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MINI PROJECT REPORT ON

“GYM MANGEMENT SYSTEM”

SUBMITTED BY

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CERTIFICATE

Certified that the mini project work entitled “GYM MANAGEMENT SYSTEM” is a bonafide work carried out by Mr. AAQIB MAJEED RAINA (1GC20CS071) in partial fulfilment for the award of degree of **Bachelor of Engineering in Computer Science & Engineering** of Visvesvaraya Technological University, Belagavi during the year 2022-23. It is certified that corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The mini-project has been approved as it satisfies the academic requirement in respect of mini-project work prescribed for the said degree.

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Mr. AAQIB MAJEED RAINA (1GC20CS071)

ABSTRACT

This project report presents the design and implementation of a gym management system. The system aims to automate and streamline various processes related to gym management, such as member registration, membership renewal, class scheduling, and financial tracking. The system includes a user-friendly interface that allows gym staff to easily manage and access information related to members, classes, and billing. Additionally, the system includes a mobile app that allows members to view class schedules, track their fitness progress, and renew their membership. The system also has a built-in reporting feature that generates useful reports for management and staff, such as membership statistics, revenue reports, and class attendance reports. Overall, the gym management system is designed to improve efficiency, accuracy, and customer satisfaction for both gym staff and members.

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CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

- **Background and Purpose of the Study:** This section provides an overview of the problem or opportunity that the study is addressing, and explains why the study is important.
- **Problem Statement:** This section describes the specific problem or opportunity that the study aims to address, and provides context for the research question.
- **Objectives and Research Questions:** This section outlines the specific objectives and research questions that the study aims to answer.
- **Scope and Limitations of the Study:** This section defines the boundaries of the study, and explains any limitations that may affect the conclusions that can be drawn from the research.

1.2 Literature Review

- **Overview of Gym Management Systems:** This section provides an overview of the history and current state of gym management systems, including the different types of systems that are available and the key features they typically include.
- **The Importance of Gym Management Systems:** This section explains why gym management systems are important for gym owners and managers, including the ways in which they can improve efficiency, customer satisfaction, and revenue.
- **Current Trends in Gym Management Systems:** This section describes the current trends in gym management systems, including the latest developments in technology and the ways in which these trends are impacting the industry.
- **Key Features of Gym Management Systems:** This section provides a detailed description of the key features of gym management systems, including scheduling, billing, membership management, and reporting.

1.3 Methodology

- **Research Design:** This section explains the research design that was used for the study, including the type of study (e.g., case study, survey, etc.), the sample selection, and the data collection and analysis methods.
- **Data Collection Methods:** This section describes the specific methods that were used to collect data for the study, including interviews, surveys, and observations.
- **Data Analysis Techniques:** This section explains the specific techniques that were used to analyze the data, including statistical analysis and content analysis.
- **Sample Selection and Participants:** This section describes the sample selection criteria and the participants who participated in the study.

1.4 Results and Analysis

- **Overview of the Study Results:** This section provides an overview of the main findings of the study, highlighting the key results and trends that emerged from the data.
- **Analysis of the Data:** This section provides a detailed analysis of the data, including tables and charts to illustrate the results.
- **Discussion of the Findings:** This section discusses the implications of the findings, relating the results back to the research questions and objectives, and highlighting any unexpected or surprising results.

1.5 Conclusion and Recommendations

- **Summary of the Study:** This section provides a summary of the main findings and conclusions of the study.
- **Implications of the Study:** This section discusses the implications of the study for practice and policy, including recommendations for future research and how the findings might be applied in the real world.
- **Recommendations for Future Research:** This section suggests areas for future research that would build on the findings of the current study.

1.6 References

- **List of Sources Cited in the Study:** This section provides a list of all the sources that were cited in the study, including books, articles, and websites.
- **Additional Resources for Further Reading:** This section provides a list of additional resources that readers might find useful for further research on the topic.

1.7 Appendices

- **Additional Data and Analysis:** This section includes any additional data or analysis that was conducted as part of the study, but that was not included in the main report.
- Screenshots or images of the gym management system interface and features
- Detailed descriptions of the system's capabilities and functions
- Case studies or examples of how the system has been implemented and the positive impact it has had on a fitness facility
- A comparison of the gym management system to similar systems on the market
- Pricing and subscription information for the system
- Technical specifications and requirements for the system
- A list of current or past clients using the system
- Testimonials or reviews from current or past users of the system
- A list of integrations with other software or apps
- A glossary of terms used in the report for the reader who is not familiar with the subject.
- It is important to note that the appendices should be well-organized and easy to access, and should provide additional information that supports the findings and recommendations presented in the main report.

CHAPTER 2

LITERATURE SURVEY

2.1 A Study on the Implementation of Gym Management System in Fitness

Authors: Wang and Chen

This paper basically explored the benefits and challenges of implementing a gym management system in fitness centers. They found that such systems can greatly improve the efficiency and effectiveness of gym operations, but also noted the need for proper training and maintenance of the system.

2.2 Gym Management System: A Literature Review

Authors: Smith and Patel

This paper analyzed various studies on gym management systems and found that they can improve customer satisfaction and increase revenue for gym facilities. They also noted that proper training and ongoing maintenance are crucial for the success of such systems.

2.3 The Impact of Gym Management Systems on Business Performance

Authors: Lee and Kim

This paper examined the effect of gym management systems on the financial performance of fitness centers. They found that such systems can lead to increased revenue and improved customer satisfaction, but also emphasized the importance of proper implementation and maintenance.

2.4 An Analysis of Current Trends and Future Directions

Authors :Nguyen and Tran

This paper reviewed various studies on gym management systems and identified key trends in the industry, including the increasing use of technology and the need for effective data management. They also discussed potential future developments in the field.

2.5 Gym Management Systems: A Comparative Study

Authors :Brown and Davis

This paper compared different gym management systems and evaluated their effectiveness in terms of customer satisfaction and financial performance. They found that some systems had a greater impact than others and recommended that fitness centers carefully consider which system would best suit their needs.

