

Gym Management System

Pathan Shahebaz Khan Feroz Khan¹, Pachpute Kshitija Mohan¹,
Kamble Prajakta Gautam¹, Shaikh Alphiya Munir¹, Prof. Nagaraju Bogiri²

¹Student, ²Assistant Professor,
^{1,2}KJ College of Engineering Management and Research, Pune, Maharashtra, India

ABSTRACT

The existing system is a manual system. Here the member needs to save his information in the Registers maintained by the Gym. There is no sharing is possible if the data is in the form of paper. The manual system gives very less security for saving data; some data may be lost due to mismanagement. It's a limited system and less users friendly. Searching of particular information is very difficult and takes lot of time. It is very difficult to maintain records manually as manual systems are more prone to errors and data loss. To overcome this drawbacks the Gym Management Software is introduced which gives computerization of the existing system is proposed. The new system must completely remove all manual burdens and provides efficient on the entry system.

KEYWORDS: Database management, Sturt Framework, Design system

How to cite this paper: Pathan Shahebaz Khan Feroz Khan | Pachpute Kshitija Mohan | Kamble Prajakta Gautam | Shaikh Alphiya Munir | Prof. Nagaraju Bogiri "Gym Management System" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-3, April 2022, pp.459-462, URL: www.ijtsrd.com/papers/ijtsrd49542.pdf



Copyright © 2022 by author(s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



I. INTRODUCTION

"Gym Management System" is to provide a system which handles the information of the people coming into the gym and maintaining their health care. It takes care of all their health information. It even maintains the data of what and all medicines used by the people. who join the gym. Data will be stored in the database. It also maintains the people's attendance, gym records. The project is designed to facilitate a gymming and fitness center to automate its operations of keeping's records and store them in of a large and user friendly database further facilitating easy access to the personnel. Our Gym Management Software is a complete gym and recreation facility system program which looks after all of your members, memberships and activities. it is designed for gyms, recreation centers, and health clubs. Our Gym management Software provides lots of functions such data entry of customer, keeping records of all the things about customer's fees, plan, and physical fitness which help to provide good quality of services to customer from Gym managers. in this proposed

system also provide the total information about machinery and data of coaches is also stored in it. Services provided by Gym are also handled by this system Gym Management System is for those who run a gym business. Before doing anything we did a decent research on major difficulties for gym owners. We examined carefully about how to make a huge registering system without failure as well as different functions for different kind of user depending on their privilege. There is too much paperwork in operation. Processes are slow and monotonous to operate. The system is less accurate i.e Admin often makes input mistakes. The Admin also needs to track attendance, manage payments, manage trainers and clients, assign trainers to clients and create periodic reports.

II. LITERATURE SURVEY

To make the efficient performance of the gym there is a requirement of the software. The awareness of being healthy is increasing day by day. That is the reason that most people pre-fer the gym to maintain

their bodies. Exercise and swimming are also very healthy techniques to make yourself healthy and fit. Unfortunately, they are very time-consuming. So normally people prefer to join the gym for their body maintenance. There are many reasons for joining the gym. First is the use of amenities, the professional trainer, and the motivation which person gets in the gym.

As per [1] In order to this problem, a library management system based on struts and hibernate frame is put forward. This system has MVC architecture. System simplifies the work of library management and has good extensibility. As indicated by [2] Any business that does not have a website is missing out on one of the most powerful marketing tools available to them. The main reason that it is important for businesses to have a website is how people are likely to find you. These days most people will go online and research products and companies before they make a purchase. Usually, the client uses MS Excel or paper, and maintains their records, however it is not possible them to share the data from multiple system in multi user environment, there is lot of duplicate work, and chance of mistake. When the records are changed they need to update each and every excel file. The Smart Gym Management System eliminates most of the limitations of the existing software. Increasing efficiency and effectiveness, automation, accuracy, user-friendly interface, information availability, communication capacity, maintenance, cost reduction makes our system smarter than the existing system. As indicated by [3] Nowadays we come across a number of cases of cyber crime, manipulation of data by unauthenticated users, hacking of personal accounts etc. due to traditional password based security systems which could be hacked. In biometric authentication technology which could not be hacked as this system consists of software which identifies or validates the user by matching the data being fed with the digital images of the unique characteristics of the user. As per [4] The client uses MS Excel or paper, and maintains their records, however it is not possible for them to share the data from multiple system in multi user environment, there is lot of duplicate work, and chance of mishap. Every Excel file need to be updated once records are been changed The Fitness Freak Sys-tem rejects most of the disadvantages of the existing software. Increasing efficiency and effectiveness, automation, accuracy, user-friendly interface, information availability, communication capacity, maintenance, cost deduction makes our

