



ONLINE STADIUM MANAGEMENT SYSTEM

[BOOK MY SEAT](#)

ABSTRACT

The goal of this study is to develop a dependable and simple online ticket booking system for customers and management to utilize. It is important to emphasize that the existing information management process is manual, and as a result, several problems have arisen, particularly in the control of audiences and ticket processing.

The present research aims to eliminate manual operations in the stadium and computerize all ticket buying processes. The notion of report generation has been mechanized, so the stadium manager will no longer have to wait for reports. Errors on hand-held fee collectors are entirely rectified. The new system was built with React on the front end and MongoDB on the backend.

Keywords: Stadium Management, Ticket Booking, Mongodb, Online, Web Application, React.

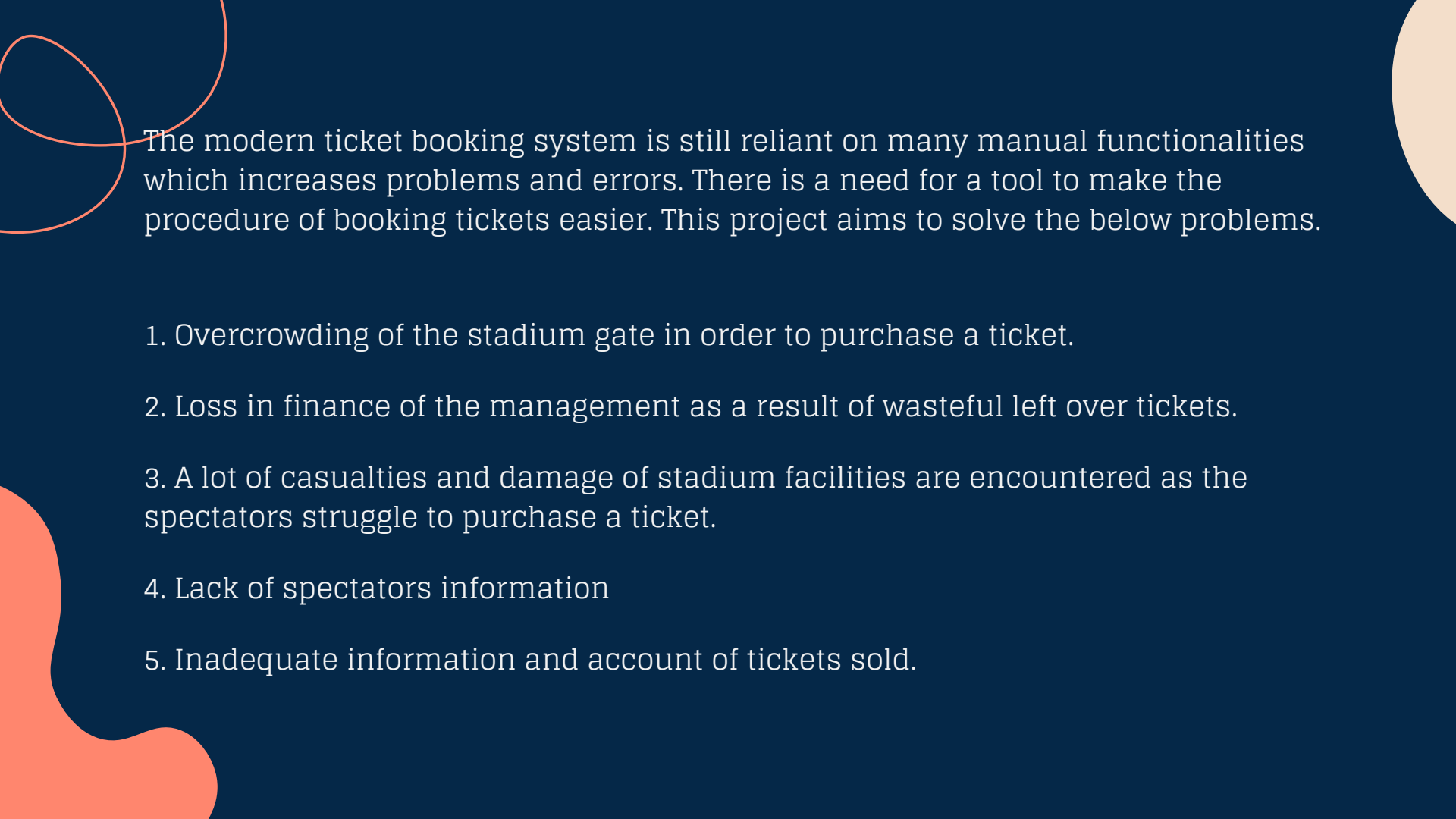


INTRODUCTION

PROBLEM STATEMENT

Significant improvements to the current ticket booking system are needed, which will benefit stadium management by saving time and money and customers will find it easier to purchase and utilize their tickets. The Stadium Management team is in charge of the stadium's day-to-day operations and management.

