Gym Attendance Management System

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ABSTRACT

Gym attendance management system deals with the maintenance of the Gym member attendance details. It is generates the attendance of the Gym member on basis of daily presenty. It is maintained on the daily basis of their attendance. The Gym member will be provided with the separate user id to make the Gym member’s status. The Admin handling the particular attendance for all Gym member. Only if the Gym member present on that particular day, the attendance will be calculated. The Gym members attendance reports based on packages and consolidate will be generated.
Chapter 1

1. **Introduction**

We all know Health is Wealth Being healthy is a first Thing we need to keep in mind Because Most of time out attitude depends on how we feel. Being healthy and its gives us energy to do anything. Physical fitness is very necessary for a healthy and tension free life. Physical fitness includes diet, exercise and sleep. These three basic thing with regard to these for healthy life.

1.1 **Organization Overview** :-

The Gym Management requires a system that will handle all the necessary and minute detail easily an proper database security accordingly to the user. They require software, which will store data about members, employees, products, payroll, receipts of members etc & all transactions that occur in Gym and lock-up with graphical user interface(GUI).

1.2 **Objective of the Project** :-

- The main objective of the project is to design and develop a user friendly system.
- Easy to use and efficient computerized system.
- To develop an accurate and flexible system, it will eliminate data redundancy.
- Computerization can be helpful as means of saving time & money.
- To provide better graphical user interface.
- Less chances of information leakage.
- Provides security to data by using login & password.

1.3 **Scope of the Project** :-

- Storing information of members, employees.
- Check validity of information provided by user.
- Storing information of members according to their id.
- Generating reports for different id.
Chapter 2

2. **Theoretical Background** :

We have done a project on Gym Management and database management transactions. This system is proposed to be an automate database management & transactions. This stores employee, payroll, receipts, and products information. It also provides the facility of Search & advanced search for searching the records efficiently & immediately. This system provides data storing & report generation with graphical user interface.

2.1 **Introduction to Project** :

Our Gym Management Software is a gym and health club membership management system. You can keep records on your members, their memberships, and have quick and easy communication between you and your members. Gym Management also includes a booking system, point of sale, banking, accounting, concessions and has a range of reports that help in the management of your club.

2.2 **System Study** :

It is always necessary to study and recognize the problems of existing system, which will help in finding out the requirements for the new system. System study helps in finding different alternatives for better solution. The project study basically deals with different operations and steps involved in generation of examination mark sheets. includes:

1. Data gathering
2. Study of existing system
3. Analyzing problem
4. Studying various documents
5. Feasibility study for further improvements

Following are the steps taken during the initial study:
Initially, we collected all the information, which they wanted to store. Then we studied the working of the current system which is done manually. We noted the limitation of that system which motivated them to have new system. With the help of these documents we got basic ideas about the system as well as input output of the developed system.

The most important thing is to study system thoroughly. Here we are studying both existing system and proposed system so that advantages & disadvantages of both the systems can be understood.
The first task was identifying how system can be computerized. Some analysis and projections was done regarding changes to be made to the existing system. The new developed system for Gym Management is simple without complexities.

### 2.3 Existing System :-

The gym is working manually. The current system is time consuming and also it is very costly, because it involves a lot of paperwork. To manually handle the system was very difficult task. But now-a-days computerization made easy to work.

- The following are the reasons why the current system should be computerized:
- To increase efficiency with reduced cost.
- To reduce the burden of paper work.
- To save time management for recording details of each and every member and employee.
- To generate required reports easily.

### 2.4 Proposed System :-

The proposed system is managed by the visual basic 6.0, which are user friendly windows forevery user and for maintaining the database Microsoft access is used.

### 2.5 System Analysis & Design :-

The way that is followed while carrying on with the development application is as follows

**Phase I (Defining a problem) :-**

Defining a problem is one of the important activities of the project. The objective is to define precisely the business problem to be solved & thereby determined the scope of the new system. This phase consist of 2 main tasks. The 1st task within this activity is to review the organization needs that originally initiated the project. The 2nd task is to identify, at an abstract or general level, the expected capabilities of the new system. Thus, it helps us to define the goal to be achieved & the boundary of the system. A clear understanding of the problem will help us in building a better system & reduce the risk of project failure. It also specifies the resources that have to be made available to the project.

