Project Report

On

GYM Management System

Submitted by

T.Y Computer Science and Engineering

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ABSTRACT

Objectives of the project this Gym Management web application shall enable the user to add members to a gym and manage the fee payment of the gym user. It is a very simple interface. The user of the system shall be able to add a new gym member. The tool shall add all the necessary details like name admission date, contact details into the system. The Gym Management System shall also monitor the timings for the member. It shall allow the user to make fee payments. This tool shall hold all the details of gym members. It shall enable the user to make payments monthly, quarterly or annually. Gym Management System provides an easy to use interface for the users and a database for the admin to maintain the records of gym member.

SECTION 1

INTRODUCTION

1.1 Introduction to the Project

1.2 Objectives Of The Project

1.1 INTRODUCTION TO THE PROJECT

This project is designed to facilitate a gymming and fitness center to automate its operations of keeping records and store them in form of a large and user friendly database further facilitating easy access to the personnel.

OBJECTIVES OF THE PROJECT

⇒ What was the Problem?

- Existing system was manual.
- Time consuming as data entry which include calculations took lot of time.
- Searching was very complex as there could be 100's of entry every year.
- The proposed system is expected to be faster than the existing system.
- The Project was made in order to effectively and efficiently cater to requirements of the fitness center.Very frequently the person who generally holds the tasks to manage the center needs to keep records of all the transactions as well as data mannually . Gennerally, In order to structure these tasks Separate Registers are maintained.This whole process thus becomes quite cumbersome for them to control manually.Moreover,Any wrong data entered mistakenly can brings serious results.
- This Mannually Managed system of the store was also heavily proned to data loss due to certain causes Misplacement of Registers,Destruction of Registers ,Unauthorized access to registers etc. which can bring in disasterous Consquences.
- The cost of maintaince of data and records of occurrence of transactions is very high.
- Searching a particular data specific to particular requirements is also very tedious in such system.In order to retrieve records,The responsible person needs to manually locate the appropriate register and locate the appropriate placement of that particular record which may be very time consuming.
- Data Redundency is also a great issue in such kind of system."Redundency" means repititon;Thus data modified or updated at a particular place may not be data modified or updated at the other related place which may create inconsistencies in data handling,Destroys Data Integrity and creates confusion for the owner.

- **What the Software Provides in this Regard?**

- The software is capable enough to allow the concerned person to store and retrieve any type of record with just a single click of mouse.The software allows Interactive ,Self decribing Graphic User Interface environment where even standalone users can work very comfortably and easily.

- All the data pertaining to transactions or other important entities is kept at central database from where its attributes can be easily controlled.But,Such kind of technical details are hidden from the standalone User. He just needs to type in correct details of the given entity and then click the save button with the help of mouse.However,That central repository of data can be easily accessed if required.

- Data Redundency is no more the problem now.The data modified from one particular data entry form will reflect the modifications at the other related forms too.This has thus reduced the chances of data inconsistency in our data storage.

- There is no need to manage bulky registers now as data stored in the backend database can be radily retrieved either from the frontend form itself or directly from the database.

- Requires one time investment of setting up required Hardware and Software after which no more headache is required by the Managers.Moreover,It also reduces dependence on Man Power.

- Effective Search measures are present at each and every data transactional forms from where by just entering a Unique keyword for that data its whole records can be readily seen within microseconds.Moreover,Facillity of Updation and Deletion of data through search is also available.

SECTION 2

SYSTEM ANALYSIS

2.1 Identification Of The Need

2.2 Preliminary Investigation

2.4 Proposed System Functionality

System Analysis refers into the process of examining a situation with the intent of improving it through better procedures and methods. System Analysis is the process of planning a new System to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System Analysis, is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to re-comment improvements in the System. Or in other words, System Analysis means a detailed explanation or description. Before computerized a system under consideration, it has to be analyzed. We need to study how it functions currently, what are the problems, and what are the requirements that the proposed system should meet.
System Analysis is conducted with the following objectives in mind:

1. Identify the customer's need.

2. Evaluate the system concept for feasibility.

3. Perform economic and technical analysis.

4. Allocate functions to hardware, software people, database and other system elements.

5. Establish cost and schedule constraints.

6. Create a system definition that forms the foundation for all the subsequent engineering work**.**

2.1 Identification of Customer's Need

Before proceding further ,It becomes very necessary to accumilate the valid and conviencing requirements of the project and communicate the very same to various stakeholders of the project. This step is initiation of System Analysis. An overview of the client's requirement has been done. The basic need of the client to opt for such kind of project is analysed. As per current marketing scenario, an entire system was required to track day-to-day transactions.
Client was following a Manual Process, which is not at all compatible with its current working conditions. It was not only time consuming, but also lacks accuracy. Security point of view the manual system was failed to hide the information from any unauthenticiated staff or any outside person. Therefore, there was an urgent requirement of such Computerised System which can fullfill all of its current as well as future requirements. Further more, data handling was also posing a serious problem for them.

2.2 Preliminary Investigation

The client set is just a worker(s),who is regularly indulged in manual maintainence transactions,keeping regular records,maintaining the records of fine details of members. Following manual registers are maintained:

❖ **Member's Details Register:**

This Register is maintained to maintain the records of the various members of the gymming center.The document contains relevant information about the various members such as members's id, Name,Address,Telephone number.

2.3 Proposed System Functionality

The proposed system will be designed to support the following features:-

- The proposed system has a **user friendly Interface** for porting of data to server.
- The proposed system provides the facility to pull the data from the server using a key (such as id) and get the desired report.
- The proposed system provides the **no replication** of data

SECTION 3

Software Project Development Methodology

The Methodology:

I was assigned the duty for developing a computerized system for a fitness center. The project time and resources were very limited . The optimum use of practical time neccessiates that every session and every activity is planned. For effective Planning ,Efficient Project Managerial skils are required,Efficiant skills then trace out best methodology to be used.

The methodology used by me includes the following things:

- **Topic Understanding:**

  It is vital that the field of application as introduced in the project may be totally a new field. So as soon as the project was allocated to me, I carefully went through the project requirements to identify the requirements of the project.