Purchasing tickets in person is by far the most convenient option, however many customers live outside of the area or are unable to visit the stadium to purchase tickets in advance due to job obligations. On match days, this results in long lines at the ticket office.



The modern ticket booking system is still reliant on many manual functionalities which increases problems and errors. There is a need for a tool to make the procedure of booking tickets easier. This project aims to solve the below problems.

1. Overcrowding of the stadium gate in order to purchase a ticket.
2. Loss in finance of the management as a result of wasteful left over tickets.
3. A lot of casualties and damage of stadium facilities are encountered as the spectators struggle to purchase a ticket.
4. Lack of spectators information
5. Inadequate information and account of tickets sold.



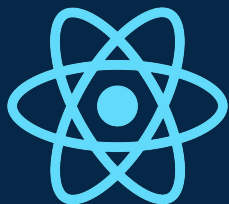
PURPOSE

- To develop an online stadium management system that will help in booking the tickets of the events, matches, and games through online mode.
- To ensure that the customers can check availability, booking of tickets from the comfort of their devices.

TECHNOLOGIES USED

React Js

React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces based on UI components.



mongoDB

MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program.

Node Js

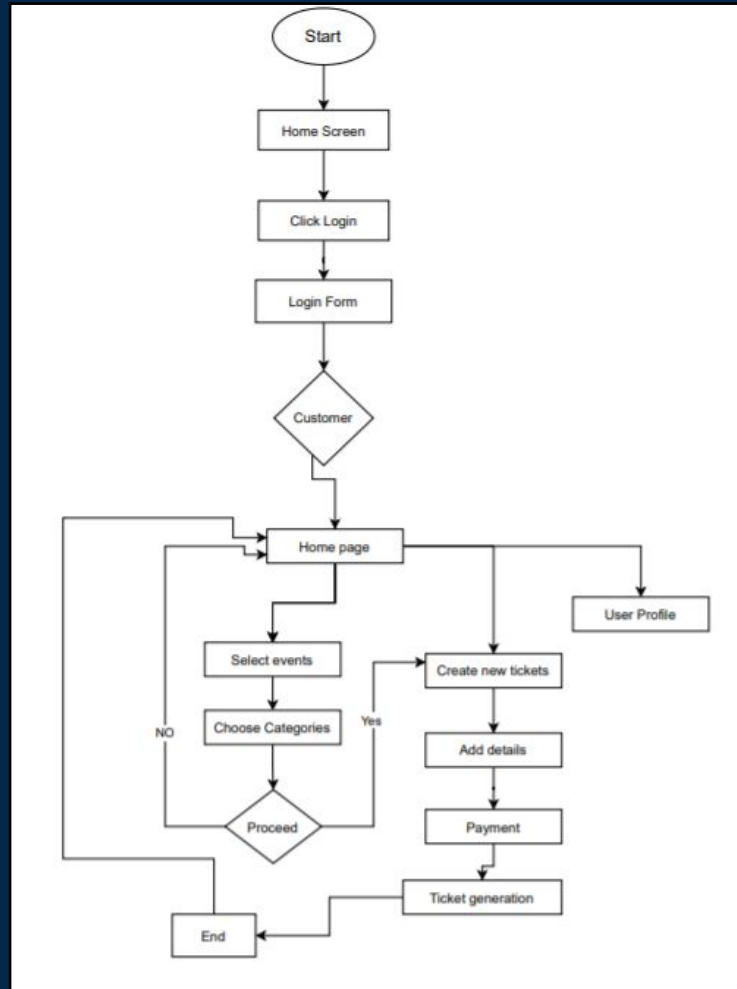
Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.