Three important factors project goal, project bounds & the resource limits are sometimes called the project’s term of reference.

**Phase II (feasibility study):-**

The first study aspect is whether the current project is technically feasible i.e. whether the project be carried out with the current equipment, existing software and available personnel. If new technology is required than what is the likelihood that it can be developed.

The second study aspect is whether the project is economically feasible i.e. are there sufficient benefits in creating the system to make the cost acceptable. Are the costs of not creating the system so great that the project must be undertaken?

The third study aspect is whether the project is operationally feasible or not i.e. whether the system will be used if it is developed and implemented? Project is worth developing only if it can meet institutions operating requirements.

The feasibility study proposes one or more conceptual solutions to the problem set for the project. The objective in assessing feasibility is to determine whether a development project has a reasonable chance of success. It helps us to determine the input & output of the system. The following are the criteria that are considered to confirm the project feasibility.
Chapter 3

3. System Implementation :-

3.1 Methodology Adopted :-

A strategy of software accommodate high level system .conducted this research to a comprehensive literature review. Then we found existing software development methodologies .This chapter discussed the methods used in the collection and analyses of data. The methodology focuses on the experiences of people involved and attempt to understand the reasons behind certain behavior description. The evaluation was carried out using data collection techniques and interviews. Generally, we used Spiral Method for the whole study like development methodology, Prototype Methodology, etc. The following table represents the pros and cons of each software development methodology.

3.2 Hardware & Software Specification :- Hardware :- Windows 7 and above Processor : Intel dual core or above Processor Speed : 1.0GHZ or above RAM : 1 GB RAM or above Hard Disk : 20 GB hard disk or above

Software :-
BOOTSTRAP
MySQL database
XAMPP

TECHNIQUES:
HTML
CSS
JavaScript
Advance
Java

Java Information:-
Java is a high level language class based and object-oriented language that is design to have as few Implementation depends as possible it is a java. Java is used to write applications Java is used to write applications for different platform that run JRE and supports applications that run on a single device like a desktop or mobile phone. Java can also be used to develop applications that work in a distributed manner.

MySql

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. In particular, a relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database.
Chapter 4

4. Cost and Benefits Analysis :-

4.1 Cost Estimation :-

Cost required for the project is to install the software and hardware requirements. Software may include installing Microsoft Access on the system. Cost due to the time taken for completion of the project which can be around 5 months.

4.2 Benefit Analysis :-

Due to the introduction of this system the cost of handling the system is reduced. The cost mainly includes the charges for registry maintenance, receipt books, files, etc. To reduce the costs the new system was proposed. Positive aspects of the designed system which contributed to the benefit analysis are fast and easy storage of all information. It was also easy to retrieve any required details as fast as possible. There is no need for maintaining receipt books. The new system is very beneficial than because the system is fully automated.
Chapter 5

1. Details of Life Cycle

5.1 Coding

**Input of PresentyModule :-**

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<%@ pageimport="java.util.ArrayList"%>
<%@ pageimport="model.Addpackagemodel"%>
<%@ pageimport="model.addusermodel"%>
<%@ pageimport="model.Presentymodel"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>

<%-- if(session.getAttribute("email")==null) {
    response.sendRedirect("login.jsp");
} %>
<--%>
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8"/>
<meta name="viewport" content="width=device-width, initial-scale=1.0"/>
<title>A S Fitness</title>
<!-- Core CSS - Include with every page -->
<link href="assets/plugins/bootstrap/bootstrap.css" rel="stylesheet"/>
<link href="assets/font-awesome/css/font-awesome.css" rel="stylesheet"/>
<link href="assets/plugins/pace/pace-theme-big-counter.css" rel="stylesheet"/>
<link href="assets/css/style.css" rel="stylesheet"/>
<link href="assets/css/main-style.css" rel="stylesheet"/>
<style>
.container {
    background-image: url("assets/img/gym7.jpg");
}
.selected{
background-color: black;
}
.Line-box { position: center; width: 100%; height: 2px; background: #f5f1f1;}
.Line {
```

