A STUDY TO REVIEW AND ASSESS GYM MANAGEMENT SYSTEM

Jayesh Khapre¹, Apurva Kandelkar²

U.G. Student, School of Engineering, Ajeenkya D.Y. Patil University, Pune, Maharashtra, India-412105
Faculty, School of Engineering, Ajeenkya D.Y. Patil University, Pune, Maharashtra, India- India-412105

Abstract: Modernizing is taking over the all systems and digitalizing helps them improve in so many particular ways. The gym management system is a system that helps managers speed up tasks while reducing complexity and time. The project titled Gym Management System is database management software for monitoring and controlling the writing task at a Gym in an innovative way. The project is developed in java, which focuses on basic operations like login, adding customer details, listing them according to their weights, deleting customer details, payment detail and subscription detail. It has a familiar, friendly and well-thought-out, attractive user interface as well as powerful search insertion and reporting functions, which make this project different from other suggested systems. The Backend of the Gym management system is designed using MySQL which further use for storing the data.

KEYWORDS: Gym Monitoring Framework, Fitness Management System, Login, Platform Independent, Modernization, MySQL.

Introduction

We all know health is a wealth. We do not need any car, big apartment to stay healthy so peoples go to gym, to gym personify their physique to the next. Being healthy and fit gives us energy to do anything this is the reason why people go to Gym. Nowadays ample amount of people goes to the gym so it is to write down all the information but it is time consuming when we have to access it. The purpose of system to automate the fitness and get rid of paper work, The Gym or Fitness centres requires a system application that will handle all the necessary and minute details easily with proper database security accordingly to the user. These centres require software which will help them to store data about members detail, employees’ detail, payroll, receipts of members, subscription & all transactions that accessed in Gym.

Literature Survey

1. Gym management interface: an overview: In these papers they have developed a site based on Gymnasium for the people who wish to maintain their health and body fitness on regularly basis. The gym management system allows users to store food details, employee details, transaction details, details of people participating in the gym, details of gym equipment, etc. This software package allows storing the details of all the data related to a gym management or fitness centre. The newly developed site for fitness centre is more suited than the manual database because it provides the facilities like, more accuracy and high security. This project uses Visual Studio as frontend and sequential query language server as backend.
2. **Online-Gym: a 3D virtual gymnasium using Kinect interaction:** This online interaction gymnasium site may provide new possibilities for enhancing the physical, social and help in well-being of individuals with restricted mobility. This paper a prototype platform for this Online Gym which allows users to interact employing a Microsoft Kinect and participate in online gymnastics sessions. During this paper we present the Online-Gym concept and a primary iteration of the platform architecture that permits interaction in Open Simulator or Second Life virtual worlds with movement captured by a Kinect device. The exploratory work done up to now provides evidence that this approach is viable which such scenarios is also pursued.

3. **Fitness Applications for Home-based Training:** They have created home-based application to exercise within home. Therefore, the latest advanced technology has created huge opportunities for the development of applications that support home training, especially for the elderly, who are usually more socially isolated, physically inactive, and have fewer opportunities to train in the gym. Those young people who are unwilling to train do not have any fitness equipment. In this article, the authors review current fitness applications and their features alongside the design challenges and opportunities of fitness applications for trainees at home which very crucial.

4. **Gymnasium management system:** This system can add members, remove members, keeping the payments records and other things required in managing the gymnasium properly. Every management task is done manually. This creates a system unreliable and confusing to stay the right track of the records. the upkeep of the system like this can be hardly needed till it must amendment any a part of the system. It also had a purpose to automate fitness centre.

5. **Gym Monitoring Framework for Fitness Management System:** This research paper shows that the application provides an easy to use interface through which user can directly add information in the database base server. this framework had access to different programs and additional facilities for the members. In which exercise card generation helps the members to follow a particular set of exercise depending on which type of program chooses. This system can show the expiry lists to identify members whose memberships are expiring. Unlimited user definable reports to analyse sales, profits, number of customers using a particular program, expense report, online customer help etc.