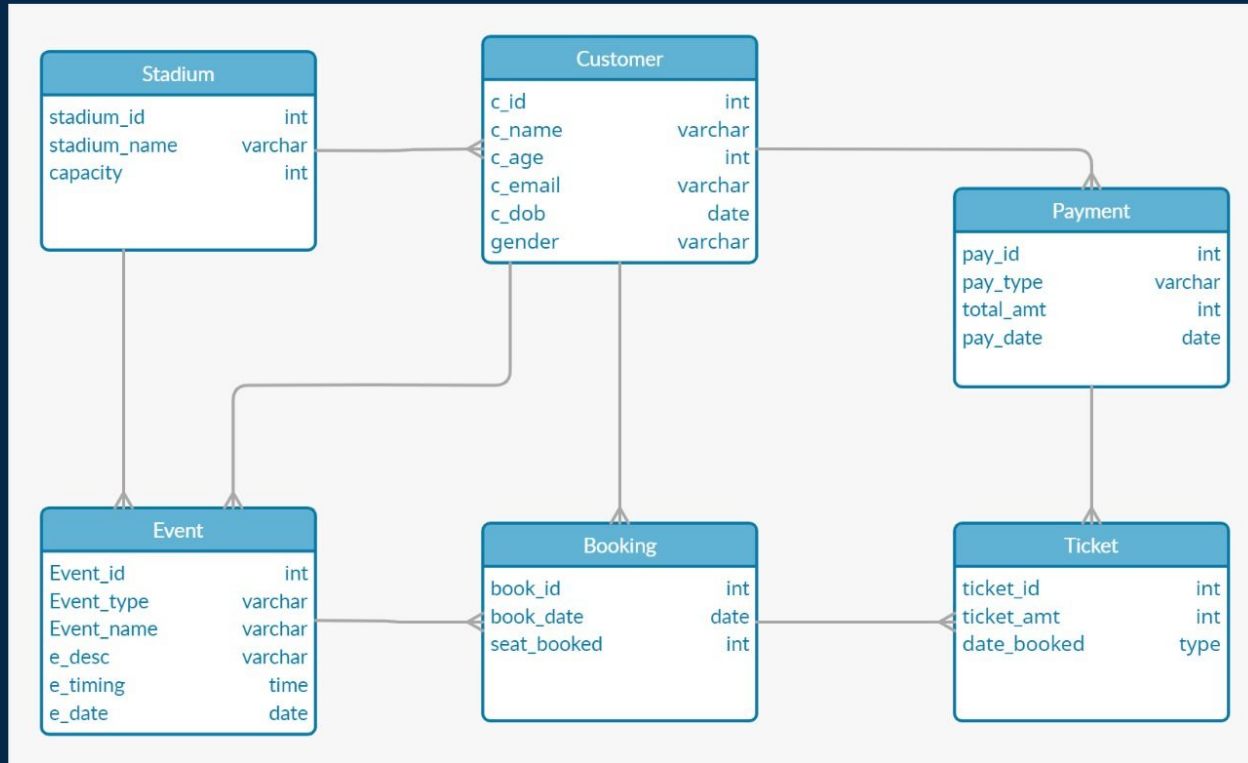
Functionalities

- Computerization of the complete ticket booking process.
- Provision for customers to buy tickets for matches and events where the stadium is rented.
- Complete database on seats available and bought for each event.
- User purchase history can be stored and accessed.
- Payment system for users to purchase tickets online.
- Here A receipt could be generated after the transaction as proof of payment.