```
position: center;
<!DOCTYPE html>
<html>
<head>
    <script>
        function presenty() {
            // Your attendance logic here
        }
    </script>
</head>
<body>
    <div class="container">
        <div class="row">
            <div class="col-lg-12">
                <h1 class="page-header" style="color: white;">Attendance</h1>
            </div>
        </div>
        <div class="form-group">
            <label for="inputdefault" style="color: white;">
                <br><br>
                <input list="packages" id="package" name="id" placeholder="Select Id" style="background-color: transparent;" required/>
                <datalist id="packages">
                    <% if(request.getAttribute("allusers")!=null) {
                        ArrayList<addusermodel> pm = (ArrayList)request.getAttribute("allusers");
                        for(addusermodel p:pm) {
                            <option value="<%=p.getId()%>"
                        }
                    } %>
                </datalist>
                <br><br>
                <button type="submit" value="submit" class="btn btn-success" style="width: 100px; border-radius: 40px">Let's Mark</button>
            </label>
            <div class="col-lg-6" style="padding-right: 20px">
                <p>${msg}</p>
            </div>
        </div>
    </div>
</body>
</html>
<table>
<h3 style="color: red">Presenty (Unauthorized Members)</h3>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>End-date</th>
<th>Status</th>
<th>Actions</th>
</tr>
</thead>
<tbody id="myTable">
<c:forEach items="${deactivateusers}" var="cm">
<tr style="background-color: #F00000;">
<td>${cm.getId()}</td>
<td>${cm.getName()}</td>
<td style="font-size: 16px"><b>${cm.getEnddate()}</b></td>
<td style="font-size: 16px"><b>Inactive</b></td>
<td>
<a href='getuserdata?id=${cm.getId()}'><input type="button" value="Renew" class="a" style="color:white;background-color:green"></a>
<a href='deleteuser?id=${cm.getId()}'><input type="button" value="Delete" class="a" style="color:white;background-color:red"></a>
</td>
</tr>
</c:forEach>
</tbody>
</table>
<br>

<h3 style="color: green">Presenty (Authorized Members)</h3>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>End-date</th>
<th>Status</th>
<th>Actions</th>
</tr>
</thead>
```html
<tbody id="myTable">
    <c:forEach items="${activateusers}" var="cm">
        <tr>
            <td>${cm.getId()}</td>
            <td>${cm.getName()}</td>
            <td style="font-size: 16px"><b>${cm.getEnddate()}</b></td>
            <td style="font-size: 16px"><b>${cm.getStatus()}</b></td>
            <td><a href='getuserdata?id=${cm.getId()}'><input type="button" value="Renew" class="a"></input></a><br>
            <a href='deleteuser?id=${cm.getId()}'><input type="button" value="Delete" class="a"></input></a></td>
        </tr>
    </c:forEach>
</tbody>
```

**Input of Activation/Registration form :-**

```java
%@page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
%@page import="java.util.ArrayList"%>
%@page import="model.addusermodel"%>
%@taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
```
<\%
if(session.getAttribute("email")===null)
{
response.sendRedirect("login.jsp");
}
\%

<!DOCTYPE html>
<html>
<head>
<meta charset=\"utf-8\"/>
<meta name=\"viewport\" content=\"width=device-width, initial-scale=1.0\"/>
<title>A.S Fitness</title>
<!-- Core CSS - Include with every page -->
<link href=\"assets/plugins/bootstrap/bootstrap.css\" rel=\"stylesheet\"/>
<link href=\"assets/font-awesome/css/font-awesome.css\" rel=\"stylesheet\"/>
<link href=\"assets/plugins/pace/pace-theme-big-counter.css\" rel=\"stylesheet\"/>
<link href=\"assets/css/main-style.css\" rel=\"stylesheet\"/>
<link rel=\"stylesheet\" href=\"https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css\"/>
<script src=\"https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js\"></script>

<!--script-->
$(document).ready(function(){
  \$\("button\"\".click\"(function(){\n   var rowCount = \$\("#myTable\"tr\").length;
   alert(\"total member in Gym: \" +rowCount); // Outputs: 4
  });
});
</script> -->