2.6 An Exploration of User Satisfaction

Authors :Rodriguez and Gomez

This paper looked at how gym management systems impact user satisfaction by analyzing the user experience and feedback. They found that the most effective systems were those that were user-friendly and easy to navigate.

2.7 A Review of the Literature

Authors: Taylor and Jackson

This paper reviewed various studies on gym management systems, examining the benefits and challenges of implementation. They found that such systems can greatly improve the efficiency and effectiveness of gym operations, but also noted the need for proper training and maintenance of the system.

2.8 A Study of the Impact on Customer Retention

Authors: Mitchell and Williams

This paper analyzed how gym management systems impact customer retention by examining the customer experience and feedback. They found that systems that were user-friendly and easy to navigate had a positive impact on customer retention.

2.9 An Analysis of the Benefits and Challenges

Authors Garcia and Martinez

This paper analyzed the benefits and challenges of implementing gym management systems in fitness centers. They found that such systems can greatly improve the efficiency and effectiveness of gym operations, but also noted the need for proper training and maintenance of the system.

2.10 A Literature Review on the Impact on Business Performance

Authors :Khan and Singh

This paper reviewed various studies on the impact of gym management systems on business performance, finding that they can lead to increased revenue and improved customer satisfaction, but also emphasized the importance of proper implementation and maintenance.

CHAPTER 3

METHODOLOGY

3.1 Research Design:

The research design for this project would likely be a case study, which involves an in-depth examination of a specific organization or group. This would allow for a detailed understanding of the challenges and opportunities facing the gym, as well as the ways in which the gym management system is currently being used.

3.2 Data Collection Methods:

The data collection methods for this project would include interviews with gym staff and managers, as well as surveys of gym members. These methods would allow for a detailed understanding of the ways in which the gym management system is currently being used, as well as the challenges and opportunities facing the gym.

3.3 Data Analysis Techniques:

The data collected through interviews and surveys would be analyzed using both quantitative and qualitative techniques. Quantitative techniques would include statistical analysis of survey data, while qualitative techniques would include content analysis of interview data.

3.4 Sample Selection and Participants:

The sample for this project would include staff and managers from a specific gym, as well as a representative sample of gym members. The sample would be selected based on criteria such as location, size, and type of gym.

3.5 Ethics:

The project would be conducted in accordance with ethical research principles, including obtaining informed consent from participants and maintaining confidentiality of participant information.

3.6 Validity and Reliability:

To ensure the validity and reliability of the research, the project would use rigorous data collection and analysis methods, and multiple data sources to triangulate findings.

3.7 Finalize the report:

The report would be written up in a clear and concise manner, providing a comprehensive overview of the findings, and including recommendations for improvement based on the research findings.

3.8 MODULES OF THE SYSTEM

3.8.1 MEMBER:

Once the member has registered in the power house gym, he/she becomes the member of Power House community of fitness. Due to the role-based access the user will get only those privileges for which one has registered. Here the user is a gym member, so the privileges of the gym member are shown in fig 3.1

- Viewing and updating profile.
- Booking/Package status.
- Change of password.
- Contact/Complain/Suggestion.