- **Module 1: Member's Module**

  In this module,Owner can see the membership details which includes:

  - MEMBER DETAILS
    i. Member id
    ii. Name
    iii. Gender
  - MEMBERSHIP DETAILS
    i. Membership type
    ii. Expiration date
    - MEMBERSHIP DETAILS
      i. Address
      ii. Date of birth
      iii. Phone number
      - ACCOUNT INFORMATION
        i. Due date
        ii. Amount Due
        iii. Amount Paid
        iv. Days late
        v. Balance

After processing all this information records are saved and in this module itself there is a provision for **report generation** for viewing details of all the members.

SECTION 4

DESIGN

4.1 Data Flow Diagram (DFD)

4.2 Entity Relationship Diagram

4.1 DATA FLOW DIAGRAM (DFD)

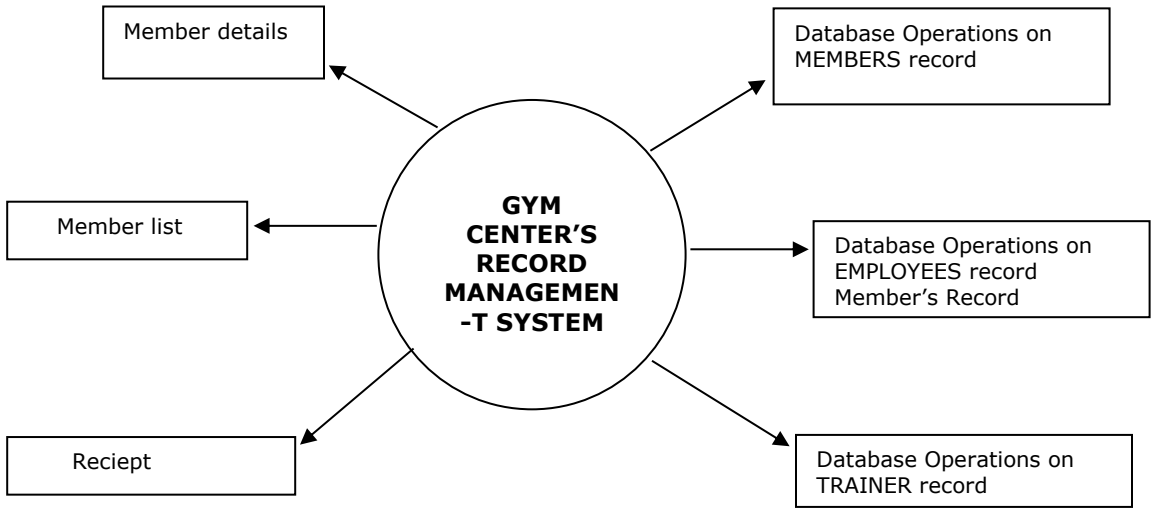
DFD is a model, which gives the insight into the information domain and functional domain at the same time. DFD is refined into different levels. The more refined DFD is, more details of the system are incorporated. In the process of creating a DFD, we decompose the system into different functional subsystems. The DFD refinement results in a corresponding refinement of data.

Following is the DFD of the "Proposed System". We have refined the system up to two levels. Each break-up has been numbered as per the rule of DFD. We have tried to incorporate all the details of the system but there is some chance of further improvisation because of the study that is still going on for the project development.

Context Level or Zero Level DFD

This level shows the overall context of the system and it's operating environment and shows the whole system as just one process.

The Context Diagram or the Zero Level DFD.