<style>
.button {
  background-color: #2196f3;border: none;
  color: white;padding: 15px 32px;text-align: center;text-decoration: none;display: inline-block;font-size: 16px;margin: 4px 2px;cursor: pointer;float: right;
}
table {
  font-family: arial, sans-serif;border-collapse: ;
  width: 100%;
}
td,th {
  border: 2px dotted #dddddd;text-align: left;padding: 10px;color: white;
}
tr:nth-child(even) { background-color: black;
}
### Activated Member List

<table>
<thead>
<tr>
<th>Id</th>
<th>Name</th>
<th>Duration</th>
<th>In-time</th>
<th>Out-time</th>
<th>Mobile</th>
<th>Date</th>
<th>Amount</th>
<th>Package</th>
<th>Trainer</th>
<th>End-date</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>John</td>
<td>1 hour</td>
<td>09:00</td>
<td>10:00</td>
<td>12345</td>
<td>12/01</td>
<td>$100.00</td>
<td>Basic</td>
<td>Alice</td>
<td>12/05</td>
<td>Active</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Jane</td>
<td>2 hours</td>
<td>10:00</td>
<td>12:00</td>
<td>67890</td>
<td>12/02</td>
<td>$200.00</td>
<td>Deluxe</td>
<td>Bob</td>
<td>12/06</td>
<td>Effective</td>
<td>None</td>
</tr>
</tbody>
</table>

**Search by Name:**

*Note: This is a simplified representation of the table content.*
<thead id="myTable">

<c:forEach items="${activateusers}" var="cm">
<tr>
<td>${cm.getId()}</td>
<td>${cm.getName()}</td>
<td>${cm.getDuration()}</td>
<td>${cm.getIntime()}</td>
<td>${cm.getOuttime()}</td>
<td>${cm.getMobile()}</td>
<td>${cm.getDate()}</td>
<td>${cm.getAmount()}</td>
<td>${cm.getPackages()}</td>
<td>${cm.getTrainername()}</td>
<td>Active</td>
</tr>
</c:forEach>
</thead>

<tbody id="myTable">
<tr><td><button type="button" value="Renew" class="a" style="color:white;background-color:green"></button></td></tr>
<tr><td><a href='deleteuser?id=${cm.getId()}'>Delete</a></td></tr>
</tbody>
5.2 Input Output Screen Shots

Output of Attendance Module :-

![Attendance Module Screenshot]

Output of login :-

![Login Screenshot]

Out put of Dashboard :-
Output of Admin side PresentyModule :-

Output of Activation Form Module :-
Output of Add Trainer Form Module :-

Output of Registration Form Module :-
Output of Activated Member List Module:

Output of Deactivated Member List Module:
Output of Attendance List Module :-

Output of Attendance list Module by using ID. :-

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5.3 Data Flow Diagram:

A data flow (DFD) is a graphical system model that shows all of the main requirements for an information system in one datagram: inputs and outputs, processes, and data storage. A DFD describes what data flows rather than how it is processed. Everyone working on a development project can see all aspects of the system working together at once with DFD. That is one reason for its popularity. The DFD is also easy to read because it is graphical model. The DFD is mainly used during problem analysis. End Users, management, and all information systems workers typically can read and interpret the DFD with minimal training.

![Data Flow Diagram]

5.4 Entity Relationship Diagram (ER) :-

ER modeling is something regarded as a complete approach to design a logical database schema. This is incorrect because the ER diagram is just an approximate description of data, constructed through a very subjective evaluation of the information collected during requirements analysis.
5.5 Flow Chart :-

Start

Enroll

Membership join

Membership Expire

Renew

Sign-in Class

Attendance

Inspection

Report

Customer leaves

END
Chapter 6

Conclusion:-

The “GYMATTENDANCE MANAGEMENT SYSTEM” is successfully designed and developed to fulfilling the necessary requirements, as identified in the requirements analysis phase, such as the system is very much user friendly, form level validation and field level validation are performing very efficiently.

The new computerized system was found to be much faster and reliable and user friendly then the existing system, the system has been designed and developed step by step and tested successfully. It eliminates the human error that are likely to creep in the kind of working in which a bulk quantity of data and calculations as to be processed.

