A
Project Report
On
"*GYM MASTER SYSTEM*"

Submitted in partial fulfillment of

the requirements for the 5TH Semester MEAN SESSION of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE & ENGINEERING

By

Suraj Prasad (20CSED032)   *Piyush Kumar (20CSE038)*

Priya Khetan (20CSE052)   *Neeraj Kumar (20CSE054)*

Armaan Arya (20CSE116)   *Prasanna Kumar (20CSE296)*

Venkata Shalini (20CSE303)   *Prashant Panda (20CST010)*

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

GIET UNIVERSITY

GUNUPUR -   765022

2022

GIET UNIVERSITY

Gunupur-765022, At – Gobriguda, Po- Kharling, Dist. - Rayagada, Odisha

Contact:- +91 7735745535, 06857-250170,172,Visit us:- **www.giet.edu**

Department of Computer Science & Engineering

CERTIFICATE

This is to certify that the project work entitled "GYM MASTER SYSTEM" is done by **Suraj Prasad(20CSE032), Piyush Kumar(20CSE038), Priya Khetan (20CSE052) , Neeraj Kumar(20CSE054), Armaan Arya (20CSE116), Prasanna Kumar (20CSE296), VEnkata Shalini (20CSE303) , Prashant Panda(20CST010)** *in partial fulfillment of the requirements for the 5TH Semester MEAN SESSION of Bachelor of Technology in* **Computer Science and Engineering** *during the academic year 2020-21. This work is submitted to the department as a part of evaluation of 5th Semester MEAN SESSION.*

PRASUN SARKAR

PROJECT GUIDE

i

ACKNOWLEDGEMENT

CONTENT:-

INTRODUCTION

The Gym Management System is one of the systems which helps the administration is speeding up the tasks at the same time reducing the complexity. The purpose or objective of this system is to digitalize and create an automated system. The system will perform the task like adding the new member to the gym, Removing the member or keeping the payments records and other stuff required in managing the gym properly. The present scenario in the gyms is that the records are kept by writing in a file on paper. Every management task is done manually.

This creates a system unreliable and confusing to keep the correct track of the records. The maintenance of a system like this is hardly required until it needs to change any part of the system. The information about the various things contained in the system are like members, trainers, the equipment can get by just a few clicks unlike the paper documents required the serious reading for such information.

It helps in creating the various batch according to their preference or if they want a particular trainer. It made it easy to generate the reports of various operations performed in the gym are like paying the fee it can be stored and later evaluated and get the list of members who did not pay the fee. It also helps the users in reducing the carbon footprint as the amount of paper used in the company reduces.

Overall Description

In the gym management system, if we take the current system and compare it

with the proposed it is far behind. Every work in the existing is manual and done on paper. There might be a computer used somewhere for the work but it's is not doing exactly what it's is supposed which is reducing the manual work.

Entering everything manually to the computer by creating a file is not exactly what we are talking about in computerization. The existing system requires a lot of manual work which results in taking more time than it should. The operations like updating and synchronizing data are also done manually in the existing system that is not automated and again time-consuming process.

These practices are not at all reliable as the one wrong entry can take a lot of time in detection and then there is a correction. Humans are prone to errors and can mistakes often unless it has some inbuilt programs which can take check the input and save from error. We introduced the system to reduce the manual work effectively as there is the backend of the system which will take care of synchronizing and updating the data for the system.

So, if there is any change in the system data it will appear to all other users of the system. As the system was not online the member cannot see their timeline that the event generated by them in past such as fee payment, attendance, batch timing, and trainer profile, etc. Keeping an automated system is also helps in managing the member's information secure and safe.

As it can only be seen by the administrator with the correct credentials which is not an option in the existing system. Unless the records are kept in a physically safe location such as a locker.

PURPOSE

The main purpose of this project is to automate a gym or a fitness center and therefore facilitating its operations. It makes the clients and staff data and schedule easily accessible and also making it easy to keep records in a secure database.

PROJECT OBJECTIVES

- Automating the existing system.
- Reducing time taken to enter client and staff data.
- Making the client data easily accessible.
- Speeding up operations.
- To centralize the management of the gym and fitness center.
- Reduce data loss in the manual system already in place.
- Reduce the cost of maintenance of the gym and data storage and reducing the space occupied the files being used.
- Make data retrieval easy and reduce time wasted when manually searching for data.
- Reduce data redundancy. Redundancy is the repetition of similar data in the system. Redundancy occurs when data is updated so there occurs more than one copy of data I which consumes a lot of space.

User Interface Design of Gym Master System

The Gym Management System reduces all the complexity of the conventional method which is a combination of folders, spreadsheets, emails, and for the management of members' information and payment info. It has a unified system in which all the processes from registration to payment in one system.

