A
Project Report
On
Sports Location Search System

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Submitted to

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Chandubhai S. Patel Institute of Technology (CSPIT)

At: Changa, Dist: Anand – 388421

October 2024

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CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

CERTIFICATE

This is to certify that the report entitled "**Sports Location Search System**" is a bonafied work carried out by **Nisarg Patel(23CS070)** under the guidance and supervision of **Pinal M. Hansora** for the subject **Project-I (CSE204)** of 3rd Semester of Bachelor of Technology in **Computer Science & Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred to the examiner.

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This is to certify that the report entitled "**Sports Location Search System**" is a bonafied work carried out by **Megh Patel(23CS069)** under the guidance and supervision of **Pinal M. Hansora** for the subject **Project-I (CSE204)** of 3rd Semester of Bachelor of Technology in **Computer Science & Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate himself, has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred to the examiner.

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DECLARATION BY THE NISARG PATEL, TEJAS PATEL, MEGH PATEL

We hereby declare that the project report entitled "**Sports Location Search System**" submitted by us to Chandubhai S. Patel Institute of Technology (CSPIT), Changa in partial fulfilment of the requirements for the award of the degree of **B.Tech Computer Science & Engineering**, from the Department of Computer Science & Engineering, CSPIT, FTE is a record of bonafide CSE204 Project-I carried out by us under the guidance of Prof. **Pinal M. Hansora**. We further declare that the work carried out and documented in this project report has not been submitted anywhere else either in part or in full and it is the original work, for the award of any other degree or diploma in this institute or any other institute or university.

Signature of the candidate
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Signature of the candidate
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Signature of the candidate
Megh Patel-23CS069

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

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ABSTRACT

This project involves developing a sports location search system. The primary objective is to enable users to search for and book sports venues across specific cities (Vadodara, Ahmedabad, Nadiad, Anand, Surat, and Rajkot). The solution provides features such as user registration, login, search filtering, booking, reviews, and a comparison feature for different venues. Admin functionalities for managing users, locations, and bookings are also included. The project uses technologies like PHP, HTML, and CSS with a local server setup through XAMPP.

CHAPTER 1: INTRODUCTION

The Sports Location Search System is designed to simplify the process of finding and booking sports venues across selected cities. With the growing demand for accessible platforms to reserve sports facilities, this system serves as a solution for both sports enthusiasts and venue administrators. It allows users to search for sports venues based on location, book them for specific dates and times, and even compare venues based on certain features.

The project provides user-friendly interfaces for registration, login, searching, and booking, along with an admin dashboard to manage locations, users, and bookings. The system is built using PHP for backend operations, HTML/CSS for frontend design, and is hosted locally via XAMPP.

BACKGROUND:

The sports location search system addresses the need for easy online booking of sports venues across major cities. The system aims to simplify the process for users to find available locations for sports activities and book them conveniently.

PROBLEM DEFINITION:

Currently, sports enthusiasts face difficulty in finding and booking venues. There's also a lack of online platforms where users can view, compare, and book venues easily.

MOTIVATION:

To provide a centralized platform that allows users to access sports venues and admins to manage venue data efficiently.

OBJECTIVES AND SCOPE:

- Allow users to search and filter venues based on their location and preferences.
- Implement booking and comparison features.
- Provide administrative tools for managing locations, users, and bookings.

CHAPTER 2: LITERATURE REVIEW:

Existing solutions focus on general venue bookings, but this project targets sports-specific locations. Unlike broader platforms, this system offers location filtering, comparison of venues, and a review system for users.

COMPARATIVE ANALYSIS OF EXISTING PLATFORMS:

Most venue booking platforms, like BookMySports and Playo, focus on booking sports venues but lack advanced filtering options and comparison features. They often cover large cities and popular sports but do not provide specialized services for smaller cities or detailed venue comparisons. Administrative tools for venue management are also limited.