Web Flow



Schema Diagram



Home Page

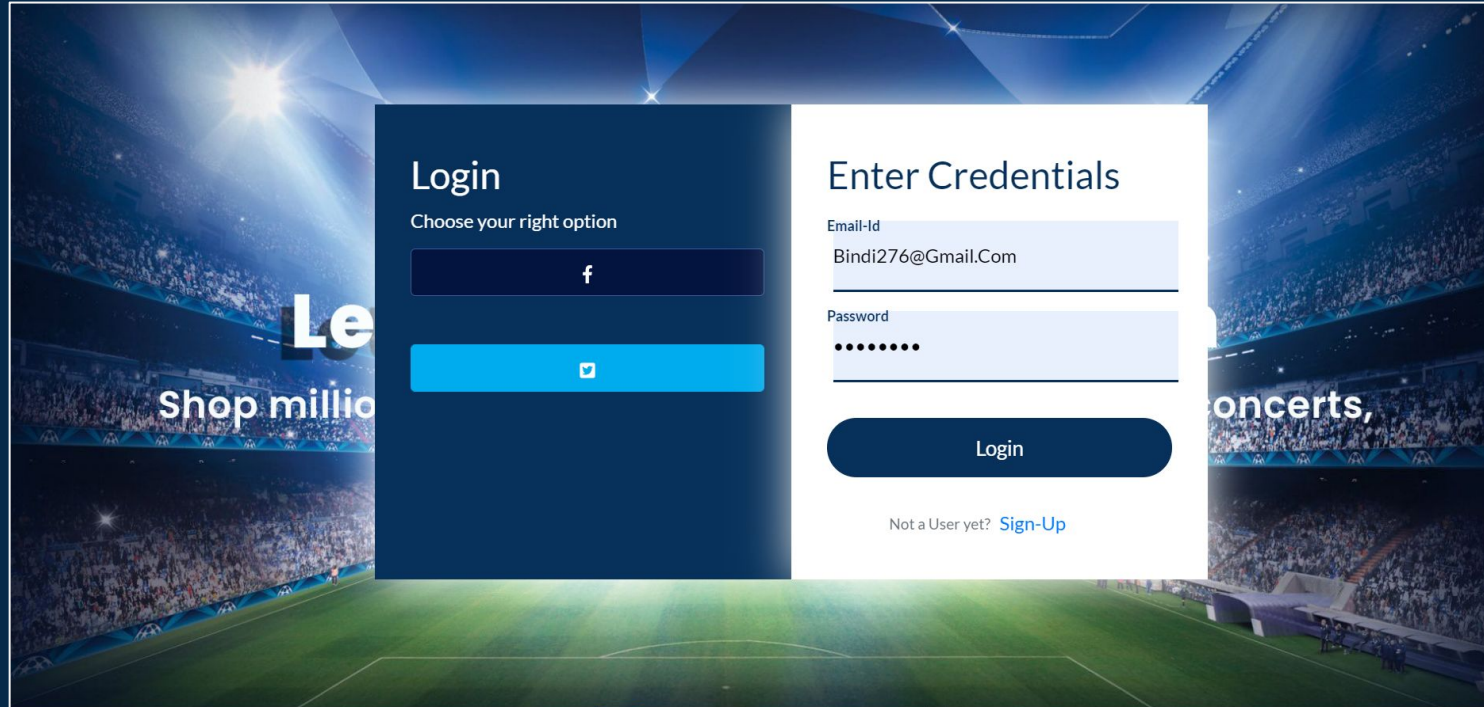
Book My Seat

Let's Make Live Happen

Shop millions of live events and discover can't miss concerts, games, theater and more.

GET STARTED!

Login Page

The background of the slide is a dark blue gradient with a faint, stylized orange line in the top right corner. The main content is a login page overlay on a background image of a soccer stadium at night, filled with spectators and illuminated by bright lights. The overlay consists of two main panels. The left panel is dark blue and contains the title 'Login' and the instruction 'Choose your right option'. It features two buttons: a dark blue button with a white 'f' icon and a bright blue button with a white envelope icon. The right panel is white and contains the title 'Enter Credentials'. It has two input fields: 'Email-Id' with the text 'Bindi276@Gmail.Com' and 'Password' with masked characters '.....'. Below these fields is a dark blue 'Login' button. At the bottom of the right panel, there is a link 'Not a User yet? Sign-Up' in blue text. The background image also has some text visible: 'Le' and 'Shop millio' on the left, and 'concerts,' on the right.

Login

Choose your right option

f

Enter Credentials

Email-Id

Bindi276@Gmail.Com

Password

.....