6. **The future of fitness:** The enamours number of individuals are taking interest in fitness activity that’s the explanation for the expansion of fitness centre taking the full gym equipment market and supplement market to the sting of growth. Similar to businesses, individuals who want to figure and thrive in tomorrow’s fitness industry will must plan for and adapt to new technology and other innovations. Within the future, consumers seem almost absolute to seek ever-higher levels of fitness training and professionalism to satisfy their needs, reinforced by governments who look to the fitness industry for greater accountability for its outcomes.

7. **The Attributes and Advantages of Virtual Worlds for Real World Training:** These research work shows that person lives or professional lives are often go head to head. the fitness training and education often get crushed in real-time. Professional have facing issue with time and location constraint and the normal person have issue with finance, for attending training and education is a typical situation so the E-learning approach help both in saving time or cost. However, e-learning is not entirely perfect or comfortable for many learner, virtual world as a way better to provide real world training.
8. Virtual Gym management system: This application recommend proper diet and exercise to user by well-known consultancy & trainer respectively, video or text chat, activity tracker, online payment and field level validation will perform efficiently. Even this system includes intelligence after certain data get store, system will recommend diet and exercise on by on to user rather than any trainer and or admin which will be beneficial for the admin as well as for user. The trainer can know user personal interest which user have searched.

9. Guiding training in gym application for beginner based on android mobile is a solution that made researchers on the problems that arise for beginners in the gym as it has been delivered at the beginning by providing a program of exercise and diet adjusted body mass index of users and include alerts meals in the form of notification that was developed using the Java programming language, XML and Database sqlite in Android studio. This application is intended for multiuser that stored in the database sqlite. In future, these applications can be developed with the capability of storing the alert notification to the database by its own.

10. Introduction of the Gym Management System Gym Management Software: Introduction of the Gym Management System Gym Management Software could be a gym and health membership management system. you'll be able to keep records on your members, their memberships, and have quick and straightforward communication between you and your members. Gym Management also includes a booking system, point of sale, banking, accounting, concessions and encompasses a range of reports that help within the management of your club. Gym Management Software could be a complete gym and recreational facility systems program which takes care of all of your members, memberships and activities. it's designed for gyms, recreation centres, and health clubs

Existing system

Ample of fitness centres are working manually and the current system is costly, also it is very time consuming because it includes a lot of paperwork and storage. It is really difficult task to manually handle the system. But nowadays Automation made easy to work. The current system which are present in market is very costly and other gym haven’t computerized, that’s the reason why gym is not adapting the automotive aspects. The existing systems are Time consuming in which records are to be manually maintained it consumes a lot of time and human efforts, Lot of paper work is involved as the records are maintained in the files & registers, Storage requirement for files and registers are increased by time, existing system is Less reliable due to use of papers for storing valuable data information is not at all secure and reliable. Accuracy is not up to the marks as the system is in manual there are lot many chances of human errors. These can cause errors in calculating or maintaining customer details and subscription one single mistake cause high financial damage to Gym management.

Proposed system

The proposed system is affordable and highly secured, because its is encrypted by login window it requires the username and password which is the most useful way to secure the data without password it won’t be accessible, this system maintains all the record for all subscription and transactions. Subscription wise all exercise and employee information separately managed by application. This application can work on any windows version and it is user friendly so anyone can easily adapt the working mechanism of application. The objective of proposed system is to enhance the existing system in such way to make it affordable. This application is able to store large amount of data. There is no delay of saving any information or while searching the information it overcomes time consuming factor of existing system, Simple and clean interface make it simple. All the information and data are end to end encrypted.

Conclusion

The new computerized system was found to be much efficient, faster, reliable and user friendly then the existing system, the system has been designed step by step and tested successfully. It eliminates the human efforts, 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. The system is further improve in future.
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