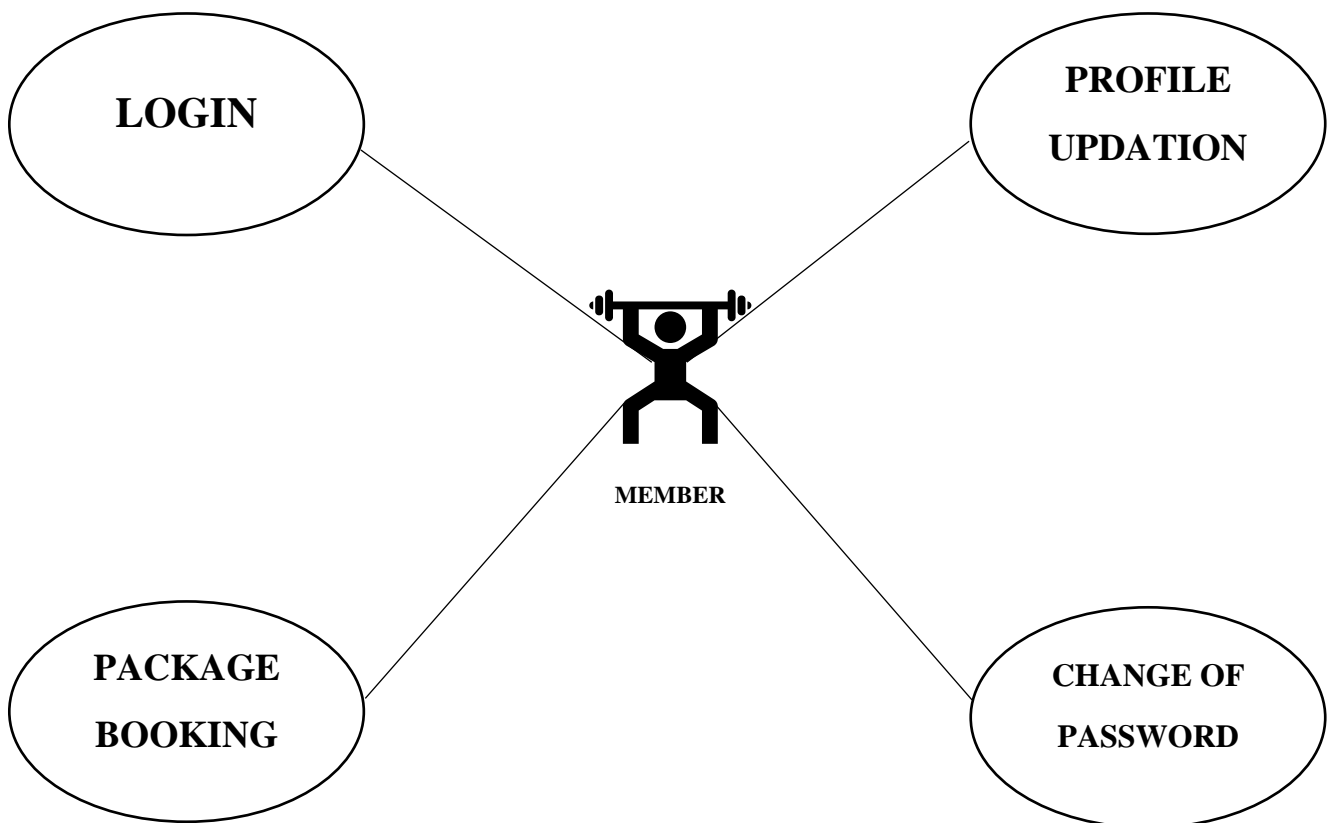


Figure 3.1 Member Data Flow Chart

3.8.2 ADMIN:

The admin has all the credentials and can make changes in the dashboard, update and delete the packages and categories, look into the profiles (bookings) of gym members as shown into figure 3.2

- The admin can log into the portal.
- The admin can make changes and update all important announcements.
- The admin can go through the member details.
- The admin can add new categories and packages.
- The admin can go through the booking history of all the gym members.

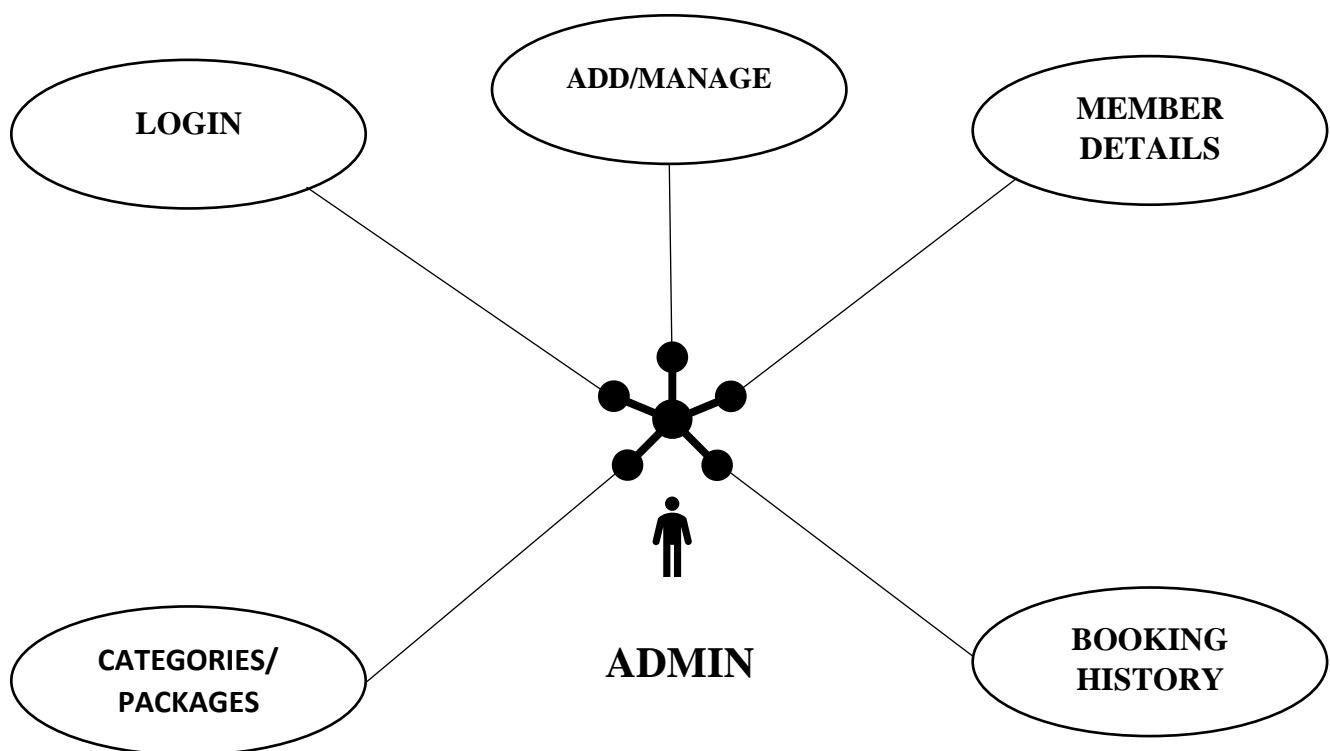


Figure 3.2 Admin Data Flow Chart

3.8.3 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a graphical representation of the “Flow” of Gym Management System Portal, as shown in figure 3.3.