- **Member:** This module shall have all the details pertaining to the member such as name, contact number, gender, address, date of birth, admission date etc.
- **Fee Payment:** This module includes the fee payments. It has the type of payments, amount paid etc.
- **Reports:** This module includes the report data. It notifies about the pending fee payment for different members. And also prints reports of fee payments.
- **Notification:** By using this site, customer can easily me notified by any notice like tomorrow gym will be closed or this machine will not work, etc.
- **Choice-** You will able to choose your trainer, by watching this website.

BENEFITS OF PROJECT

- Data can be saved safely

- No other person can view other person's detail

- Greater efficiency

- User friendliness

- Minimum time required

- Free of cost

AIM OF THE PROJECT

Our project aims at GYM process automation, i.e. we have tried to computerize various processes of GYM MASTER SYSTEM

 • To utilize resources in an efficient manner by increasing their productivity through automation.

• It satisfies the user requirement.

• Be easy to understand by the user and operator

• Be easy to operate.

 • Have a good user interface

• Be expandable

• Delivered on schedule within the budget.

PROPOSED SYSTEM

In the gym management system, after the planning and analysis phase of the system gets completed. Then the next phase required to transform the collected required system information into a structural blueprint which will serve as a reference while constructing the working system. It is a phase when most of the risks and errors unveiled so it's is good practice to take care of this thing from the start.

This is a fully-fledged system that will be the backbone of the whole management of the gym so ignoring the risk or error is not an option as later it can make a greater form of itself. So, it is better to minimize the problems faced by both staff and the manager in the Organization.

SYSTEM ANALYSIS

> **Software Requirements:-**

i. *Web server:* A web server is server software or hardware dedicated to running this software, that can satisfy client requests on the World Wide Web. A web server can contain one or more websites. A web server processes incoming network requests over HTTP and several other related protocols. The primary function of a web server is to store, process and deliver web pages to clients. The communication between client and server takes place using the Hypertext Transfer Protocol (HTTP). Pages delivered are most frequently HTML

documents, which may include images, style sheets and scripts in addition to the text content.

ii. **HTML:** HTML stands for Hyper Text Markup Language. Hypertext means that the document contains links that allow the reader to jump to other places in the document or to another document altogether. The latest version is known as HTML5.

iii. **CSS:** CSS Stands for Cascading Style Sheets. CSS is used to control the style of a web document in a simple and easy way. Style defines how to display HTML elements. External Style Sheets can save a lot of work. External Style Sheet are stored in CSS files.

iv. **NODE JS :** Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on a JavaScript Engine and executes JavaScript code outside a web browser, which was designed to build scalable network applications. Node.js lets developers use JavaScript to write command line tools and for server-side scripting—running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm, [unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

v.   **ANGULAR JS :** AngularJS is a very powerful JavaScript Framework. It is used in Single Page Application (SPA) projects. It

extends HTML DOM with additional attributes and makes it more responsive to user actions. AngularJS is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

vi. *EXPRESS JS :* Express is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications. It facilitates the rapid development of Node based Web applications. Following are some of the core features of Express framework –

- Allows to set up middleware's to respond to HTTP Requests.
- Defines a routing table which is used to perform different actions based on HTTP Method and URL.
- Allows to dynamically render HTML Pages based on passing arguments to templates.

> **Hardware Requirements:-**

- **Processor:** 800 MHz
- **Memory :** 512 MB
- **Disk Space :** 750 MB of free space
- **RAM :** 1GB or higher

- **Hard drive :** 10GB or more

PROPOSED MODEL

In this phase, a logical system is built which fulfills the given requirements.

Design phase of software development deals with transforming the client's requirements into a logically working system. Normally, design is performed in the following in the following two steps:

- Primary Design Phase: In this phase, the system is designed at block level.

  The blocks are created on the basis of analysis done in the problem identification phase.

  Different blocks are created for different functions emphasis is put on minimizing the information flow between blocks.

  Thus, all activities which require more interaction are kept in one block.

- Secondary Design Phase: In the secondary phase the detailed design of every block is performed.

The general tasks involved in the design process are the following:

- Design various blocks for overall system processes.
- Design smaller, compact and workable modules in each block.
- Design various database structures.
- Specify details of programs to achieve desired functionality.
- Design the form of inputs, and outputs of the system.
- Perform documentation of the design.
- System reviews.