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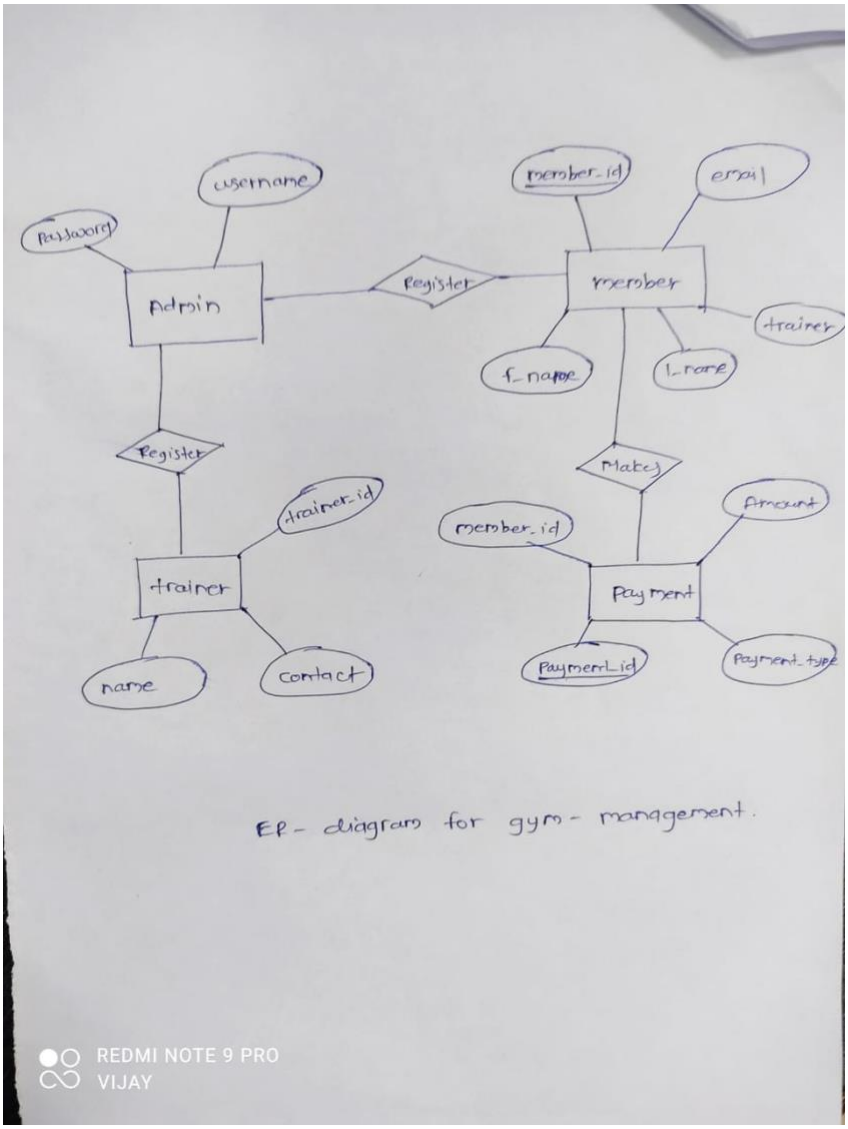
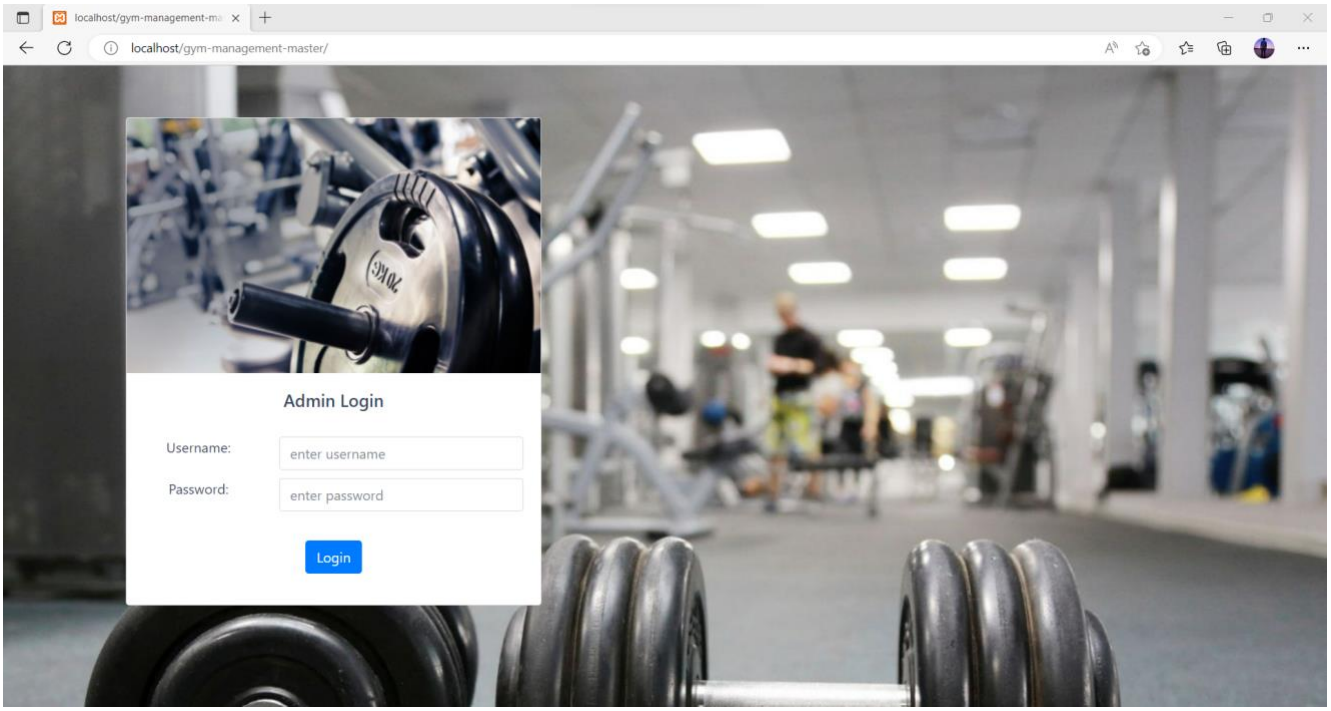
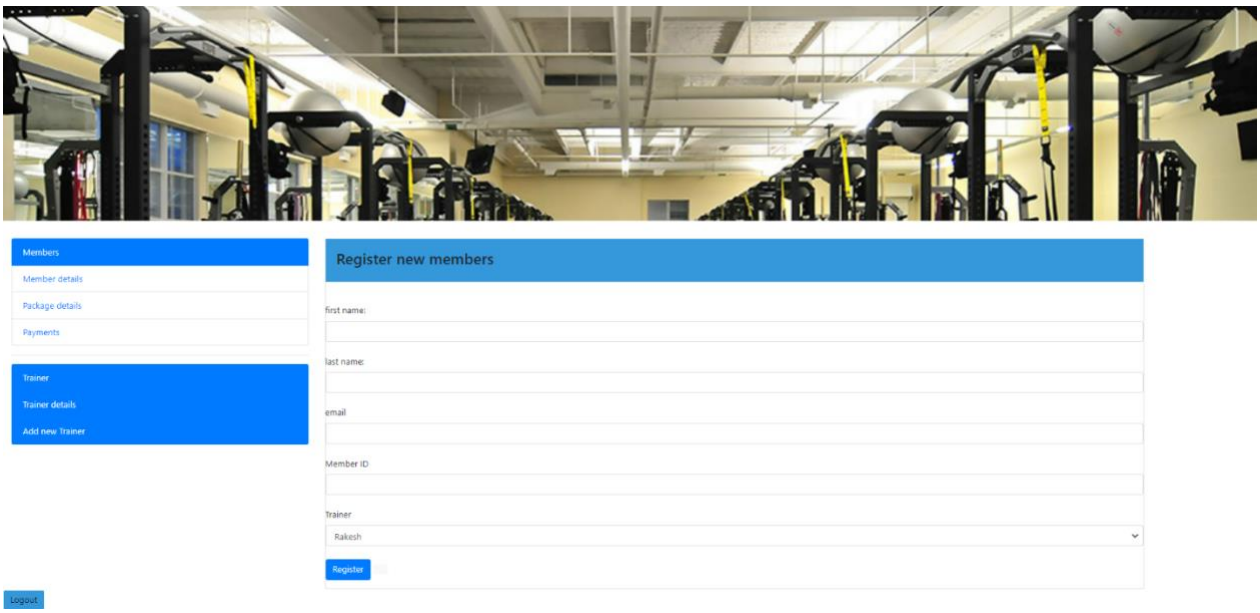
4.2 ENTITY-RELATIONSHIP DIAGRAM