UNIQUE FEATURES IN THE DEVELOPED SYSTEM:

- City-Specific Focus: Targets smaller cities like Vadodara, Ahmedabad, and Rajkot.
- Advanced Filtering and Comparison: Users can filter by sports type and compare venues based on key factors like availability and price.
- Admin Dashboard: Allows venue management, user tracking, and booking supervision.
- User Reviews: A built-in review system for users to rate and provide feedback on venues.

These features make the system more tailored to local needs and provide a more detailed comparison and management experience than existing platforms.

CHAPTER 3: SYSTEM ANALYSIS

FUNCTIONAL REQUIREMENTS:

- User Registration and Login (login.php, registration.php)
- Location Search (search.html)
- Venue Booking (booking.php)
- Review Submission (reviews.php)

NON-FUNCTIONAL REQUIREMENTS:

- Security (session management, admin control)
- Usability (clear user interfaces for booking and search)

CHAPTER 4: TECHNOLOGY STACK

LANGUAGES:

PHP for server-side scripting, HTML, and CSS for frontend.

SERVER:

Serves as the local server environment, providing Apache and MySQL for hosting and database management.

WHY THESE TOOLS? :

PHP is well-suited for backend data handling, and HTML/CSS provides easy frontend development.

CHAPTER 5: SYSTEM DESIGN

USE CASE DIAGRAM:

The system supports two user roles: Regular Users and Admins. Regular users can register, log in, search for locations, and book venues. Admins manage users, locations, and bookings.