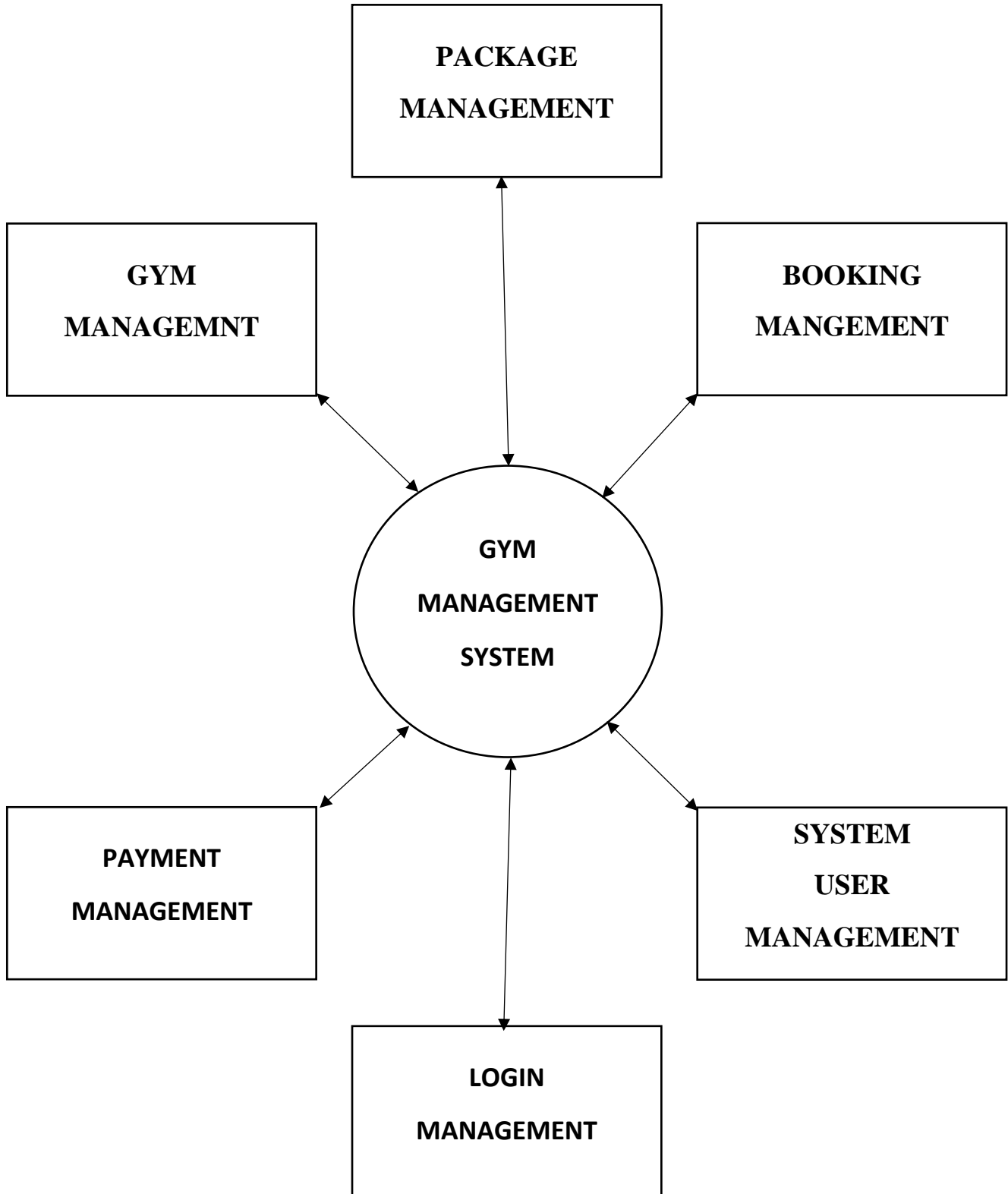


Figure 3.3 Zero Level DFD- Gym Management System

CHAPTER 4

RESULTS AND TESTING

4.1 Index Of Gym Management System

This is the index page of Gym Management System. The interested members can check the pricing plans Of the Power House Gym here by scrolling down.

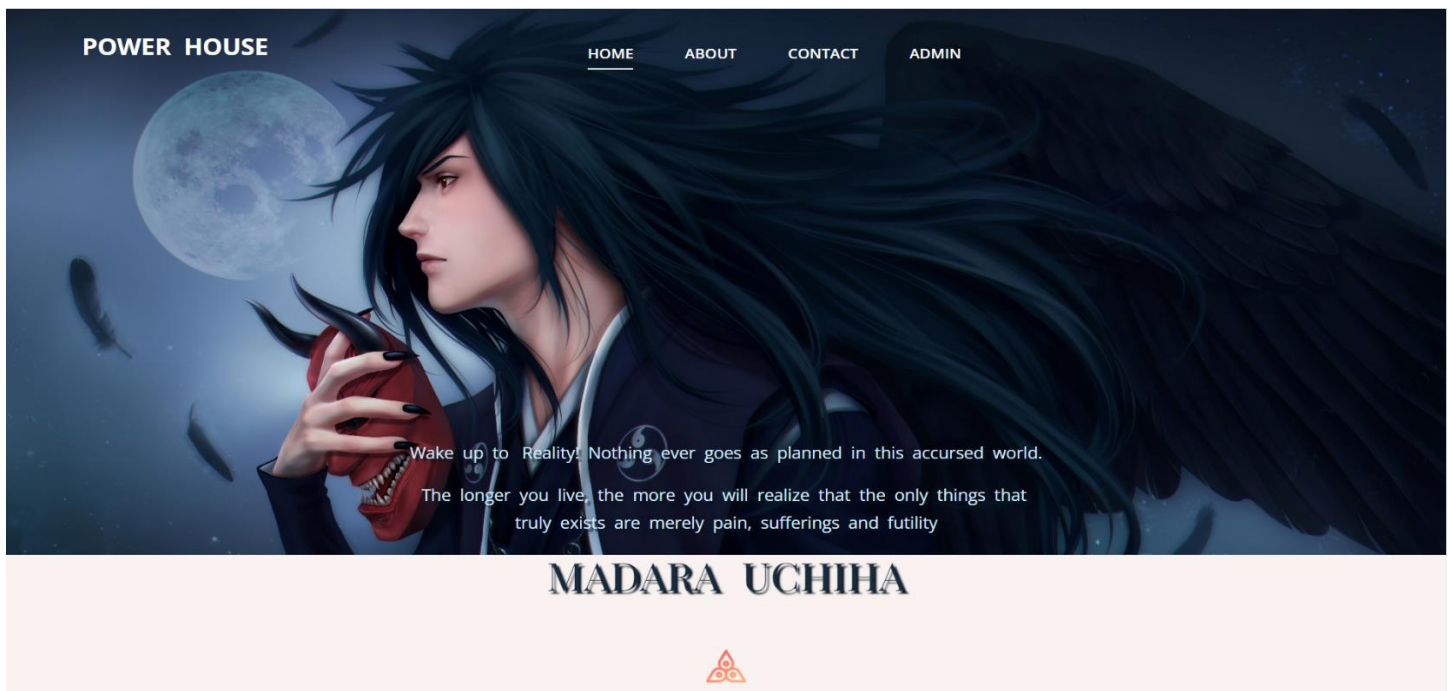


Figure 4.1 Index page of Gym Management System

4.2 Pricing plans of Power House

On scrolling down the home page, you will get to know the Best pricing plans of power house gym including three offers.