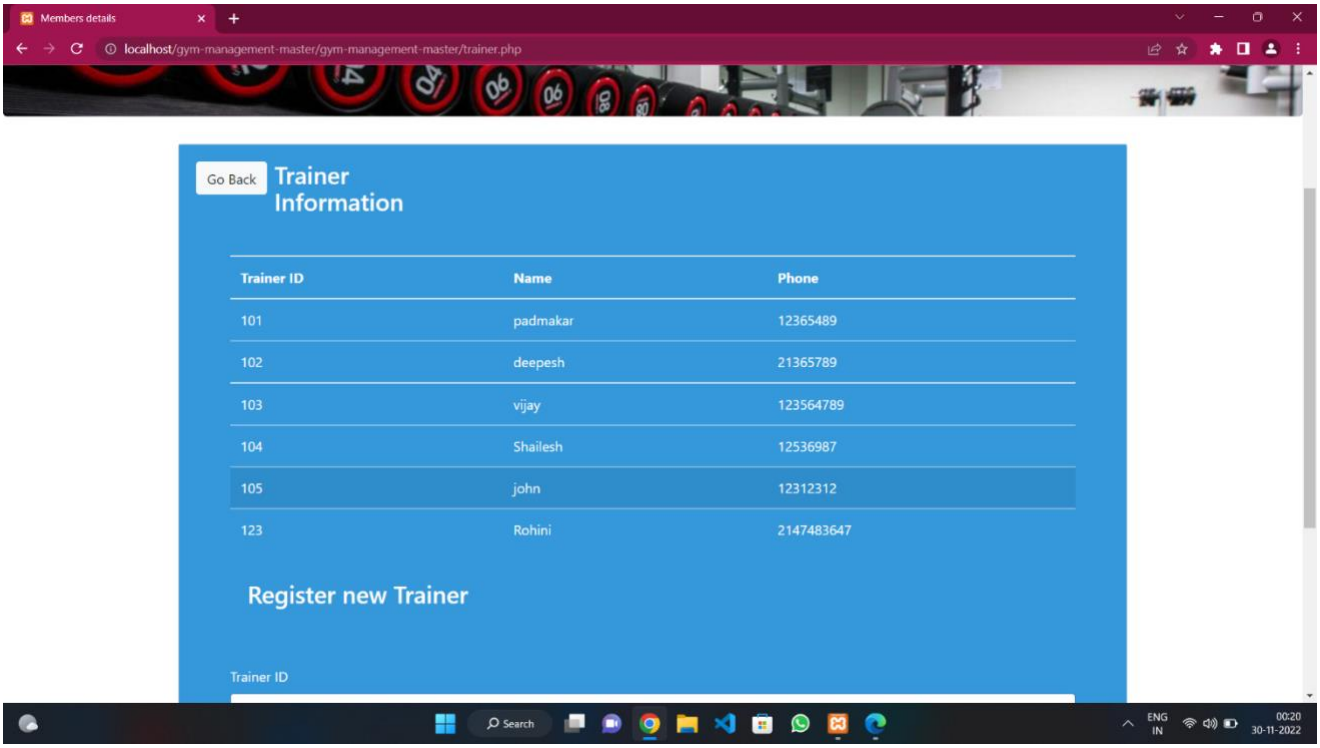


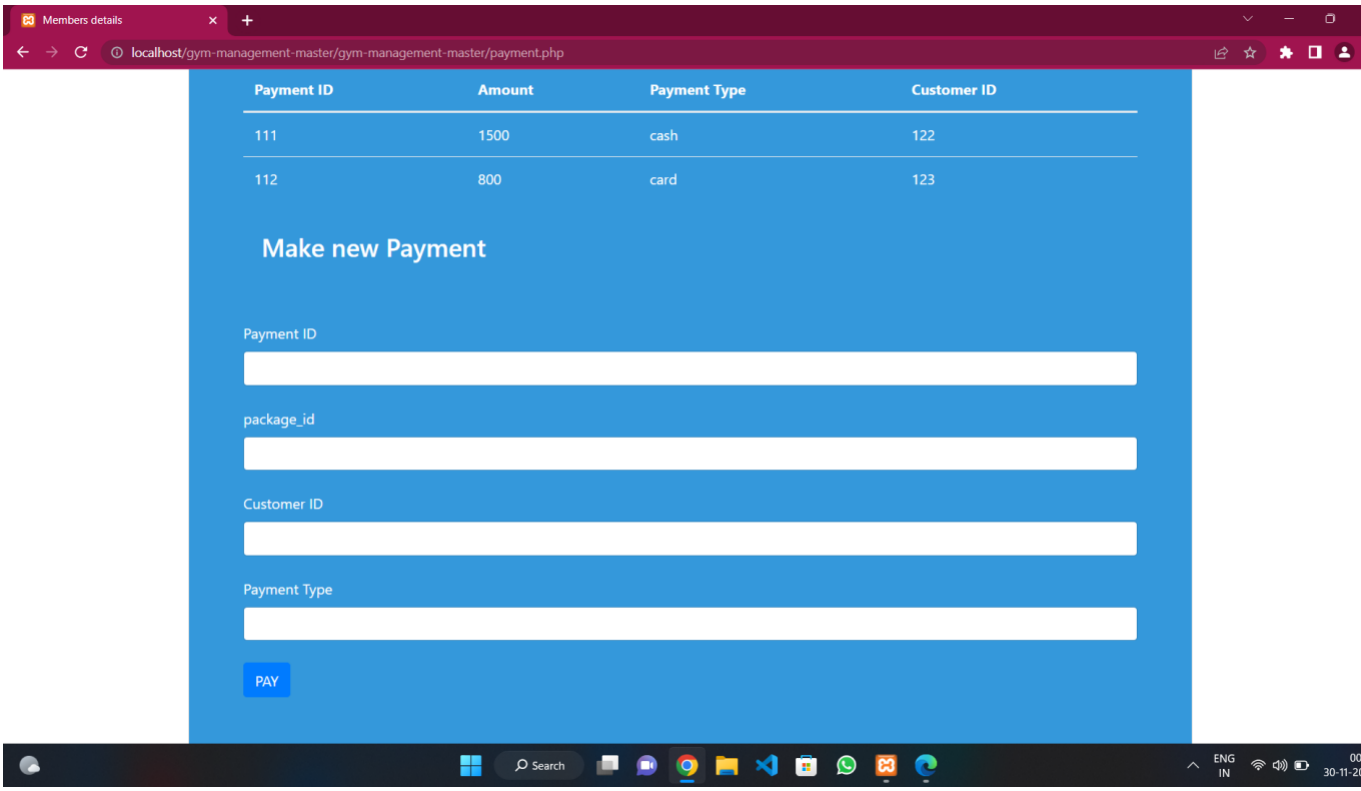
Screenshot of project


localhost/gym-management-master/
Admin Login
Username:
enter username
Password:
enter password
Login

