

Badminton Court Management System

Anusha K¹, Rashmi P², Kiran Kumar M N³

Students, Department of BCA, BMS College of Commerce and Management, Bengaluru, India^{1,2}
Assistant Professor, Department of BCA, BMS College of Commerce and Management, Bengaluru, India³

Abstract: *A badminton court management project can be designed to help manage the scheduling and booking of badminton courts, as well as the payment and maintenance of the courts. The project can be developed as a web-based application or a mobile application, or both, depending on the needs of the users. They can help automate and streamline many of the processes involved in managing badminton courts. The system can provide an online platform for users to view court availability, make bookings, and make payments. It can also keep track of maintenance schedules and send reminders to staff when maintenance is due. This system can solve some problems such as it is time consuming for customer to find a badminton hall to play badminton and badminton hall's owner need a system to easily manage user's booking of their badminton court. The objective of this system is to design a system that can generate a list of badminton halls or badminton courts based on user's preferences. By using this system, customer can book a badminton court via online and badminton hall's owner can use this system to manage user's booking of their badminton court.*

Keywords: Badminton court, Booking, Court Rental ,PHP, MySQL, Allocation

I. INTRODUCTION

A badminton court booking system is a software that allows users to book badminton courts online. The system simplifies court bookings and management by providing facility scheduling tools to manage bookings, memberships, and payments . The booking system can use different scheduling methods, such as First Come First Serve (FCFS) scheduling, to facilitate court booking . The system can also send automated email notifications to avoid no- shows and cancellations .

Flexible work schedules: The system allows users to easily create and manage the perfect work schedules and shifts for their team .

Staff login accounts: The system can provide staff login accounts to handle customer bookings and manage the sports facility and equipment .

These systems can streamline court reservations, event scheduling, and resource allocation . By implementing a booking system for badminton courts, court owners can focus on providing top-notch badminton experiences while the software takes care of the administrative work .

1.1 OBJECTIVE AND GOAL

The objective of the badminton court booking system project is to develop a comprehensive digital platform that simplifies and enhances the process of reserving badminton courts. The primary goal is to provide users with a user-friendly and convenient online booking experience, allowing them to easily check court availability, select preferred time slots, and manage their reservations. The system should offer an online platform where players can easily browse through available courts, select desired time slots, and make reservations. By providing a user-friendly interface, real-time availability updates, automated notifications, and streamlined administrative tools, the online badminton court booking system simplifies the process of booking courts, making it convenient and efficient for both users and administrators.

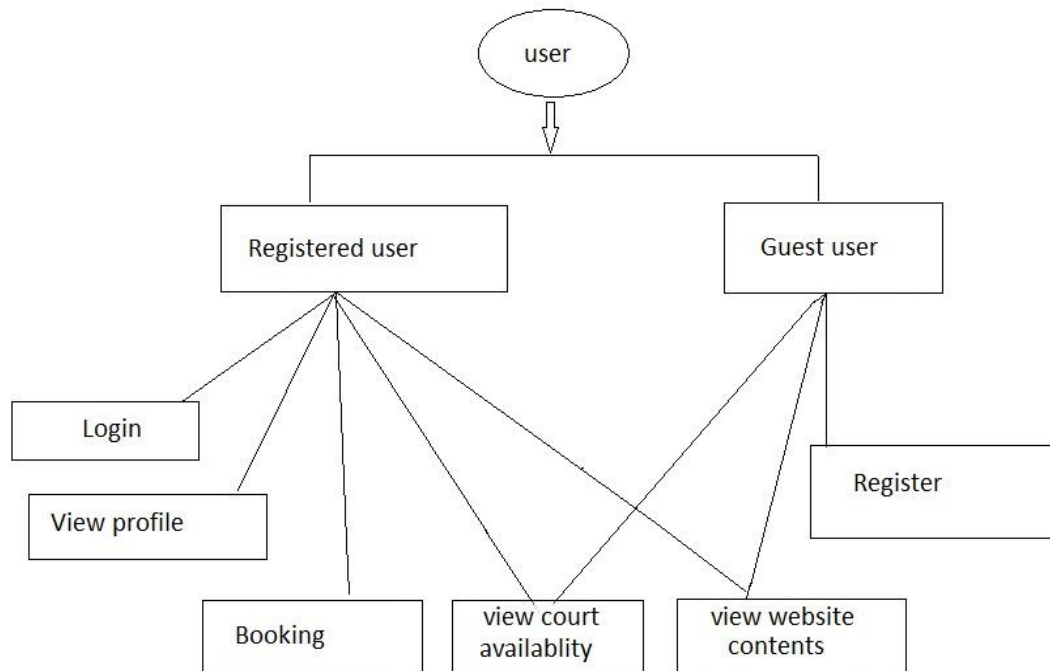
II. METHODOLOGY

XAMPP is a free and open-source software that provides a local web server environment for developers to build and test web applications on their own computer. If you want to implement a web application using XAMPP, you can follow these general steps:

1. Install XAMPP: You can download and install XAMPP from the official Apache Friends website. Once installed, XAMPP should automatically set up a web server environment on your computer.
2. Create a web application: You can use any programming language and framework to create your web application. Write your application code and save it in a folder under the "htdocs" directory in the XAMPP installation folder.
3. Configure the database: If your web application requires a database, you can use the MySQL database that comes bundled with XAMPP. You can create a new database and set up database tables using the phpMyAdmin tool included in XAMPP.
4. Test the web application: You can test your web application by opening a web browser and navigating to `http://localhost/your-folder-name/index.php`, where "your-folder-name" is the name of the folder where you saved your application files. If everything is configured correctly, you should see your web application running.
5. Deploy the web application: Once you have tested your web application and are satisfied with its performance, you can deploy it to a production server for public use. You can copy your application files to a web server and configure the server environment accordingly.
6. Overall, implementing a web application using XAMPP involves setting up a local web server environment, creating a web application using any programming language and framework, and testing and deploying the application.

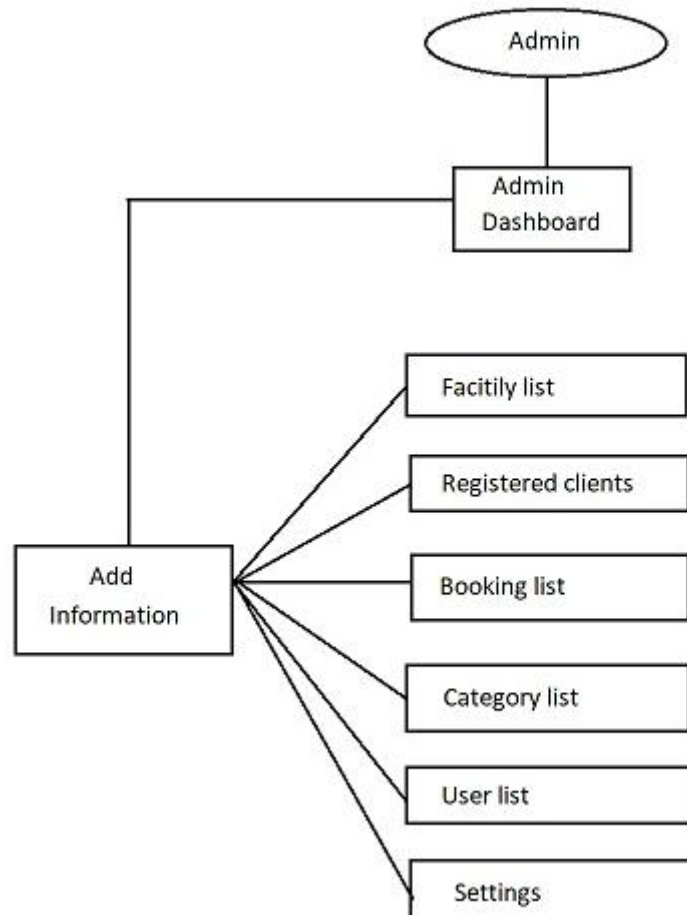
III. DATAFLOW DIAGRAM

A data flow diagram is a graphical representation of the flow of data through an information system. A data flow diagram can also be used for the visualization of the data processing. It is a common practice for a designer to draw a context level DFD.



a) Structure of user DFD

It shows the interaction between the system and the outside entities. This context level DFD, is then exploded to show more detail of the system being modelled. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a function that performs the input into the desired output. A DFD shows movement of data through the different transformations or processes in the system. Data Flow diagrams can be used to provide the end users with the physical idea of where the data they input ultimately has an effect upon the structure of whole system from order to dispatch to restock how any system is developed can be determined through data flow diagram. The appropriate register saved in database and maintained by appropriate authorities.



b) Structure of admin DFD

IV. CONCLUSION

A badminton court booking system allows players to conveniently reserve a court for their desired date and time. They can check the availability of courts in real-time, choose the most suitable slot, and secure their booking without the need for manual coordination or waiting in queues. In summary, the use of a badminton court booking system enhances convenience, time management, court availability, flexibility, fairness, and payment processes for players. It brings organization and efficiency to the overall badminton experience, ensuring a smoother and more enjoyable playing environment.

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