HOME PAGE:-

This is the home page of our site. As you can see here, there are some buttons at the top which will directly get you to that page where you want.
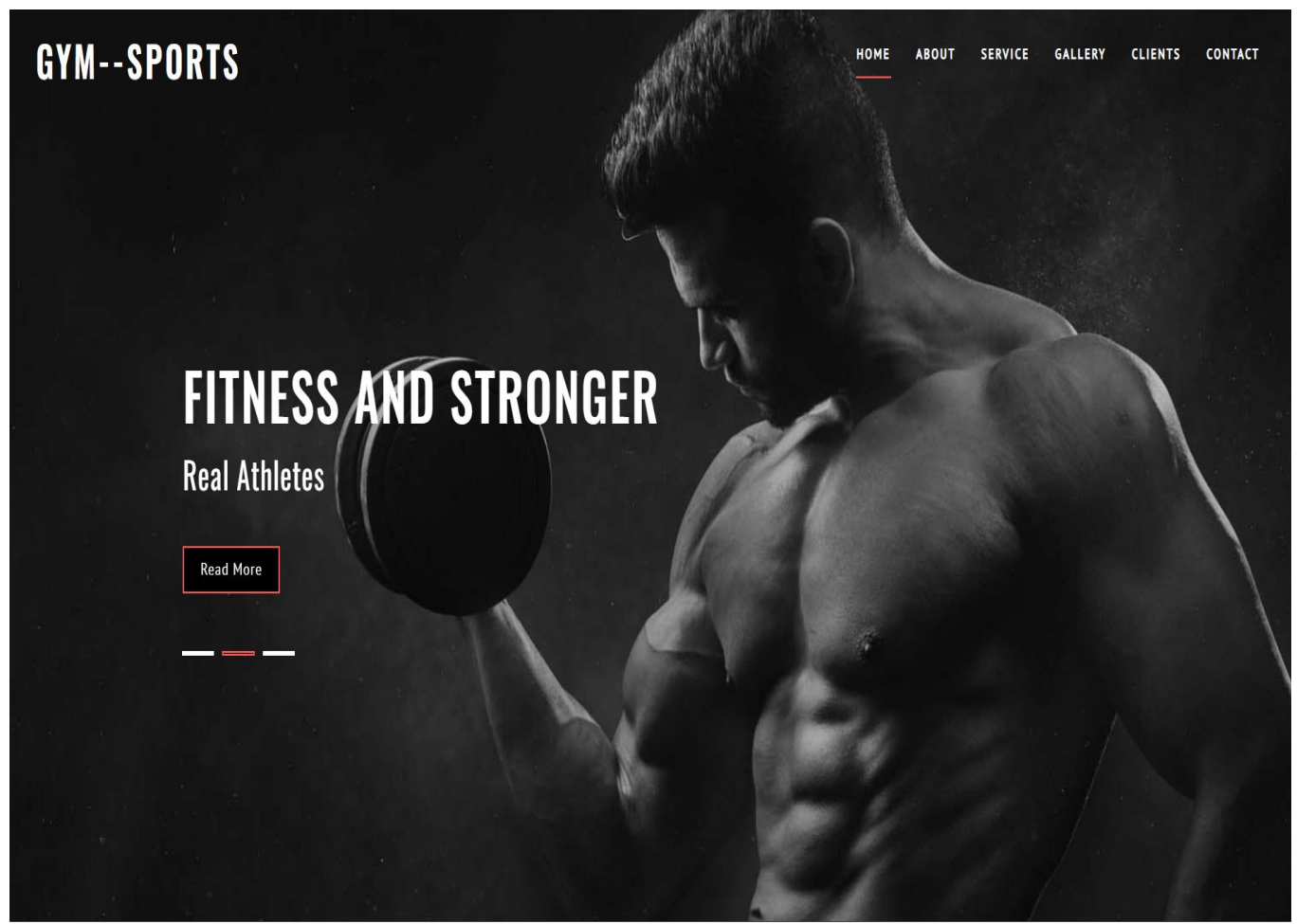
FITNESSS AND HEALTH:-

This is blog area or you can say the comment section of our gym, here the happy customer of our firm can write, comment their thought and you can give your reviews here by writing comment.

Fitness And Health

In humans, it is the ability of individuals or communities to adapt and self-manage when facing physical, mental, or social challenges. The most widely accepted definition of good health is that of the World Health Organization Constitution. It states: "health is a state of complete physical, mental and social well-being and is not merely the absence of disease or infirmity" (World Health Organization, 1946). In more recent years, this statement has been amplified to include the ability to lead a "socially and economically productive life." The WHO definition is not without criticism; mainly that it is much too broad.

The most solid aspects of wellness that fit firmly in the realm of medicine are environmental health, nutrition, disease prevention, and public health. These matters can be investigated at length, and can assist in measuring well-being. Please see our medical disclaimer for cautions about Wikipedia's limitations.