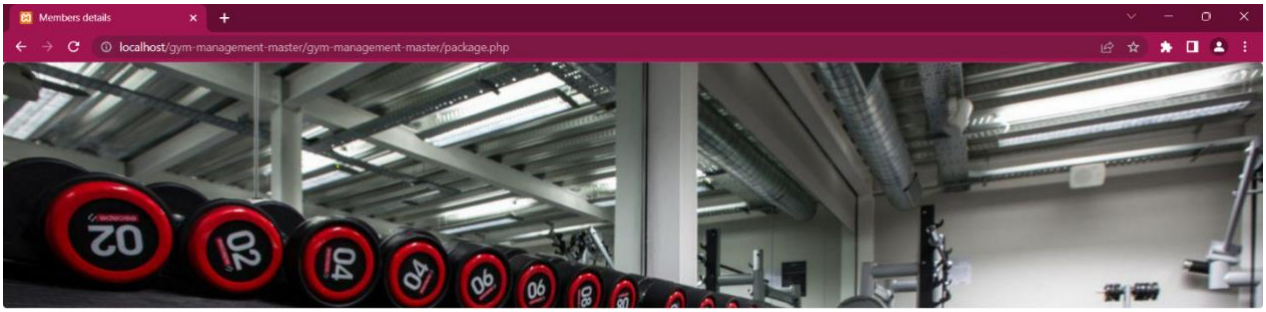

Members
Member details
Package details
Payments
Trainer
Trainer details
Add new Trainer
Logout
Register new members
first name:
last name:
email
Member ID
Trainer
Rakesh
Register