Login

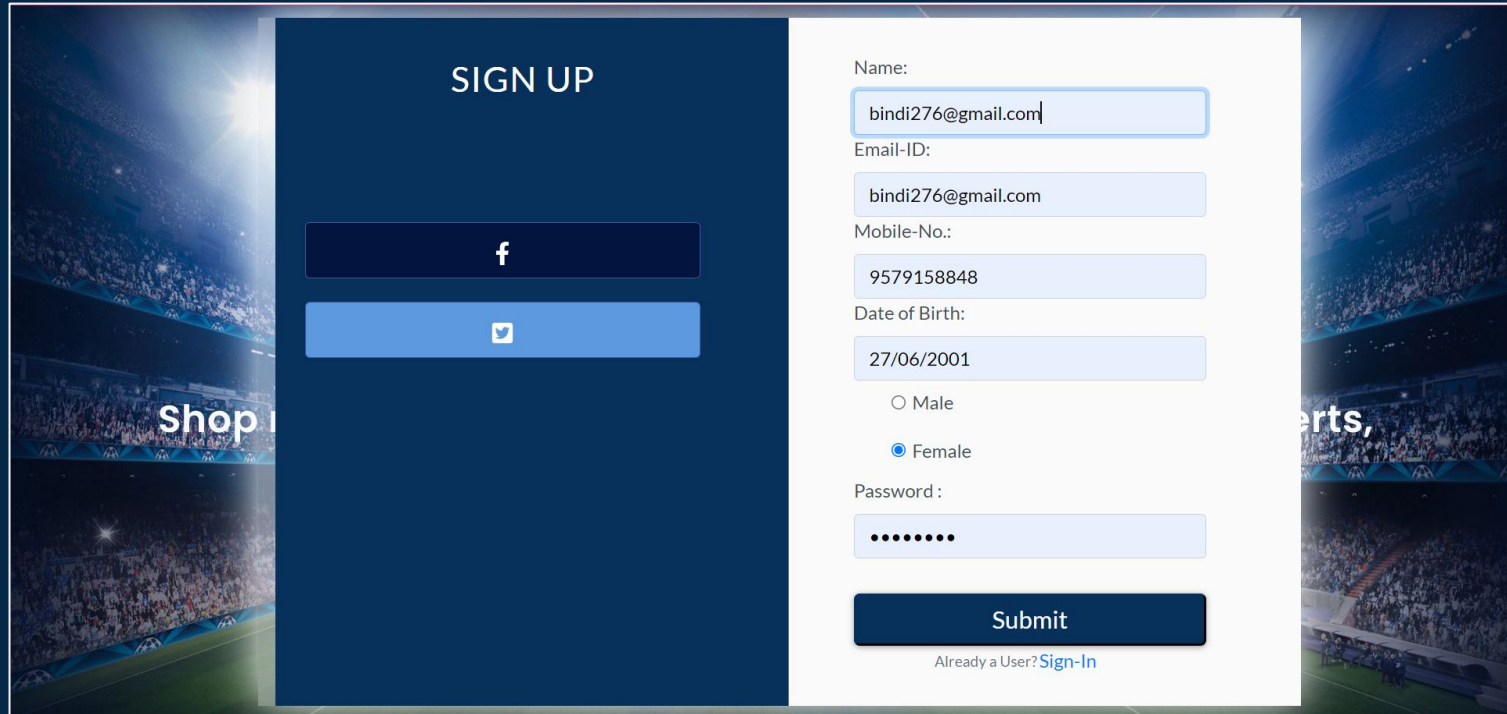
Not a User yet? [Sign-Up](#)

Le

Shop millio

concerts,

Sign-Up Page



A mockup of a sign-up page with a dark blue background and a stadium image. The page is divided into two main sections: a dark blue left panel and a white right panel. The left panel has the text 'SIGN UP' at the top, followed by two buttons: a dark blue button with a white 'f' icon and a light blue button with a white envelope icon. The right panel contains a form with labels and input fields for Name, Email-ID, Mobile-No., Date of Birth, Gender (Male/Female), and Password. A 'Submit' button is at the bottom, and a link 'Already a User? Sign-In' is below it.