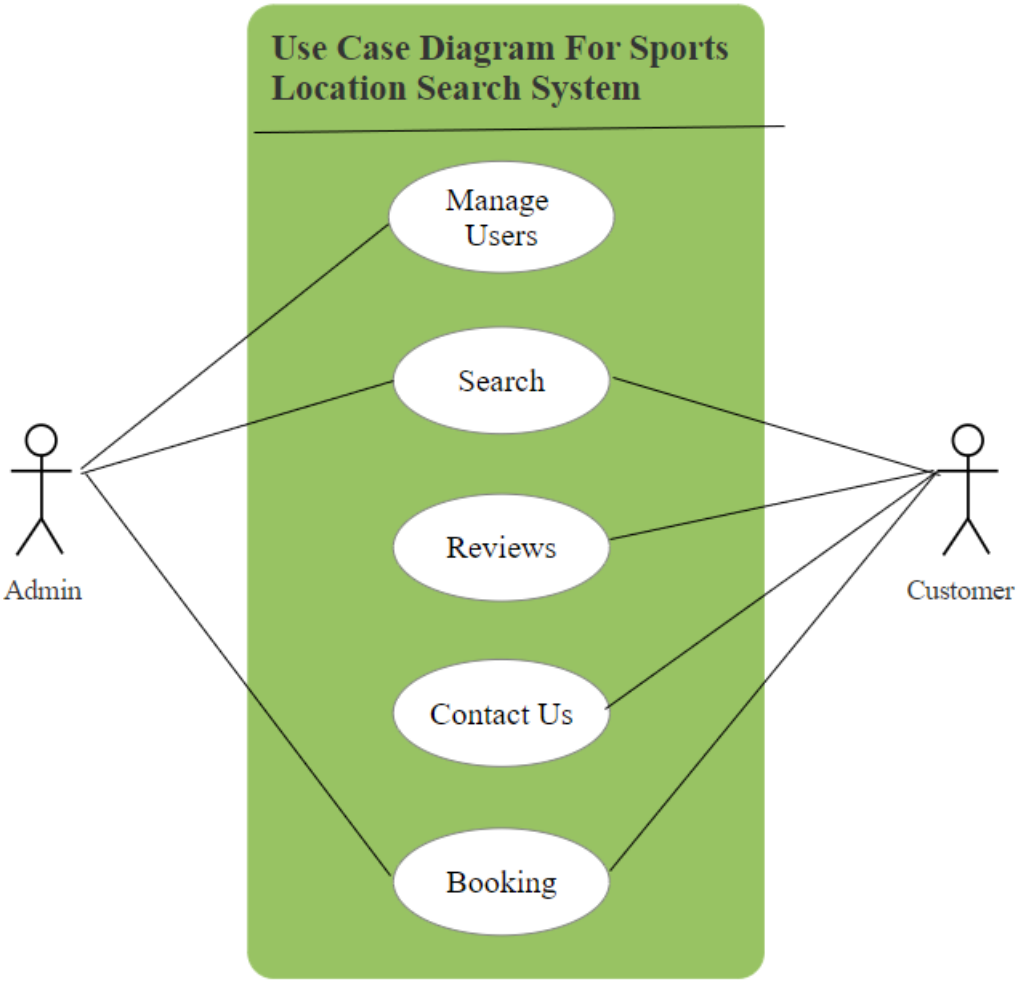

Fig 5.1 Use Case Diagram

ARCHITECTURE DESIGN:

A simple three-layer architecture where the frontend interfaces with the PHP backend, which in turn interacts with the MySQL database.

DATABASE DESIGN:

- **Tables**: List all the tables that will be used in your database, such as:
    - **Users:** id, full_name, email, password
    - **Locations:** id, name, distance, rating, amenities
    - **Bookings:** booking_id, user_id, location_id, date, time
    - **Reviews:** id, full_name, email, review-text
    - **Admins:** id, email, password

- **Foreign Keys:** Indicate foreign key relationships, such as:
    - user_id in the **Bookings** table referencing the id in the **Users** table.
    - location_id in the **Bookings** table referencing the id in the **Locations** table.

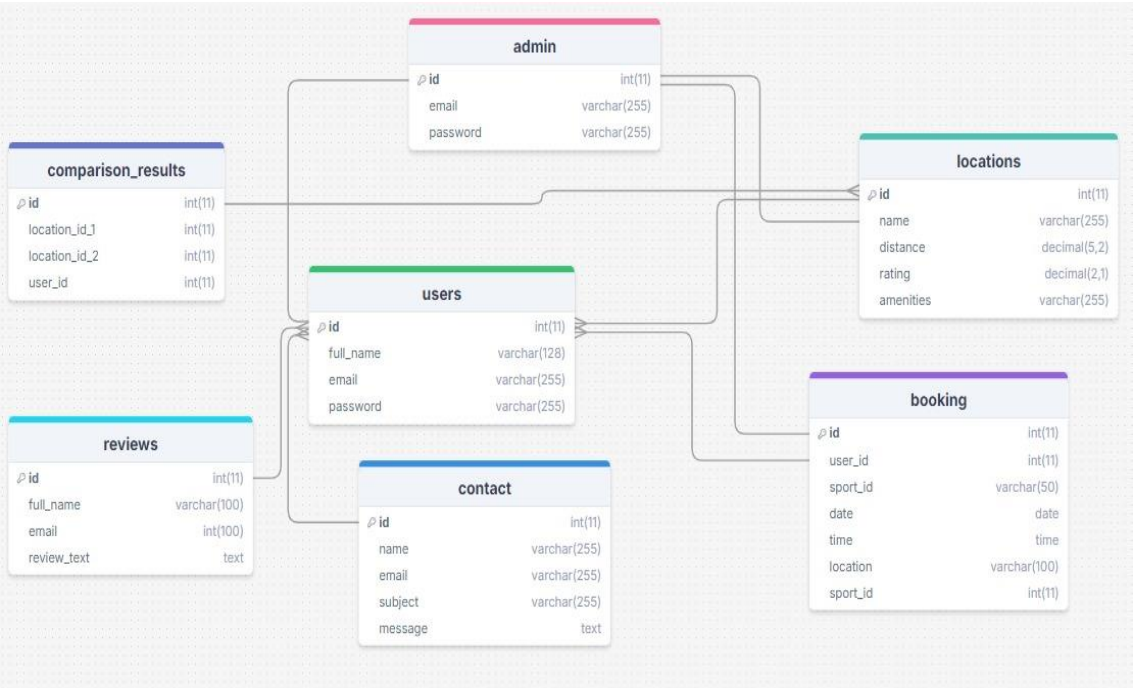

Fig 5.2 Database Design

UI/UX DESIGN:

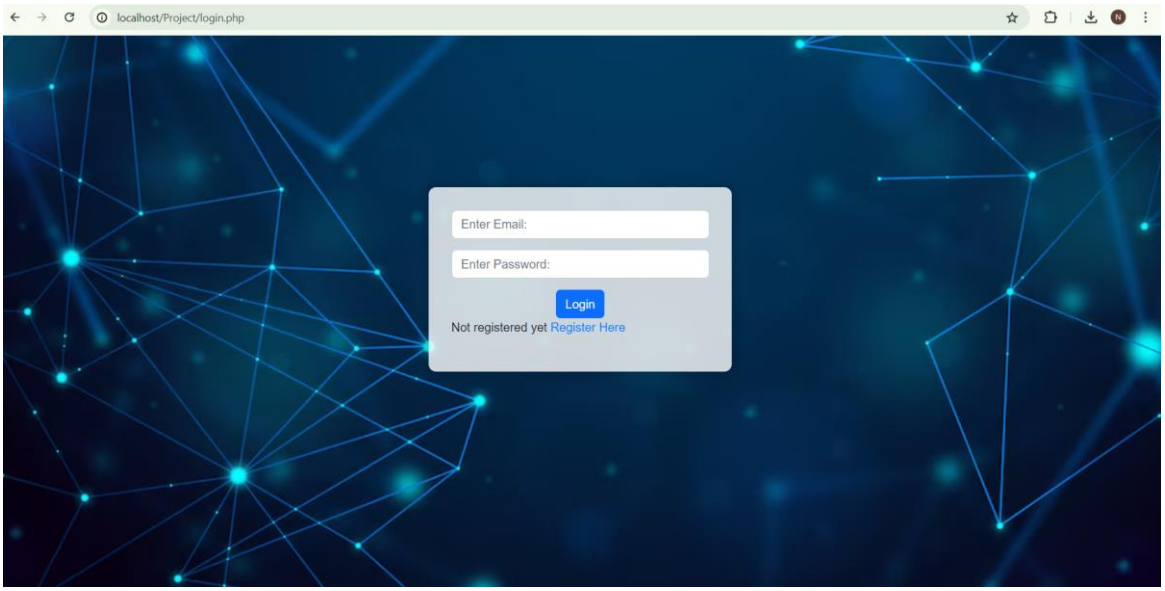

Fig 5.3 UI/UX Design

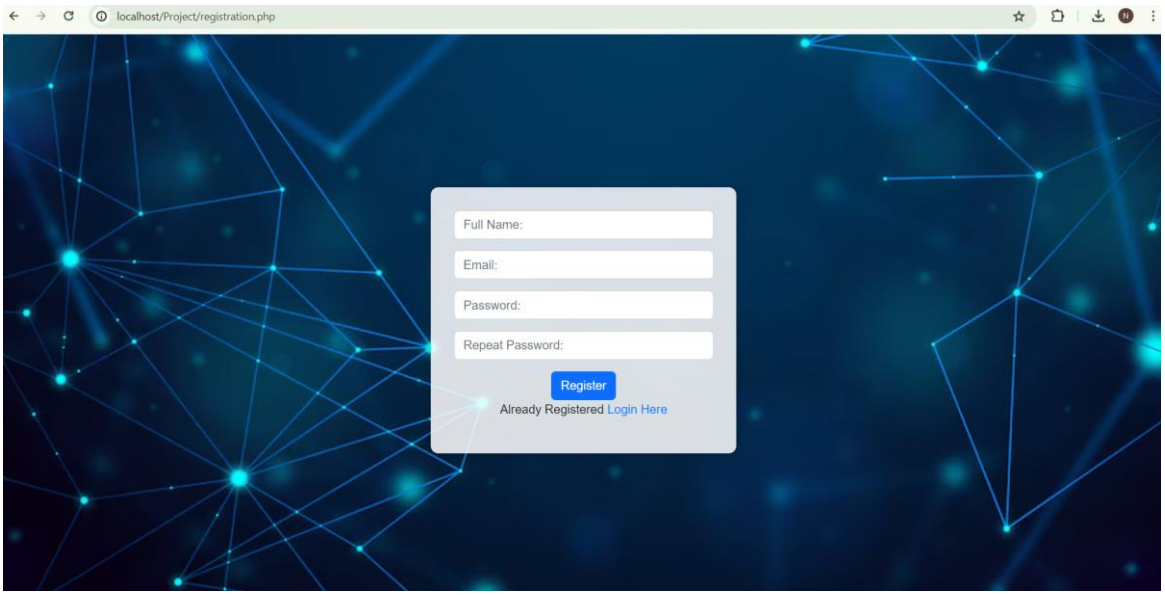

Fig 5.4 UI/UX Design

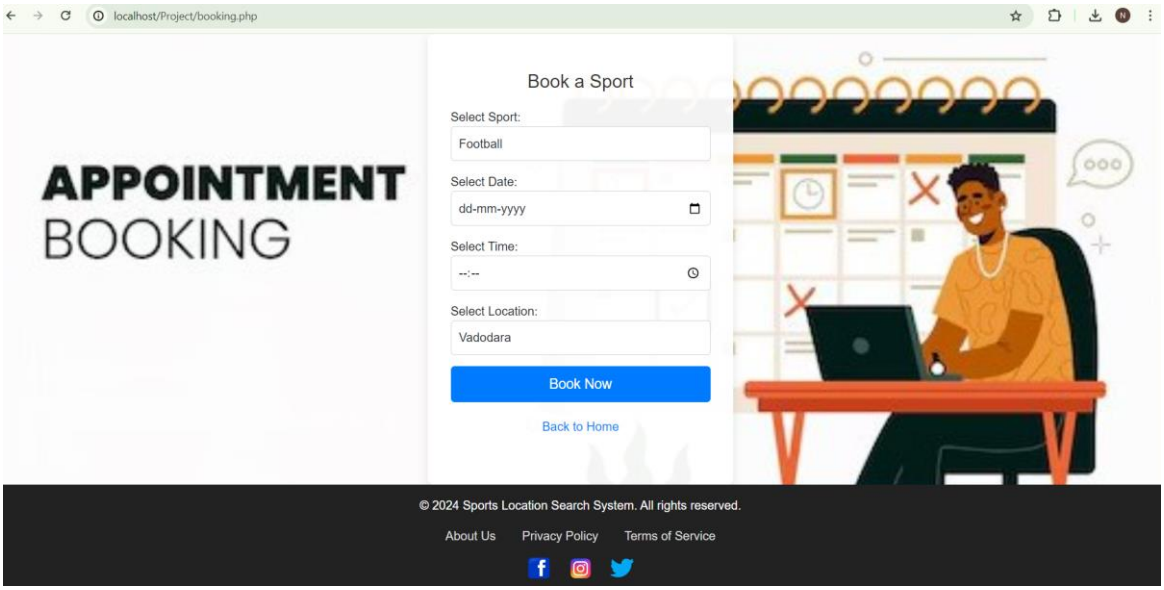