Screenshot of project



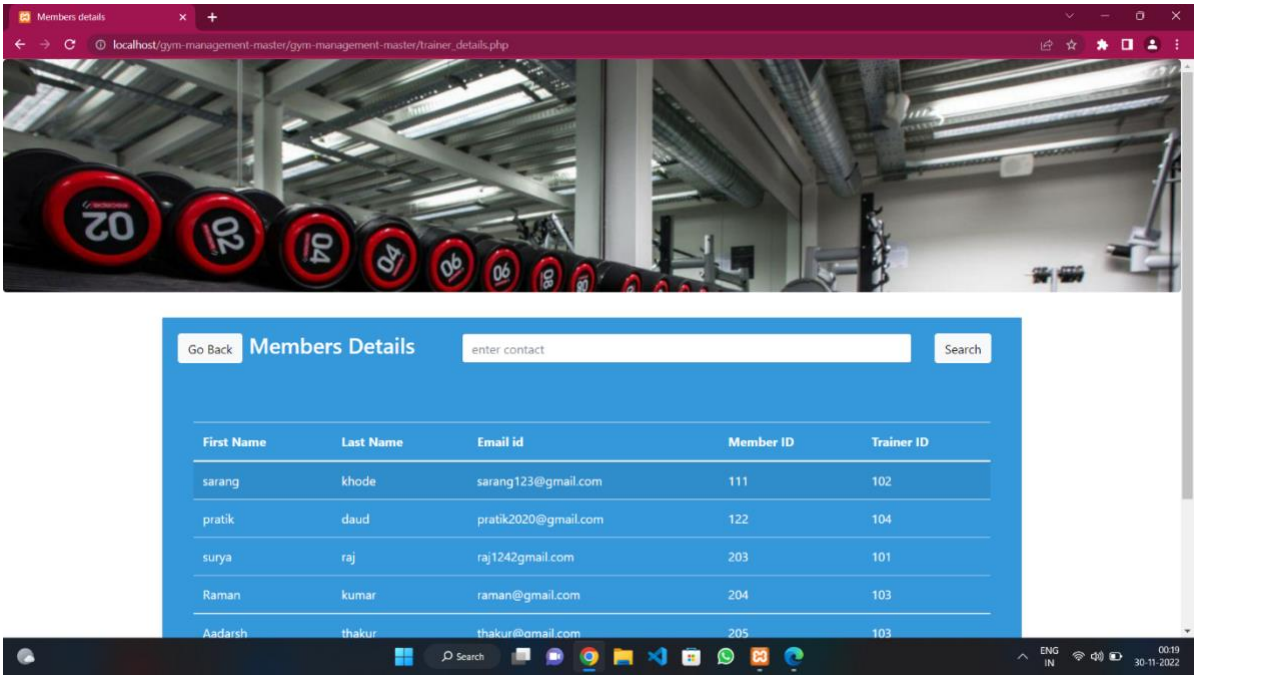


Screenshot of project

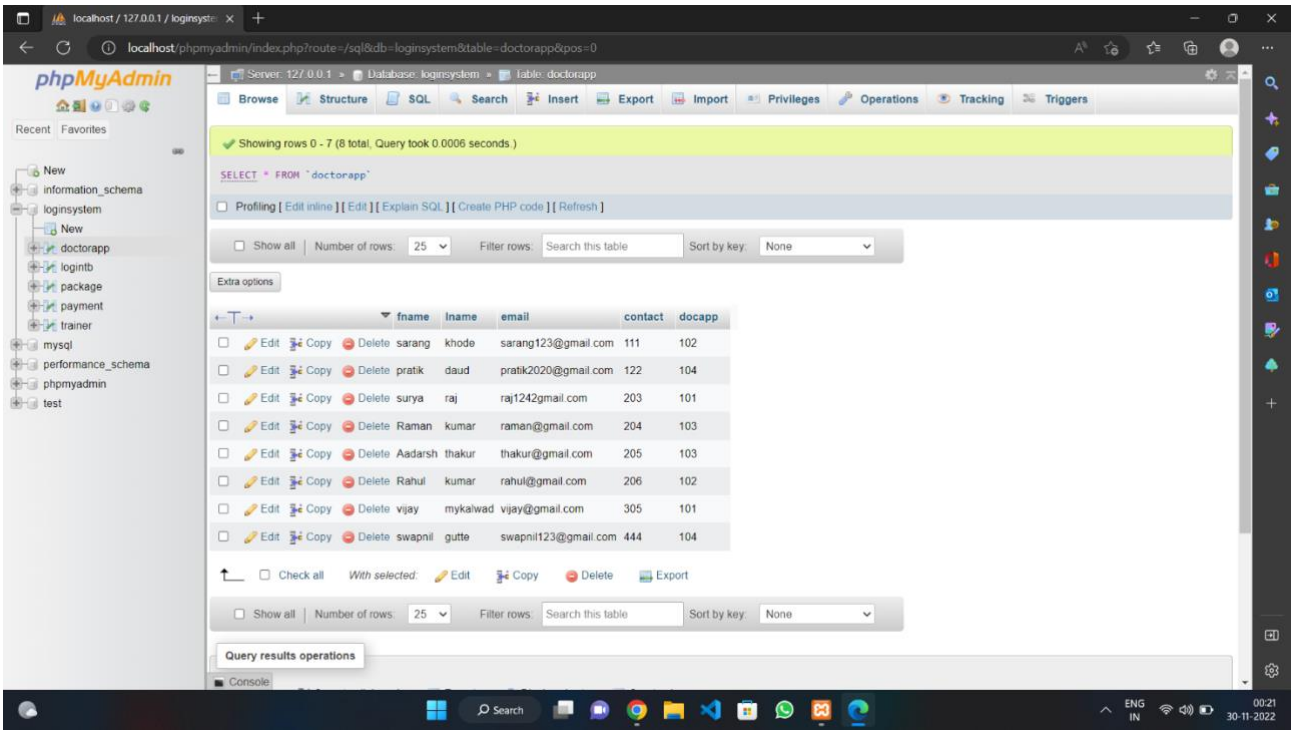


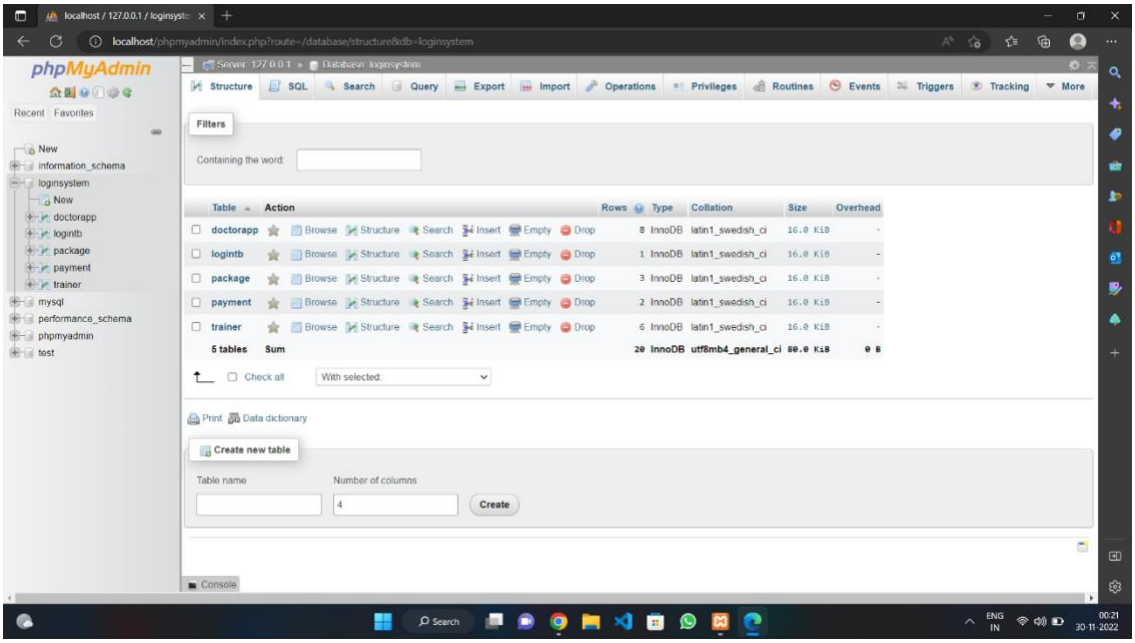
Go Back **Pcakage Details**

Package ID	Package Name	Amounts
121	preliminary	800
122	Wt. gain	1500
123	Wt.loss	1000