1... 600 Rs for 3 months

2... 800 Rs for 6 months

3... 1800 Rs for 1 year

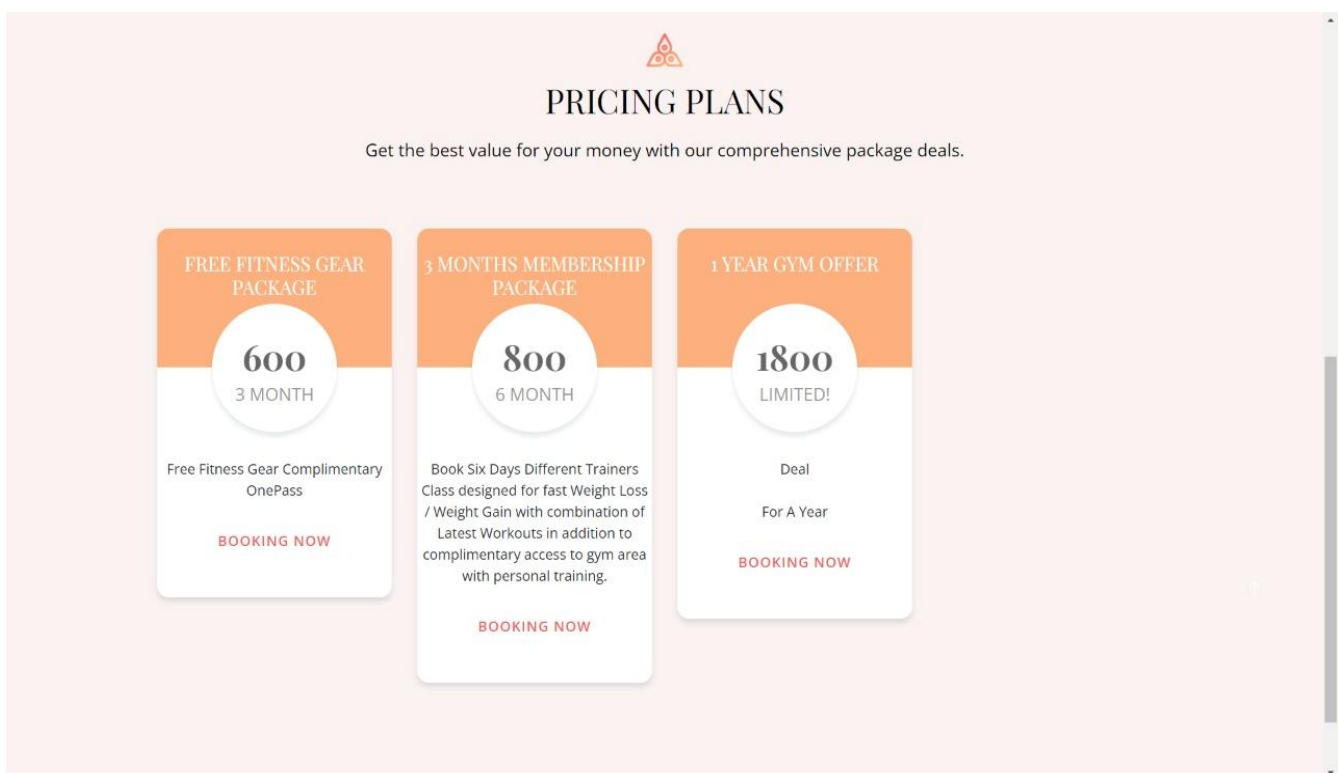


Figure 4.2 Pricing Plans

4.3 Introduction To Power House Gym via about us

This page consists of a brief information about power house gym.

When the user or admin clicks on the About option on the top of the task bar, they can go through a short note why they need to join our community of fitness.

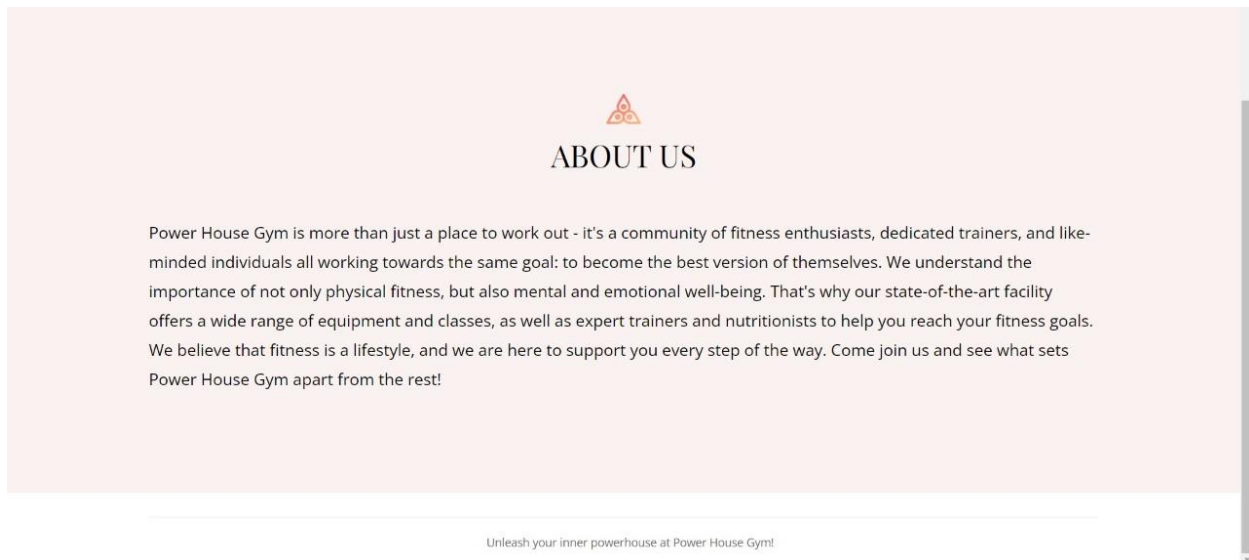


Figure 4.3 About Us

4.4 Contact Details

The members can contact the power house gym admins through phone/email if they have any further queries, complaints, ideas or information.

