1 Bowl)
2.00 PM- 3.00PM
Lunch
2 Roti+Brown Rice (Half Bowl)Pulse(Dal) /Chicken/Fish/ Seasonalvegetables Low Fat Curd Sprouts +veg Salad
5.00 PM-6.00PM
Evening Snacks
Green Tea With ALmonds
8.00PM-9.00PM
Dinner
Seasonal Vegetables Sprouts+veg Salad
10.00PM
Bed Time
Toned Milk
Before Workout - 2 Banana or 1 Apple
After Workout - 2 Scoops Gainer with Water


Activities
Firefox Web Browser
May 25 13:28
Gym Management System
Gym Management System
pgAdmin 4
localhost:8000/index.php
localhost:8000/payment.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOG OUT
search infromation
open successfullyHello
Billing Details
User Name
username
first Name
first name
Last Name
Last name
Email
email
Age
age
Gender
Female
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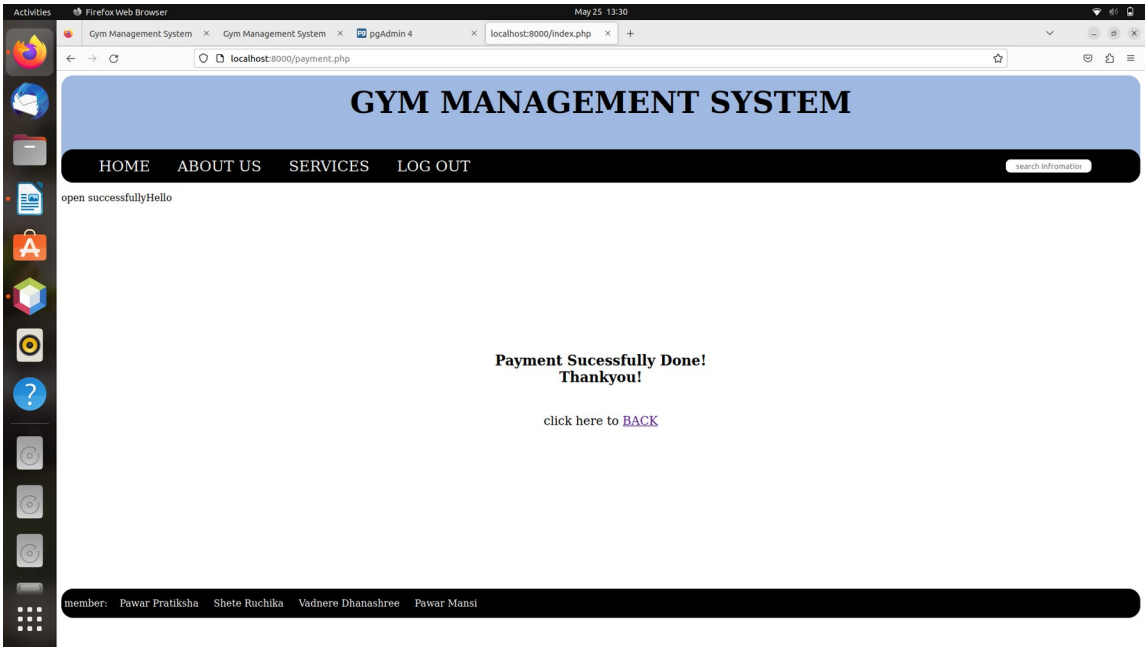
Address
Address
City
City
Joining Date
Joining Date
Expiry Date
Expiry Date
Fees.
Fees
pay


Activities
Firefox Web Browser
May 25 13:30
Gym Management System
Gym Management System
pgAdmin 4
localhost:8000/index.php
localhost:8000/payment.php
GYM MANAGEMENT SYSTEM
HOME
ABOUT US
SERVICES
LOG OUT
search infromation
open successfullyHello
Payment Sucessfully Done!
Thankyou!
click here to BACK
member: Pawar Pratiksha Shete Ruchika Vadnere Dhanashree Pawar Mansi

Report

Gym Management System is a gym and health, club,membership Management System .You can keep records on your members, their membership. The System provides a diet plan for user .User can see equipments in gym which are available, user can pay for their membership, trainers can view the batches and also can view the equipments are available. This System provides us a user friendly handled it easily.