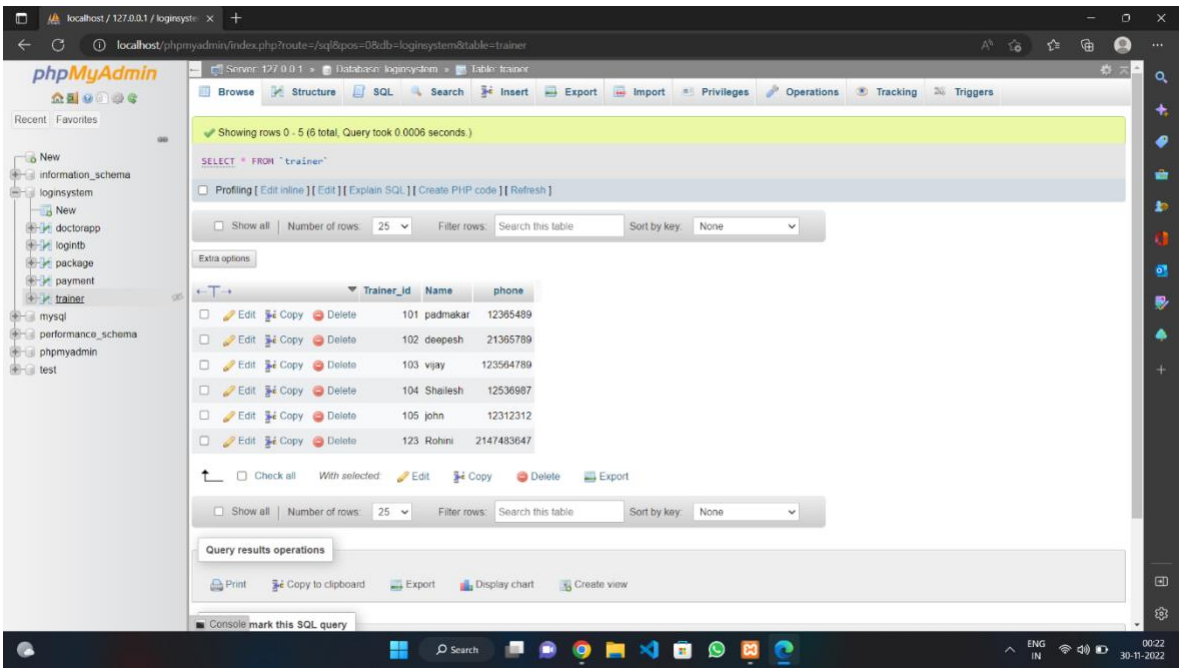


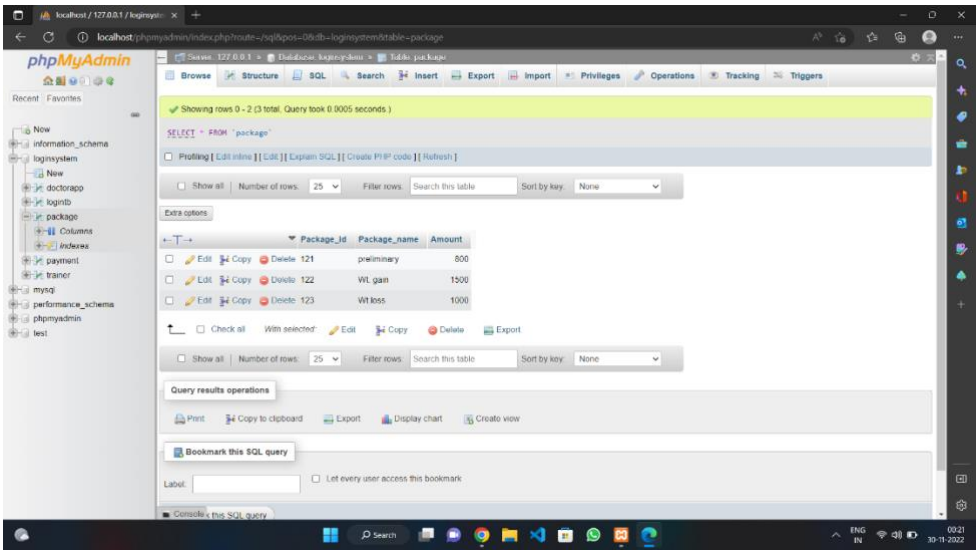
Tables of project





Tables of project





Code of project

index.php

```php
<!DOCTYPE html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/css/bootstrap.min.css" integrity="sha384-/Y6pD6FV/Vv2HJnA6t+vslU6fwYXjCFtcEpHbNJ0lyAFsXTsjBbfaDjzALeQsN6M" crossorigin="anonymous">
  </head>
  <style type="text/css">
    #inputbtn:hover{cursor:pointer;}
  </style>
  <body style="background:url('images/4.jpg'); background-size: cover;">
    <div class="container-fluid" style="margin-top:60px;margin-bottom:60px;color:#34495E;">
      <div class="row">
        <div class="col-md-1"></div>
        <div class="col-md-4">
          <div class="card">
            <img src="images/cardback.jpg" class="card-img-top">
            <div class="card-body">
              <center>
              <h5>Admin Login</h5><br>
              <form class="form-group" method="POST" action="admin-panel.php">
                <div class="row">
                  <div class="col-md-4"><label>Username: </label></div>
                  <div class="col-md-8"><input type="text" name="username" class="form-control" placeholder="enter username" required/></div><br><br>
                  <div class="col-md-4"><label>Password: </label></div>
                  <div class="col-md-8"><input type="password" class="form-control" name="password" placeholder="enter password" required/></div><br><br><br>
                </div>
                <center><input type="submit" id="inputbtn" name="login_submit" value="Login" class="btn btn-primary"></center>
              </form>


              </center>
              </div>
            </div>
          </div>
          <div class="col-md-7"></div>
        </div>
      </div>



    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN" crossorigin="anonymous"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.11.0/umd/popper.min.js" integrity="sha384-b/U6ypiBEHpOf/4+1nzFpr53nxSS+GLCkfwBdFNTxtclqqenISfwAzpKaMNFNmj4" crossorigin="anonymous"></script>
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/js/bootstrap.min.js" integrity="sha384-h0AbiXch4ZDo7tp9hKZ4TsHbi047NrKGLO3SEJAg45jXxnGIfYzk4Si90RDIqNm1" crossorigin="anonymous"></script>
  </body>
</html>
```

admin-panel.php | func.php | loginsystem.sql | trainer.php

admin-panel.php

```php
<!DOCTYPE html>
<?php

// php select option value from database

$hostname = "localhost";
$username = "root";
$password = "";
$databaseName = "loginsystem";

// connect to mysql database

$connect = mysqli_connect($hostname, $username, $password, $databaseName);

// mysql select query
$query = "SELECT * FROM `Trainer`";

// for method 1

$result1 = mysqli_query($connect, $query);



?>
<html>
  <head>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/css/bootstrap.min.css" integrity="sha384-/Y6pD6FV/Vv2HJnA6t+vslU6fwYXjCFtcEpHbNJ0lyAFsXTsjBbfaDjzALeQsN6M" crossorigin="anonymous">
  </head>
  <body>


<div class="jumbotron" style="border-radius:0;background:url('images/3.jpg');background-size:cover;height:400px;"></div>
  <div class="container-fluid">
    <div class="row">
        <div class="col-md-3">
            <div class="list-group">
                <a href="" class="list-group-item active"
                >Members</a>
                <a href="trainer_details.php" class="list-group-item">Member details</a>
                <a href="package.php" class="list-group-item">Package details</a>
                <a href="payment.php" class="list-group-item">Payments</a>
            </div>
            <hr>
            <div class="list-group">
              <a href="trainer.php" class="list-group-item active">Trainer</a>
              <a href="trainer.php" class="list-group-item active">Trainer details</a>
              <a href="trainer.php" class="list-group-item active">Add new Trainer</a>
            </div>

        </div>
            <div class="col-md-8">
            <div class="card">

    <div class="card-body" style="background-color:#3498DB;color:FFFFFF;">
```