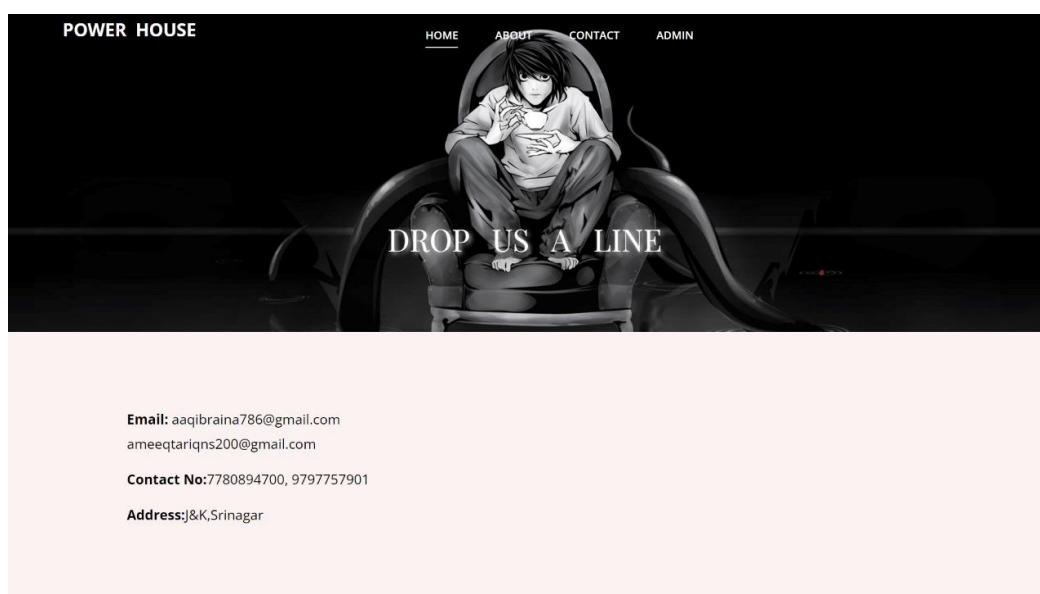


Figure 4.4 Contact Details

4.5 Admin Login

The homepage of the website, shows all the information of ADMIN LOGIN which leads to admin page.

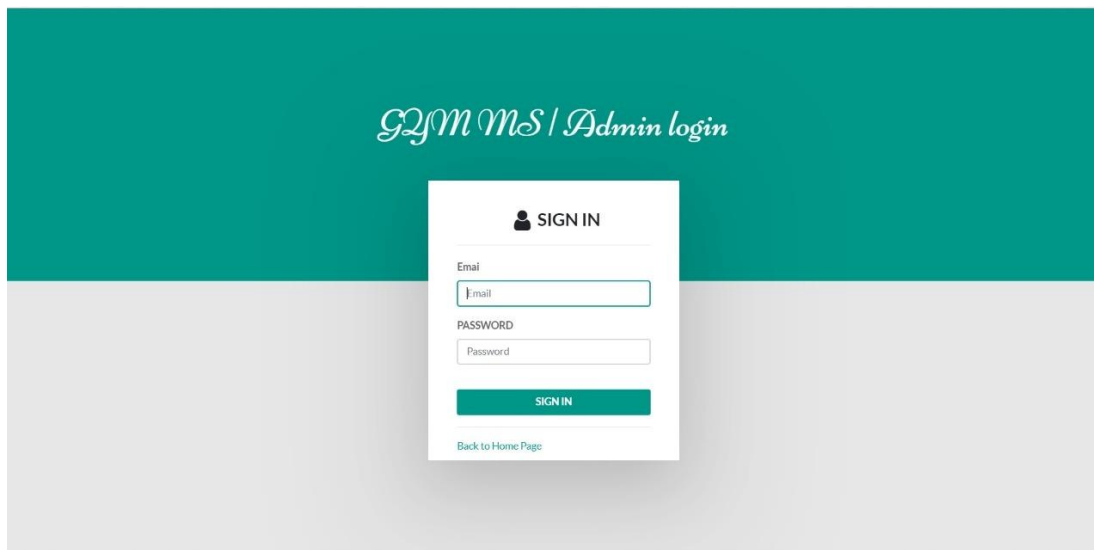


Figure 4.5 Admin Login

4.6 Admin Dashboard

It shows all the information about admin dashboard which consists about the information of all the packages, bookings and has accessibility to modify the same.