system smarter than the existing system. As indicated by [5] how to use the combined framework to realize the application and design of the management system for scientific research projects. This system can efficiently solve the problem of the poor expansibility and poor maintainability in the application of traditional Java Web. As indicated by [6] This work presents a design for online database and transactions management. The design system can manage employee, member, facilities, 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 a graphical user interface (GUI). As per [7] The project gym management system is prepared to eliminate the time required for existing system in the previous system there is no records secured as all the paper work was there and if the paper misplaced then all the records will gone so to avoid all these problems this gym management system project has been developed. Through these all the records are maintained and secured. It also requires software which store data about staff and persons. As indicated by [8] Attendance documentation is a crucial metric for determining a student's dedication, qualification, and status. Several types of systems have been developed for automated attendance. The majority of these implementations were built on a single factor template, representing a line of security error. In recent years, rapid development has taken place in several applications such as authorization, data access, and access control by implementing biometrics and radio frequency identification technologies. This research work focuses on designing a smart protocol for RFID authentication in combination with finger-print biometric information, which guarantees confidentiality, identity verification, and data protection. Reaction time and event performance evaluation were the tests performed on the system. Ten students with unique fingerprints and RFID cards are assessed for the test. The test results show an average duration of 20.61 respective seconds for each student, and zero percent of false refusal rate was recorded in the implementation. Finally, the result shows the system is reliable and efficient. Each result revealed high-speed performance due to software and hardware coordination. Biometric systems provided data integrity and security, RFID provided limited complexity, and the proposed method's technical programming pattern provided an average run time.