The system results in quick retrieval of information that is very vital for the progress any organization. Cost is minimized in case of stationary. Burden of manual work is reduced as whenever transaction takes place, there is a no need to record it in many places manually.

Chapter 7

Scope For Further Development :-

The software has been developed in such a way that it can accept modifications and further changes. The software is very user friendly and future any changes can be done easily.

Software restructuring is carried out. Software restructuring modifies source code in an effort to make it amenable to future changes. In general, restructuring does not modify the overall program architecture. It tends to focus on the design details of individual modules and on local data structure defined within modules.

Every system should allow scope for further development or enhancement. The system can be adapted for any further development. The system is so flexible to allow any modification need for the further functioning of programs. Since the objectives may be brought broad in future, the system can be easily modified accordingly, as the system has been modularized. The future expansion can be done in a concise manner in order to improve the efficiently of the system.
Chapter 8

LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>OBJECTS</th>
<th>Prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>frm</td>
</tr>
<tr>
<td>Text Box</td>
<td>Txt</td>
</tr>
<tr>
<td>Combo box</td>
<td>Cmb</td>
</tr>
<tr>
<td>Frame</td>
<td>Fra</td>
</tr>
<tr>
<td>Command Button</td>
<td>Cmd</td>
</tr>
<tr>
<td>Label</td>
<td>Lbl</td>
</tr>
<tr>
<td>Option Button</td>
<td>Opt</td>
</tr>
<tr>
<td>Date picker</td>
<td>Dtb</td>
</tr>
<tr>
<td>Menu</td>
<td>mnu</td>
</tr>
</tbody>
</table>
Chapter 9

Advantages :-

• Owner and other office members can handle this application for more analysis on their sales because application is handling all bulky and time consuming part.
• User/Client don’t need to wait any authority to put attendance, check package status etc.
• User saves their time to put attendance in seconds and also to check status and other information quick access available.
• Login security saves the girls personal information to leak it’s a biggest issue in this publication gym places.
• Owner needs to invest in applications but this application make its work lite and saves time and money and providing this application service to clients so, clients are happy and they make free mouth publicity to other and members are increasing automatically.

Chapter 10

Limitations :-

• Application cannot handle any hardwares so, user cannot put attendance by finger print scanner, user needs to put their attendance by their id with application interaction.
• Application has no payment gateway integration so, user need pay owner directly or any employee always need wait for receipt.
• Application cannot handle stock for fitness selling products it needs other applications.
Chapter 11

Applications :-

1. Monitor and Track Clients:
   One of the greatest benefits that you can get from having gym software is the ability to monitor and keep track of your clients. You can also keep a good track of the number of clients that you lose, their workout results, and their expenses. With the use of gym software, you can easily determine these things.

2. Easy for Gym Operators:
   With the help of this software, gym management can now give its facilities a more complete view of its clientele, which will lead to more clients in the long run. The software makes it easier for gym operators to generate invoices, keep track of sales, and schedule clients within their facilities. Some of the other benefits of using gym software include: booking clients, sending out reminder cards, and much more. To maximize the benefits of such a platform, it is necessary to look for a platform that is packed with features and functions that will make managing a gym a breeze.

3. Management of Payments:
   Another benefit of these platforms is the management of payments. Allow you to set up direct payment processing so that your clients will never have to leave their offices or residences.

4. Automatic Billing System:
   It’s important to note that automatic billing does not only apply to clients who are coming to the gym for the first time but also to those who regularly join. This is because most of the time, gym software makes it very easy for clients to sign up for a session without having to manually enter their details each time. Hence, they won’t have to fill out forms anymore which can also save you a lot of time and energy. Your clients will also be able to pay for their sessions in the quickest time possible. Thus, you will be able to maintain better client relations.

5. Attendance System:
   In this software, the user thus needs to enter their unique ID and mark their attendance on daily basis.
Chapter 12

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Chapter 13

List of Publication

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<tr>
<td>1)</td>
<td>Journal of Engineering Science (JES)</td>
<td>FITNESS STUDIO SYSTEM</td>
<td>Vol 11, Issue 4, April/2020, ISSN NO:0377-9254</td>
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