Fig 5.5 UI/UX Design

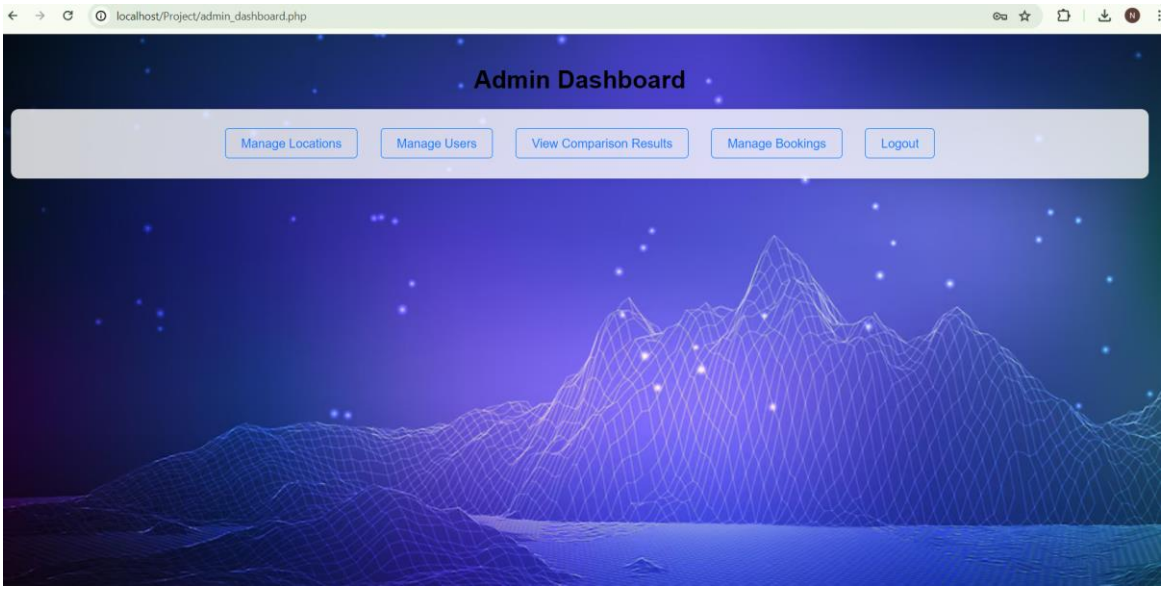

Fig 5.6 UI/UX Design

CHAPTER 6: TESTING

Test Case-1: User Registration