SIGN UP

f

✉

Name:

bindi276@gmail.com

Email-ID:

bindi276@gmail.com

Mobile-No.:

9579158848

Date of Birth:

27/06/2001

☐ Male

☒ Female

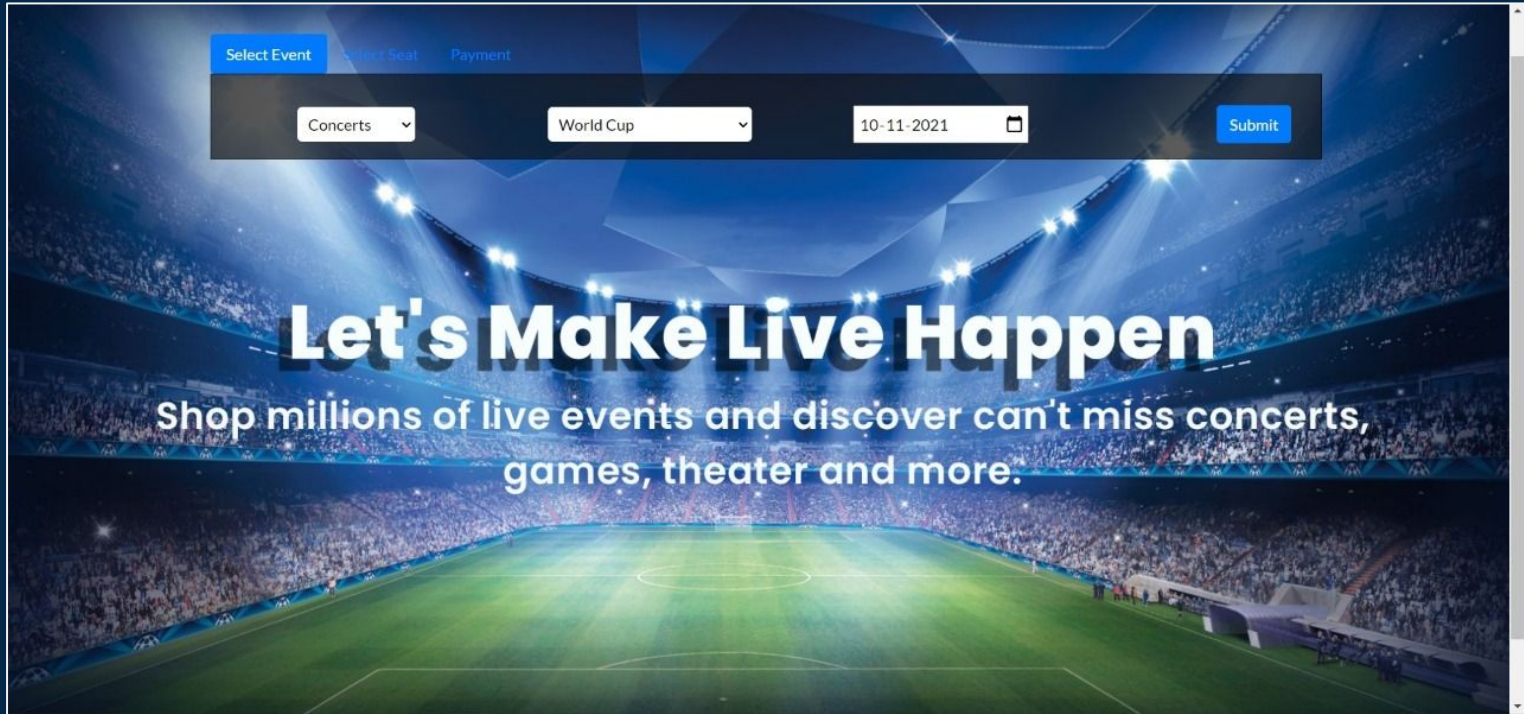
Password :