OUR SERVICES:-

These are the services provided by our gym and people can check out with here.

OUR CLIENTS:-

This is the customer section of our project where other public can see that how we are working with our clients and also are they happy with our services or not.

Our Clients

YOU HAVE EVERYTHING ONE COULD WANT IN A GYM AS WELL AS A GREAT LOCATION, GREAT STAFF, GREAT OWNER!

Anurag Thakur

"RUBBER BANDS FOR HAIR. WOMEN'S BATHROOM ON MAIN FLOOR. GOOD MACHINE S AND FRIENDLY STAFF."

Priya Khetan

Our Clients

INSTRUCTORS FOR THE VARIOUS CLASSES ARE GOOD. MANY CARDIO MACHINES AVAILABLE GOOD WEIGHT ROOM"

Armaan Arya

When you are fit you have a girl..

Couple Goals

OUR TRAINERS:-

Here is the feature to select you trainer by yourself only. So, this is the list. You can easily choose your trainer from here and also you will able to know the achievements of trainer and category.

15

CONTACT US:-

This is the contact page of our site, here can see some numbers of our staffs are present and also go to top button.
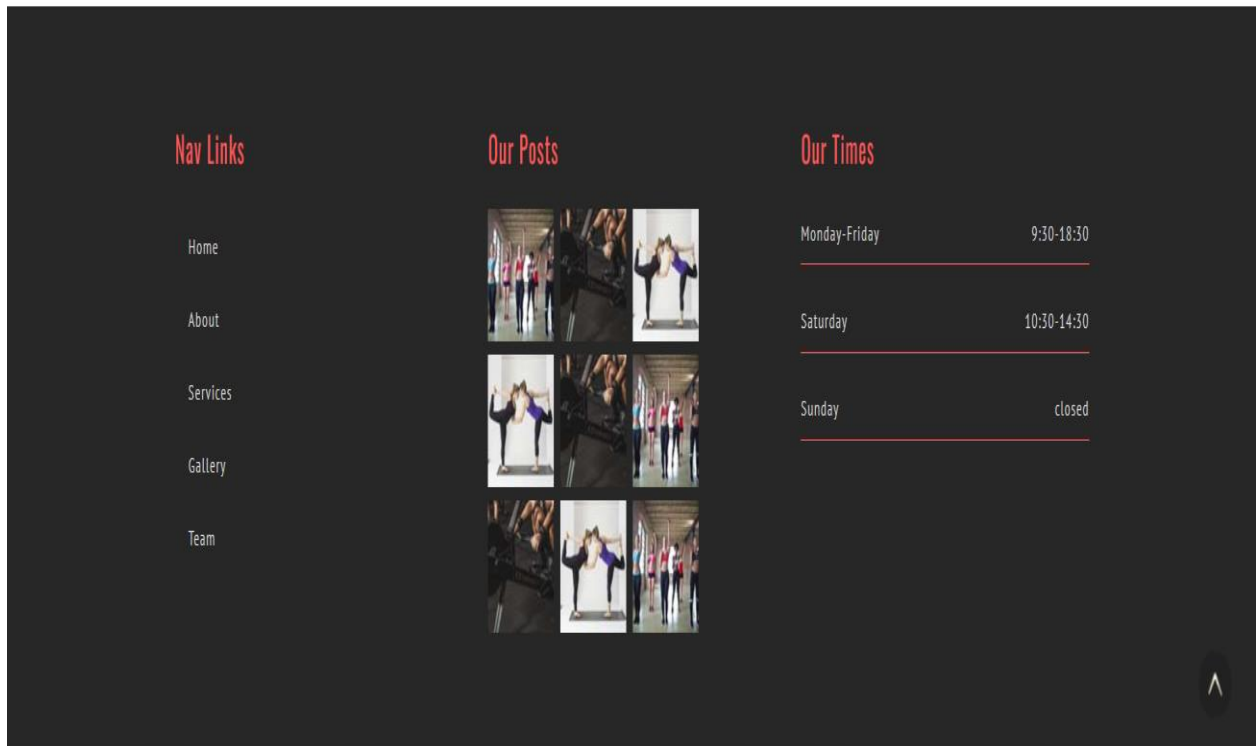
Contact Us

GIET UNIVERSITY,GUNUPUR
RAYAGADA City 90210.

+(91) 8102265670
+(91) 7033917014

piyush1504@gmail.com
anuragthakur03@gmail.com

CONCLUSION –

- While developing a system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that will generate the proper system cases.

- While making the system an eye has been kept on making it as user friendly as such one may hope that the system will be acceptable to any user and will adequately meet his/her needs.

- As in case of any system development process where are number of short comings, there have been some short comings in the development of this system also.

17