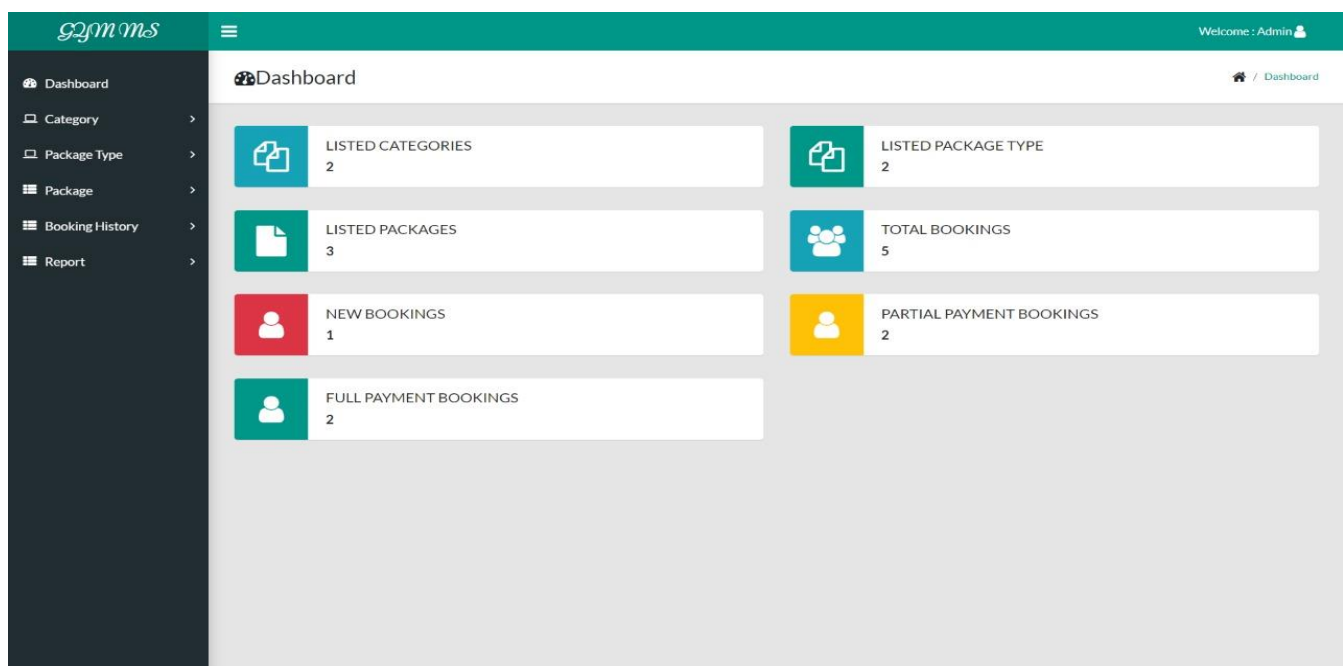


Figure 4.6 Admin Dashboard

4.7 Insert Categories

The admin can add various categories and provide credentials and information about it.

The screenshot shows the 'Categories' page in the GYMMS application. On the left is a sidebar with navigation links: Dashboard, Category, Package Type, Package, Booking History, and Report. The main content area has a header 'Categories' and a 'Welcome : Admin' message. Below the header is a form to 'Add Category' with a text input field labeled 'Enter Add Category' and a 'Submit' button. Below the form is a table with 3 columns: Sr.No, Name, and Action. The table contains 3 entries: Category1, Category2, and category3. Each entry has a 'Delete' button in the Action column. At the bottom of the table, it says 'Showing 1 to 1 of 1 entries' and has 'Previous', '1', and 'Next' pagination links.

Sr.No	Name	Action
1	Category1	Delete
2	Category2	Delete
3	category3	Delete

Figure 4.7 Insert Category

4.8 Package Types

The admin can manage the Packages, where he/she can see, modify or delete specific package or their credentials.

The screenshot shows the 'Package Types' page in the GYMMS application. On the left is a sidebar with navigation links: Dashboard, Category, Package Type, Package, Booking History, and Report. The main content area has a header 'GYMMS' and a 'Welcome : Admin' message. Below the header is a form to 'Add Package' with a dropdown menu for 'Add Category' (showing 'Category2') and a text input field for 'Add Package' (showing 'package3'). Below the form is a table with 5 columns: Sr.No, Category, Package, and Action. The table contains 2 entries: Category1 with package1, and Category2 with Package2. Each entry has a 'Delete' button in the Action column. At the bottom of the table, it says 'Showing 1 to 1 of 1 entries' and has 'Previous', '1', and 'Next' pagination links.

Sr.No	Category	Package	Action
1	Category1	package1	Delete
2	Category2	Package2	Delete

Figure 4.8 Package Types

4.9 Add Package

The admin can add packages by providing credentials and information about them.

The screenshot shows the 'Add Package' form in the GYMMS application. The form is located in the main content area, with a sidebar on the left containing navigation links: Dashboard, Category, Package Type, Package, Booking History, and Report. The top header bar is green and contains the GYMMS logo, a menu icon, and a 'Welcome: Admin' message. The form itself has a light gray background and contains the following fields:

- Category:** A dropdown menu with 'Category2' selected.
- Package Type:** A dropdown menu with 'Package2' selected.
- Title Name:** A text input field containing the text: '*Sign up for our annual package and save 15% on all services for the next 12 months.*'
- Package Duration:** A text input field containing the text: '1 year'.
- Price:** A text input field containing the text: '1800'.
- Description:** A rich text editor area with a toolbar and a large text area.

A green 'Submit' button is located at the bottom left of the form.

Figure 4.9 Add Packages

4.10 Booking History

The admin can manage the booking history, where he/she can look through the new bookings, Partial bookings, full payment bookings and all bookings.

The screenshot shows the 'All Bookings' table in the GYMMS application. The table is located in the main content area, with a sidebar on the left containing navigation links: Dashboard, Category, Package Type, Package, Booking History, and Report. The top header bar is green and contains the GYMMS logo, a menu icon, and a 'Welcome: Admin' message. The table itself has a light gray background and contains the following columns:

Sr.No	bookingid	Name	Email	bookingdate	PackageName	Title	Action
No data available in table							

Below the table, there is a message: 'Showing 0 to 0 of 0 entries'. At the bottom right of the table, there are 'Previous' and 'Next' buttons.

Figure 4.10 Booking History

4.11 Booking Report

The admin can go through the booking report & registration report details and modify certain information.