••••••••

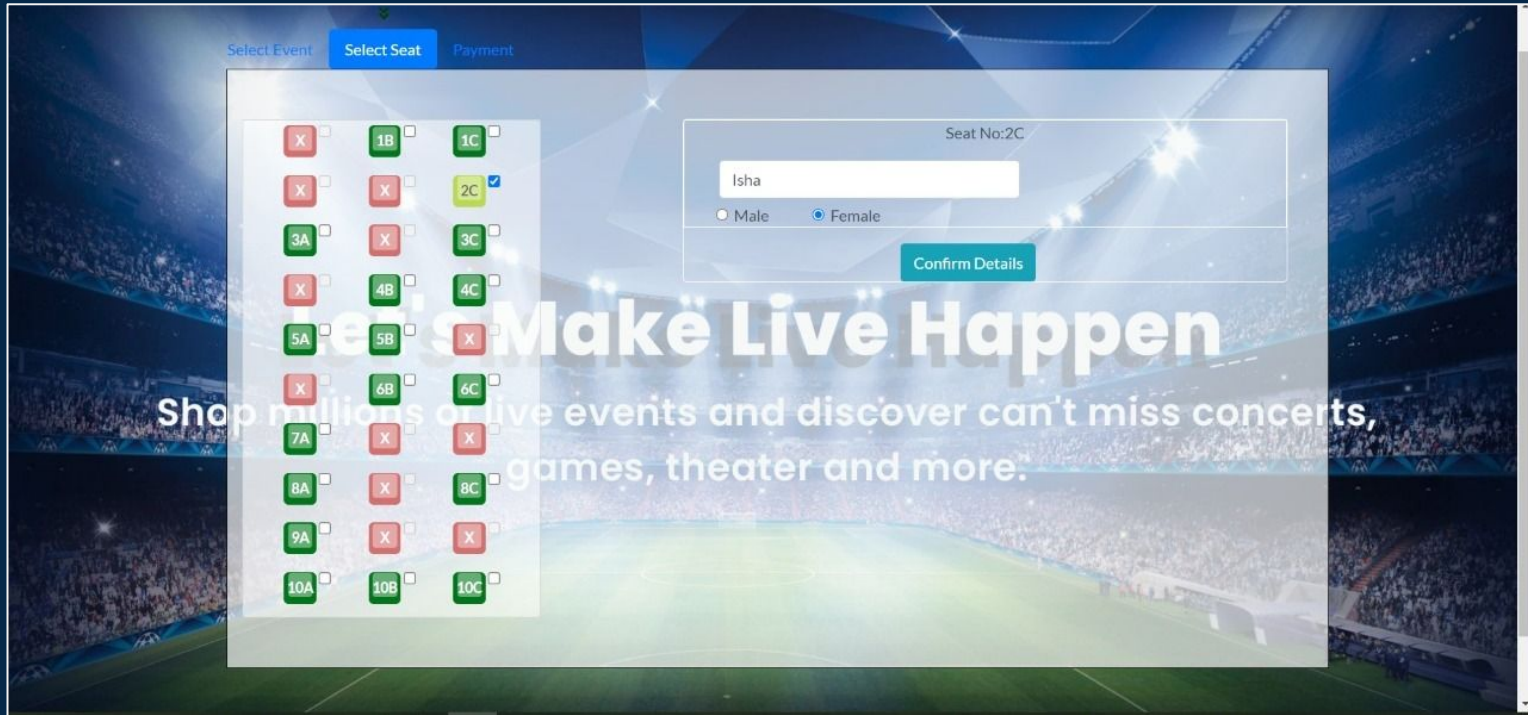
Submit

Already a User? [Sign-In](#)

Event Booking Page




Seat Booking Page



Payments Page

Select Event Select Seat **Payment**

ENTER CREDIT CARD DETAILS



.....