Code of project

```php
<?php
$con=mysqli_connect("localhost","root","","loginsystem");
if(isset($_POST['login_submit'])){
    $username=$_POST['username'];
    $password=$_POST['password'];
    $query="select * from logintb where username='$username' and password='$password'";
    $result=mysqli_query($con,$query);
    if(mysqli_num_rows($result)==1)
    {
        header("Location:admin-panel.php");

}
    else
    {
        echo "<script>alert('error login')</script>";
        echo "<script>window.open('admin-panel.php','_self')</script>";
    }
    }
if(isset($_POST['pat_submit']))
{
    $fname=$_POST['fname'];
    $lname=$_POST['lname'];
    $email=$_POST['email'];
    $contact=$_POST['contact'];
    $docapp=$_POST['docapp'];
    $query="insert into doctorapp(fname,lname,email,contact,docapp)values('$fname','$lname','$email','$contact','$docapp')";
     $result=mysqli_query($con,$query);
    if($result)
    {
      echo "<script>alert('Member added.')</script>";
        echo "<script>window.open('admin-panel.php','_self')</script>";
    }
    }
    if(isset($_POST['tra_submit']))
    {
        $Trainer_id=$_POST['Trainer_id'];
        $Name=$_POST['Name'];
        $phone=$_POST['phone'];
        $query="insert into Trainer(Trainer_id,Name,phone)values('$Trainer_id','$Name','$phone')";
         $result=mysqli_query($con,$query);
        if($result)
        {
          echo "<script>alert('Trainer added.')</script>";
            echo "<script>window.open('admin-panel.php','_self')</script>";
        }
        }
        if(isset($_POST['pay_submit']))
        {
            $Payment_id=$_POST['Payment_id'];
            $Amount=$_POST['Amount'];
            $customer_id=$_POST['customer_id'];
            $payment_type=$_POST['payment_type'];
            $customer_name=$_POST['customer_name'];
            $query="insert into Payment(Payment_id,Amount,customer_id,payment_type,customer_name)values('$Payment_id','$Amount','$customer_id','$payment_type','$customer_name')";
             $result=mysqli_query($con,$query);
```

```php
        </tr>";
    }
}
function get_package(){
    global $con;
    $query="select * from Package";
    $result=mysqli_query($con,$query);
    while($row=mysqli_fetch_array($result)){
        $Package_id=$row ['Package_id'];
        $Package_name=$row['Package_name'];
        $Amount=$row['Amount'];
        echo"<tr>
        <td>$Package_id</td>
        <td>$Package_name</td>
            <td>$Amount</td>
        </tr>";
    }
}
function get_trainer(){
    global $con;
    $query="select * from Trainer";
    $result=mysqli_query($con,$query);
    while($row=mysqli_fetch_array($result)){
        $Trainer_id=$row ['Trainer_id'];
        $Name=$row['Name'];
        $phone=$row['phone'];
        echo"<tr>
        <td>$Trainer_id</td>
        <td>$Name</td>
            <td>$phone</td>
        </tr>";
    }
}
function get_payment(){
    global $con;
    $query="select * from Payment";
    $result=mysqli_query($con,$query);
    while($row=mysqli_fetch_array($result)){
        $Payment_id=$row ['Payment_id'];
        $Amount=$row['Amount'];
        $payment_type=$row['payment_type'];
        $customer_id=$row['customer_id'];
        $customer_name=$row['customer_name'];

        echo"<tr>
        <td>$Payment_id</td>
        <td>$Amount</td>
        <td>$payment_type</td>
        <td>$customer_id</td>
        <td>$customer_name</td>
            </tr>";
    }
}
?>
```

Code of project

```
<!DOCTYPE html>
<?php include("func.php");?>
<html>
<head>
    <title>Members details</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/css/bootstrap.min.css" integrity="sha384-/Y6pD6FV/Vv2HJnA6t+vslU6fwYXjCFtcEpHbNJ0lyAFsXTsjBbfaDjzALeQsN6M" crossorigin="an
</head>
<body>
<div class="jumbotron" style="background: url('images/2.jpg') no-repeat;background-size: cover;height: 300px;"></div>

 <div class="container">
<div class="card">
    <div class="card-body" style="background-color:#3498DB;color:#ffffff;">
        <div class="row">
            <div class="col-md-1">
    <a href="admin-panel.php" class="btn btn-light ">Go Back</a>
            </div>
            <div class="col-md-3"><h3>Members Details</h3></div>
            <div class="col-md-8">
        <form class="form-group" action="trainer_search.php" method="post">
         <div class="row">
   <div class="col-md-10"><input type="text" name="search" class="form-control" placeholder="enter contact"></div>
             <div class="col-md-2"><input type="submit" name="patient_search_submit" class="btn btn-light" value="Search"> </div></div>
              </form></div></div></div>
    <div class="card-body" style="background-color:#3498DB;color:#ffffff;">
        <div class="card-body">
    <table class="table table-hover">
        <thead>
     <tr>
            <th>First Name</th>
            <th>Last Name</th>
        <th>Email id</th>
        <th>Member ID</th>
        <th>Trainer ID</th>
       </tr>
       </thead>
       <tbody>
         <?php get_patient_details(); ?>
       </tbody>
    </table>
    </div>
    </div>
    </div>


<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/js/bootstrap.min.js" integrity="sha384-h0AbiXch4ZDo7tp9hKZ4TsHbi047NrKGLO3SEJAg45jXxnGIfYzk4Si90RDIqNm1" crossorigin="anonymous"></script>
    </div>
    </body>
</html>
```

SECTION 5

MAINTAINENCE

Once the software is delivered and developed, it enters the maintenance phase. All systems need maintenance. Software needs to be maintained because there are often some residual errors or bugs remaining in the system that must be removed as they are discovered. Many of these surfaces only after the system has been in operation sometimes for a long time. These errors once discovered need to be removed, leading to the software getting changed. Though Maintenance is not a part of software development, it is an extremely important activity in the life of a software product.

Maintenance involves understanding the existing software (code and related documents), understanding the effects of change, making the changes-to both the code and documents-testing the new parts and retesting the old part.

SECTION 6

CONCLUSION

The objective of this project was to build a program for maintaining the details of all the members,employees and inventory .The system developed is able to meet all the basic requirements. The management of the records (both members and employees)will be also benefited by the proposed system, as it will automate the whole procedure, which will reduce the workload. The security of the system is also one of the prime concerns.

There is always a room for improvement in any software, however efficient the system may be. The important thing is that the system should be flexible enough for future modifications. The system has been factored into different modules to make system adapt to the further changes. Every effort has been made to cover all user requirements and make it user friendly.

- **Goal achieved:** The System is able provide the interface to the owner so that he can replicate his desired data. .

- **User friendliness:** Though the most part of the system is supposed to act in the background, efforts have been made to make the foreground interaction with user(owner) as smooth as possible. Also the integration of the existing system with the project has been kept in mind throughout the development phase.