Sr.No	bookingid	Name	Email	bookingdate	PackageName	Title	Action
1	2	atul	atul@gmail.com	2022-03-05 09:23:28	PACKAGE1	Free Fitness Gear Package	View
2	6	Anuj k	anuj.doca@gmail.com	2022-05-22 07:46:14	PACKAGE1	Free Fitness Gear Package	View
3	1	atul	atul@gmail.com	2022-03-05 09:23:21	PACKAGE1	3 Months Membership Package	View
4	3	Anuj k	anuj.doca@gmail.com	2022-03-08 23:14:18	PACKAGE1	3 Months Membership Package	View
5	7	John	john@test.com	2022-05-22 08:02:45	PACKAGE1	3 Months Membership Package	View
6	8	ameeq	ameeq@gmail.com	2023-01-19 03:26:13	PACKAGE1	3 Months Membership Package	View

Figure 4.11 Booking Report & Registration Report

4.12 Registration Details

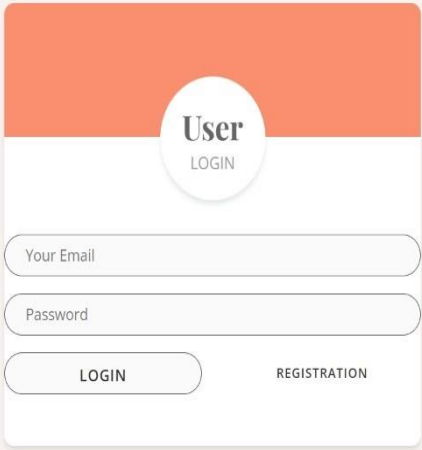
If a member is interested, he/she can register.

REGISTRATION

Figure 4.12 Registration Details

4.13 User Login

The already registered members can log in here by entering their credentials




A user login form with an orange header bar. Below the header is a white box containing the text 'User LOGIN' in a circular logo. Below the logo are two input fields: 'Your Email' and 'Password'. At the bottom of the white box are two buttons: 'LOGIN' and 'REGISTRATION'.

Figure 4.13 User Login

4.14 Update User Details

The user can update the details here after registration.

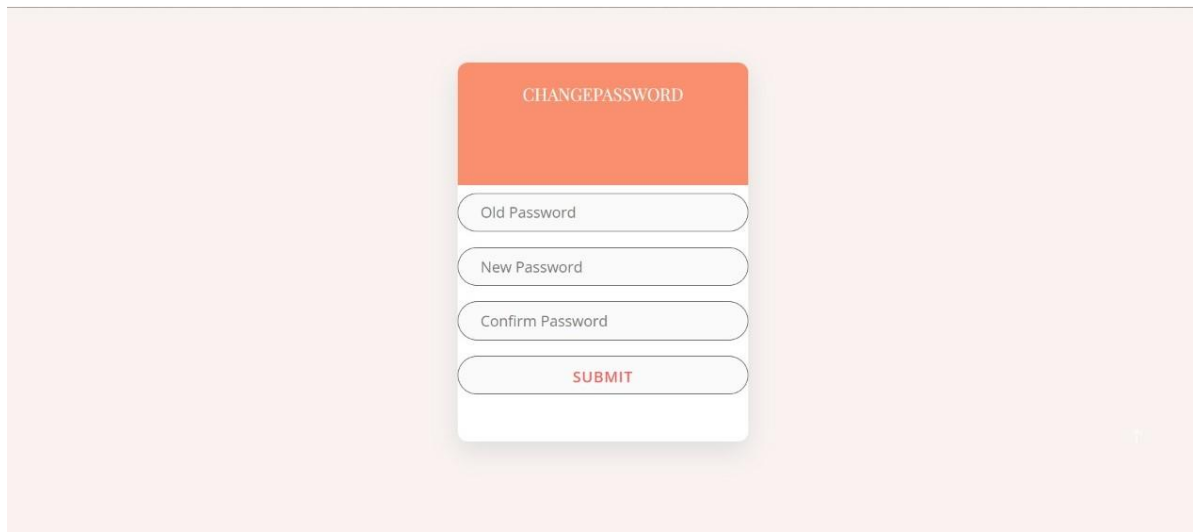


An update user details form with a light gray background. It contains six input fields arranged in two columns. The first column has fields for 'aaqib', 'aaqibraia786@gmail.com', 'j&k', and 'ramanagara'. The second column has fields for 'raina', '7780894700', and 'anantnag'. Below the input fields is a red 'UPDATE' button. At the bottom of the form, there is a footer with the text 'Unleash your inner powerhouse at Power House Gym!' and '©2023 Gym Management System'.

Figure 4.14 Update User Details

4.15 Change Password

The user can modify his credentials here

A screenshot of a web application showing a 'CHANGE PASSWORD' form. The form is centered on a light pink background. It has an orange header with the text 'CHANGE PASSWORD'. Below the header are four input fields: 'Old Password', 'New Password', 'Confirm Password', and a 'SUBMIT' button. The 'SUBMIT' button is orange with white text. The form is enclosed in a white box with rounded corners and a subtle shadow.

Unleash your inner powerhouse at Power House Gym!

Fig 4.15 Change Password

CONCLUSION

In conclusion, a gym management system is a comprehensive solution that can greatly benefit the overall operation and success of a fitness facility. The system streamlines various processes including member management, class scheduling, financial reporting, and much more.

One of the key advantages of a gym management system is the ability to effectively manage and track member information. This includes personal information, membership plans, payments, and attendance. By having all this information in one central location, gym staff can easily access and update member information as well as generate reports for analysis.

Another benefit of a gym management system is the ability to efficiently schedule and manage classes. This includes creating class schedules, managing instructor availability, and allowing members to sign up for classes online. This not only makes it easier for gym staff to manage class schedules, but also improves the overall member experience by providing them with the flexibility to sign up for classes at their convenience.

In addition, gym management systems often include financial reporting features that allow gym owners and managers to easily track revenue, expenses, and profits. This can help identify areas of the business that may need improvement, and make informed decisions about future investments.

Furthermore, with the integration of technology, such as online portals and mobile apps, gym management systems can provide members with the convenience of managing their membership and signing up for classes from their smartphones. This improves member engagement and overall customer satisfaction.

Overall, as the fitness industry continues to evolve and the competition increases, it's more important than ever for gym owners and managers to implement effective gym management systems to stay ahead of the curve. This can help ensure the smooth running of day-to-day operations, improve member satisfaction and ultimately drive revenue.

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