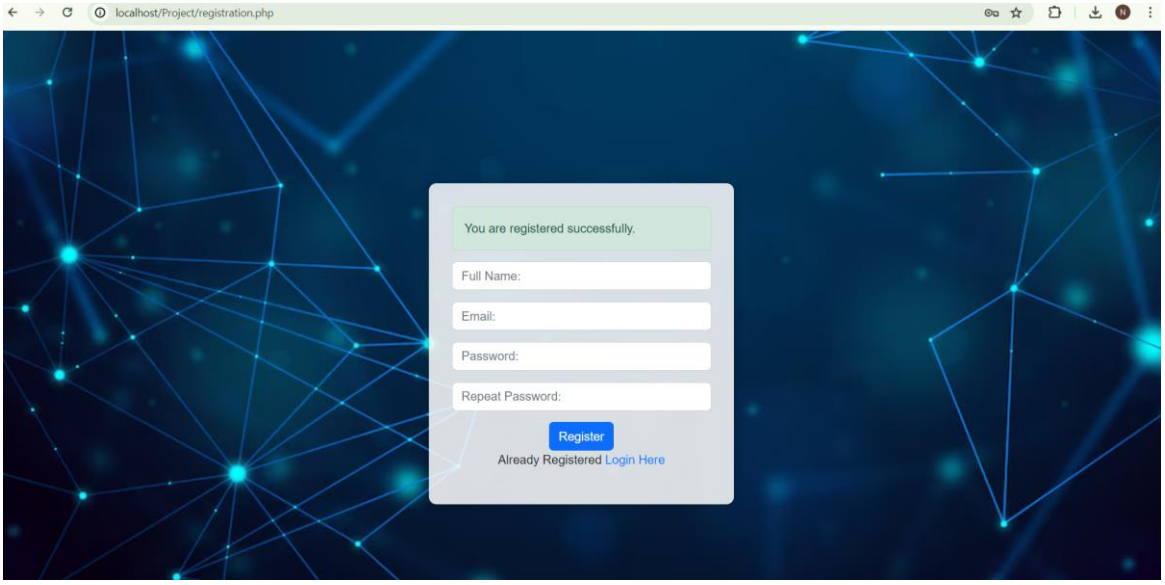

Fig 6.1 Testing

Test Case-2: Submitting Review

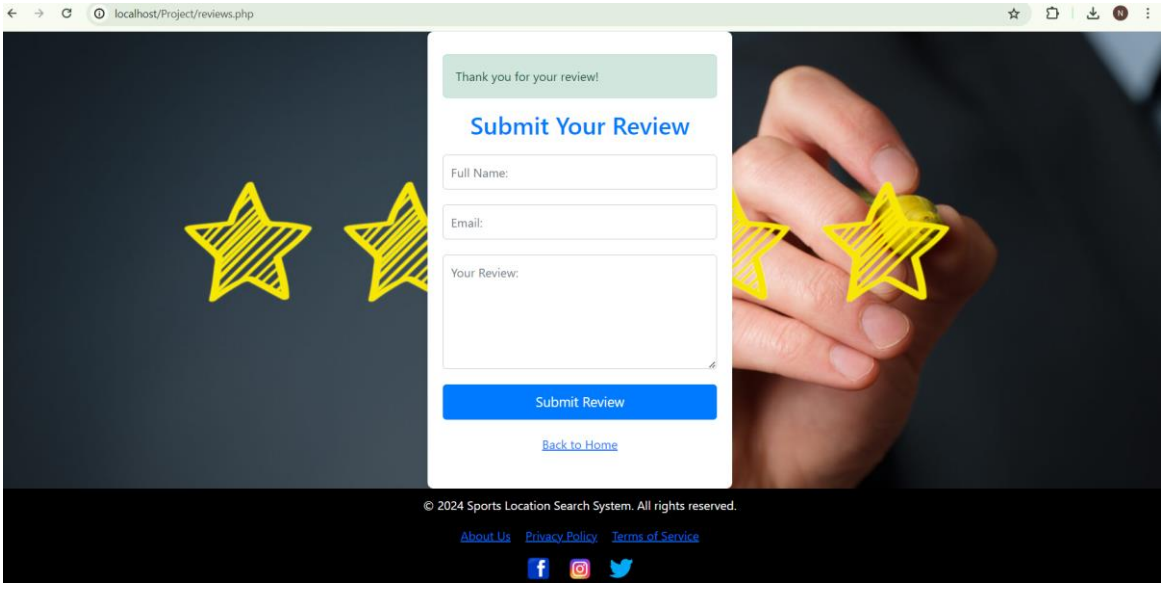

Fig 6.2 Testing