III. PROPOSED WORK

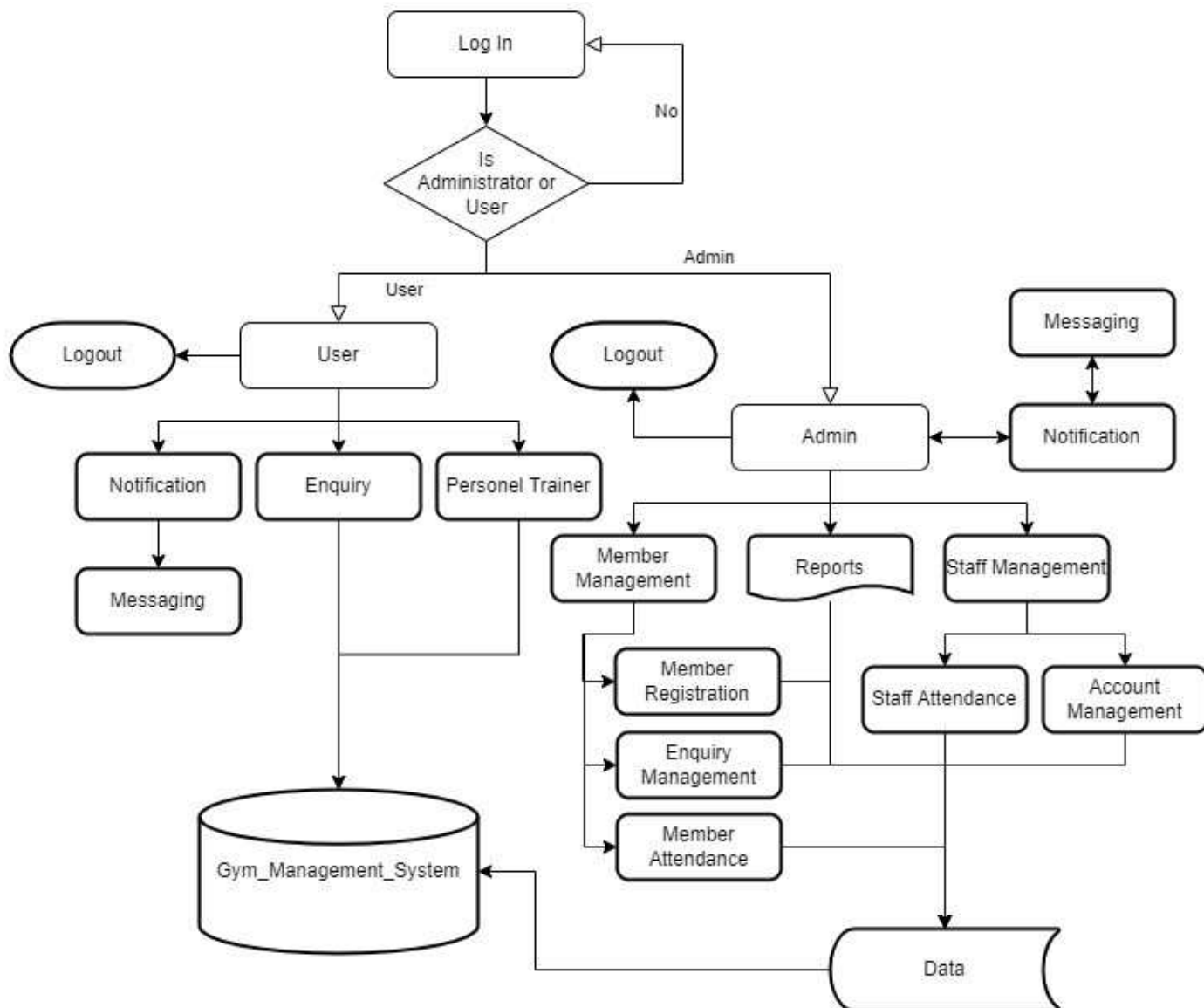


Fig 1 System diagram

The Application would contain following modules:

- Administrator login.
- User Login.
- Account.
- Notification.
- Enquiry.
- Personal Trainer.
- Messaging and mailing System for Members.
- Various Reports.
- Attendance For members.
- Expenses for the Gym.

The development of this new system contains the following activities:

- User Friendliness is provided in the application with various controls provided by system Rich User Interface.
- Automation of the entire process keeping in the view of database integration approach.
- The system makes the overall Gym management much easier and flexible.

- The user information can be stored in centralized database which can be maintained by the system.
- This application can give the good security for user information as due to the authentication provided by this application only registered Users can access.
- There is no risk of data loss at any level while the project development is under process.

IV. CONCLUSION

In this Paper, We Have created 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 employee will e also benefited by the proposed system. Hence, the system module named Messaging system for members of Gym Management Software is added. By adding this module sending notifications and updates to the members about their remaining fees and sending update about gym schedules is get easy.

REFERENCES

- [1] Minghui Liu, Erxiang Chen, "Research and Design on Library Management System Based on Struts and Hibernate Framework," WASE International Conference on Information Engineering, ICIE, 2009.
- [2] A. V. Dinesh Kumar, K Bhargav Ram Rayal, M. Saraswathi, "Smart Gym Management System," IJSRET, Trends Volume 6, Issue 3, May-June-2020.
- [3] Kavita Gupta, "Biometric Authentication" International Journal of Engineering Research Technology (IJERT), VIMPACT 2017.
- [4] Mr Akshay Sambare, Dipali Bondre, Sachin Thorat, Miss Archana Vishe, Prof. Ankit Sanghavi "Gym Monitoring Framework for Fitness Management System," International Journal of Advanced Research in Computer and Communication Engineering Vol. 6, Issue 3, March 2017.
- [5] Jing Yang, Bei Jing, Leixiao Li, Yan Zhao 'Combined Framework of Struts and Hibernate' Combined Framework of Struts and Hibernate," IEEE-2011.
- [6] Muhammad Adul Shakoor, Muhammad Abbas, Muhammad Irfan Mehdi, Sajjad Hussain, Ashraf Ali "DATABASE AND TRANSACTIONS MANAGEMENT SYSTEM FOR A SMART GYM," Sci-Int, 2018.
- [7] Kasliwal Mahima, Raundal Pooja, Wagh Niyati, G. M. Lodha, "Gym Management System". HBRP -Publication, 2019.
- [8] E. O. Badmus, O. P. Odekunle, and D. O. Oyewobi, "Smart Fingerprint Biometric and RFID Time-Based Attendance Management System". Vol 5, Issue 4, EJECE, July 2021.
- [9] Donald Brown, Chad Michael Davis, and Scott Stan, "Struts 2 in Action", ISBN: 193398807X, May, 2008.
- [10] James Holmes, "Struts 2: The Complete Reference", ISBN-10: 0071489908, October 24, 2008.
- [11] Christian Bauer and Gavin King, "Hibernate in Action", ISBN: 193239415X, 2004.
- [12] Jeff Linwood and Dave Minter, "Beginning Hibernate", ISBN: 187647534X, Apr, 2007.
- [13] Jim Keogh, "j2ee: the complete reference", ISBN: 187647534X, 2008.