6. System Testing

a. Defining Testing Plan: -

Test Plan is a detailed document that catalogs the test stratergies, objectives, schedule, estimation, deadlines and resources required to complete that project .

It is a blueprint for running the tests needed to ensure that the software is running correctly. A test plan is one of the most important part of any software deveploment process.

ii. Implementing Testing Strategy: -

The following methods of testing were carried out to check correctless and reliabilityof the processing system.

i. Unit Testing: -

Test Cases:

For Login:

Sr no	Input	Expected Output	Actual Output	Result
1.	username in userfield	correct	User Login successfull	PASS
2.	username in userfield	incorrect	User cant Login-error message	FAIL
3.	user_pass in passwordField	correct	User Login successfull	PASS
4.	user_pass in passwordField	incorrect	User cant Login-error message	FAIL
5.	Login	Click	Login Sucessfully	PASS

For Registration:

Sr no.	Input	Expected Output	Actual Output	Result
1.	username in userfield	correct	User Register successfull	PASS
2.	username in userfield	incorrect	User cant Register-error message	FAIL
3.	User pass in passwordField	correct	User Register successfull	PASS
4.	User pass in passwordField	incorrect	User cant Register-error message	FAIL
5.	User first name in first name field	correct	User Register successfull	PASS
6.	User first name in first name field	incorrect	User cant Register-error message	FAIL
7.	User last name in first name field	correct	User Register successfull	PASS
8.	User last name in first name field	incorrect	User cant Register-error message	FAIL
9.	User Email in email field	correct	User Register successfull	PASS
10.	User Email in email field	incorrect	User cant Register-error message	FAIL
17.	Register	Click	Register Sucessfully	PASS

ii. **Black box Testing: -**

The test object is website with a personal user account .For black box testing, In order to gain access to system user need to authorize themsleves to a simple login screen by entering username and password .
Blackbox testing include requirements,design test case,define test data,etc.

Requirements:
A clear understanding of the requirements and specification of gym management system .This includes user requirements,functional requirements,performace requirements,etc.

Design Test Cases:
Test case should specify the input which is given and the expected output received in response

Define Test Data:
Preparing necessary test data required for executing test cases.This includes dietplan,equipments,batches.

Functionality:
Login functionality:-test login functionality for user.Verify that valid login username and password are rejected
Registration Functionality: - test member registration for creating new account for accessing the software.

iii. White-box Testing: -

In this testing user can see the detail information about the equipments which are available in the gym. User can also see the diet plan they need diet plan can be display by the users need.user can done payment.

Trainer can see all the batches which they assigned to either it is male batch or female batch. And can also view their information .Trainer can see the detail information about the equipments which are available in the gym.

iv. Alpha Testing: -

Alpha testing is done on small scale with limited number of tester and focused on the functionality of the software..Alpha Testing is a type of software testing performed to identify bugs before releasing the product to real users or to the public. Alpha Testing is one of the user acceptance testing.In alpha testing user,trainer ,admin can use this system

7. Conclusion And Future Plans

Conclusion: -

Our project is only a humble venture to satisfy the needs to manage their work. Several user friendly coding have also adopted. This package shall prove to be powerful package in satisfying all the requirements of the Gym Management System.

The objective of software planning is to provide a frame work that enables our team to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progress.

So for getting result within the time limits. The project can be completed with proper planning.

Future Plans: -

- We will host the platform on online servers to make it accessible worldwide.
- we will add online payment options.
- We can improve the servers and we can add more services.
- The project can be further extended by allowing the large database.

8. Bibliography and Referances

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