Test Case-3: Register as Admin

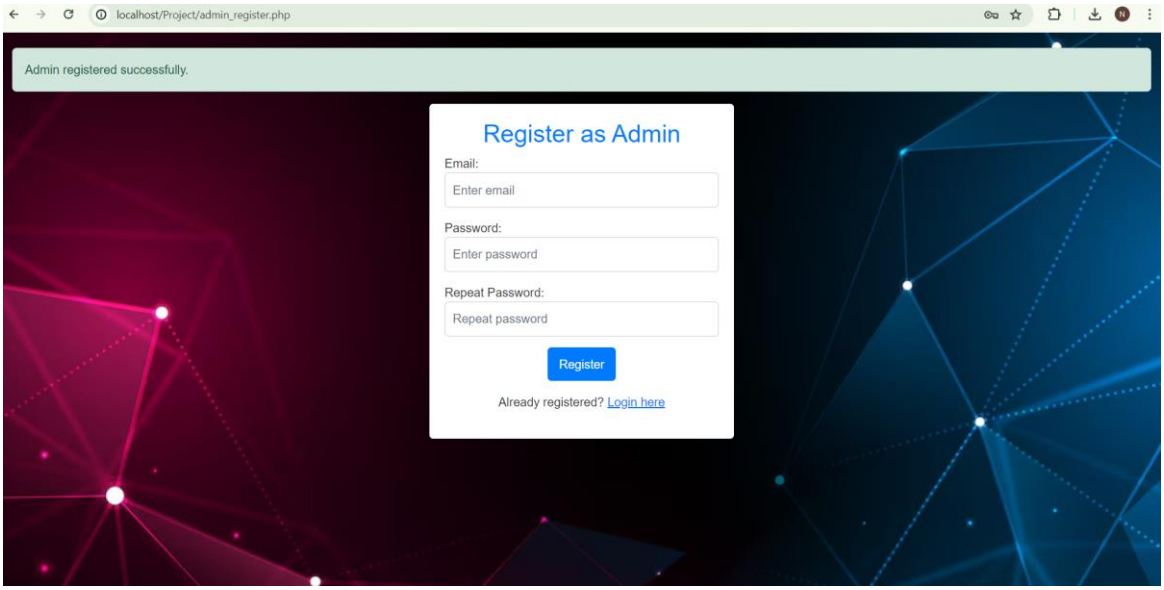

Fig 6.3 Testing

CHAPTER 7: RESULTS

OVERVIEW OF TESTING OUTCOMES:

The testing process for the Sports Location Search System involved several key phases:

1. Planning: Defined testing objectives focused on functionality, usability, and security.
2. Types of Testing:
    - Unit Testing: Individual components were tested for correct operation.
    - Integration Testing: Ensured that different modules work together seamlessly.
    - System Testing: Validated the complete application against requirements.
    - User Acceptance Testing (UAT): Engaged users to test usability in real scenarios.
3. Results Analysis: Analyzed pass/fail rates and addressed any recurring problems Execution: Ran test cases, documenting results and identifying issues.

KEY FEATURE DEVELOPED:

 User Registration and Login:

- Allows users to create an account and securely log in, with session management to maintain user state.

 Booking System:

- Enables users to book selected sports venues for specific dates and times, streamlining the reservation process.

 User Reviews and Ratings:

- Users can submit reviews and rate venues based on their experiences, providing valuable feedback for other users.

 Admin Dashboard:

- A comprehensive dashboard for administrators to manage users, venues, and bookings effectively, ensuring smooth operations.

 Comparison Feature:

- Allows users to compare multiple venues side by side based on factors like price, availability, and user ratings.

CHAPTER 8: CHALLENGES FACED

Session Management:

- Implementing secure session management to ensure user data protection while allowing seamless login and registration processes.

Data Validation:

- Ensuring robust data validation for user inputs during registration and bookings to prevent errors and maintain data integrity.

Responsive Design:

- Designing a user interface that works well across different devices and screen sizes, requiring additional time for testing and adjustments.

Integration of Features:

- Coordinating the integration of various features, such as the booking system and user reviews, to ensure they function together smoothly without conflicts.

Testing and Debugging:

- Identifying and resolving bugs during the testing phase, which sometimes delayed the project timeline. This required thorough testing and retesting of features.

User Feedback Incorporation:

- Gathering and implementing user feedback effectively to enhance usability while balancing development timelines.

Database Management:

- Designing a well-structured database to handle relationships among users, venues, and bookings, ensuring efficient data retrieval and storage.

CHAPTER 9: CONCLUSION & FUTURE SCOPE

Conclusion: The Sports Location Search System successfully meets its objectives by providing a user-friendly platform for finding and booking sports venues. Through comprehensive features such as user registration, location search, booking, and admin management, the system enhances the experience for both users and venue administrators. The testing phase demonstrated high reliability and functionality, confirming the system's readiness for deployment.

The project effectively addresses the need for accessible sports venue bookings, particularly in targeted cities, and incorporates valuable user feedback to improve usability. Overall, the system is positioned to make a positive impact in the local sports community by streamlining the venue reservation process.

Future Scope: Looking ahead, several enhancements could further improve the system:

1. **Mobile Application Development:**
    - Creating a mobile app version of the platform to increase accessibility and convenience for users on the go.
2. **Payment Integration:**
    - Implementing online payment options to streamline the booking process and enhance user experience.
3. **Advanced Analytics:**
    - Adding analytics features for venue administrators to track bookings and user engagement, helping them make informed decisions.
4. **Expanded Location Database:**
    - Expanding the database to include more cities and venues, increasing the platform's reach and usability.

5. **Social Media Integration:**
    - Allowing users to share bookings or reviews on social media platforms, which can enhance user engagement and marketing.
6. **Real-time Availability:**
    - Implementing real-time availability checks for venues to ensure accurate booking information and reduce conflicts.

CHAPTER 10: REFERENCES

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[4.] Login Form:- https://youtu.be/hQPBeS4xlxg?si=rXZEsvCdbW7mfHv-

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