valid thru
/

YOUR NAME HERE

Card Number

Name

Valid Thru

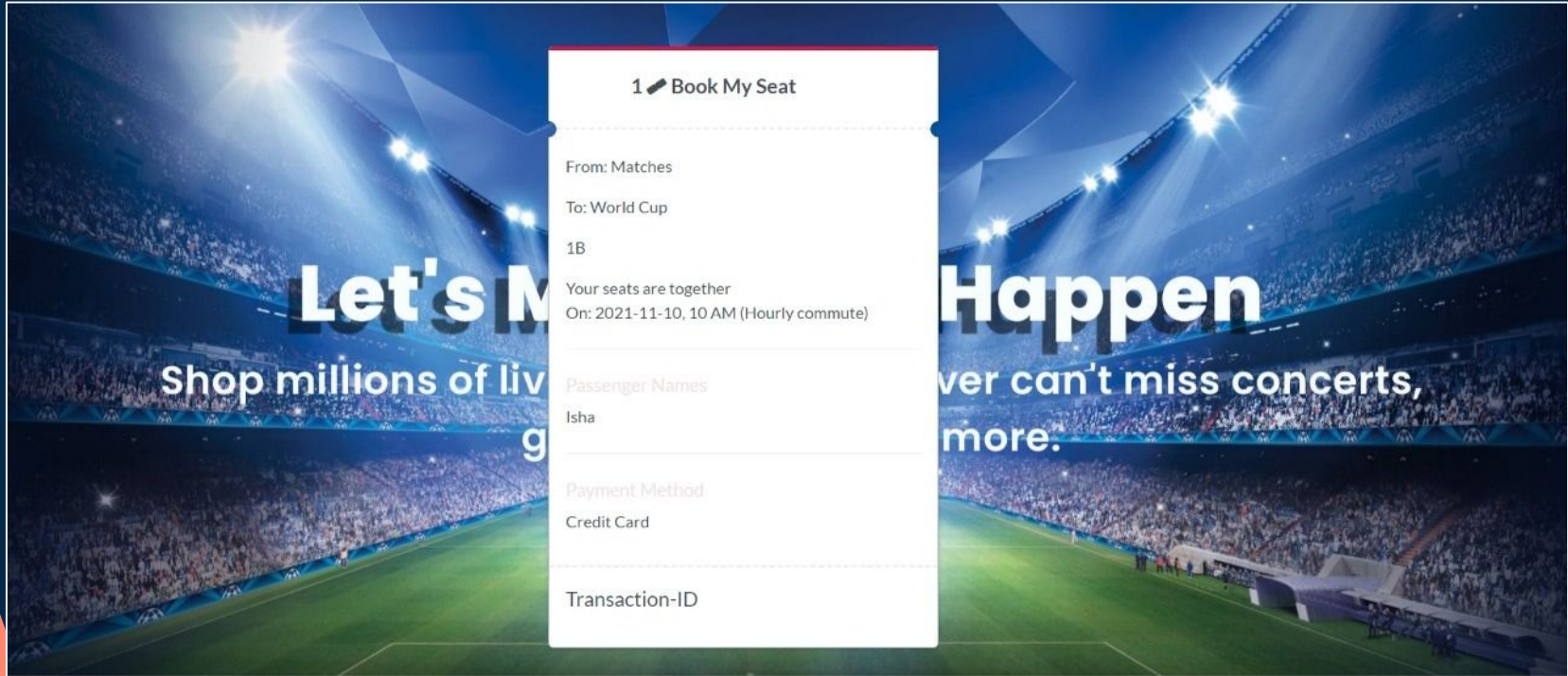
CVC

PAY

Book My Seat BOOKING DETAILS

Username	Isha Kanade
Date	2021-11-10
From	Concerts
To	World Cup
Passengers	Seat No
Isha	2C
Ticket price	1000
Tax	+150
Total Sum	1150

Ticket generation page

The background of the slide is a vibrant image of a football stadium at night, filled with spectators and illuminated by bright floodlights. Overlaid on this background is a white rectangular form for ticket generation. The form has a red header bar with the text '1 Book My Seat'. Below the header, the form is divided into several sections by dashed lines. The first section contains the text 'From: Matches', 'To: World Cup', '1B', 'Your seats are together', and 'On: 2021-11-10, 10 AM (Hourly commute)'. The second section is labeled 'Passenger Names' and contains the name 'Isha'. The third section is labeled 'Payment Method' and contains the text 'Credit Card'. The final section at the bottom is labeled 'Transaction-ID'. The form is centered on the slide, and the stadium background is visible on either side of the form.

1 Book My Seat

From: Matches

To: World Cup

1B

Your seats are together

On: 2021-11-10, 10 AM (Hourly commute)

Passenger Names

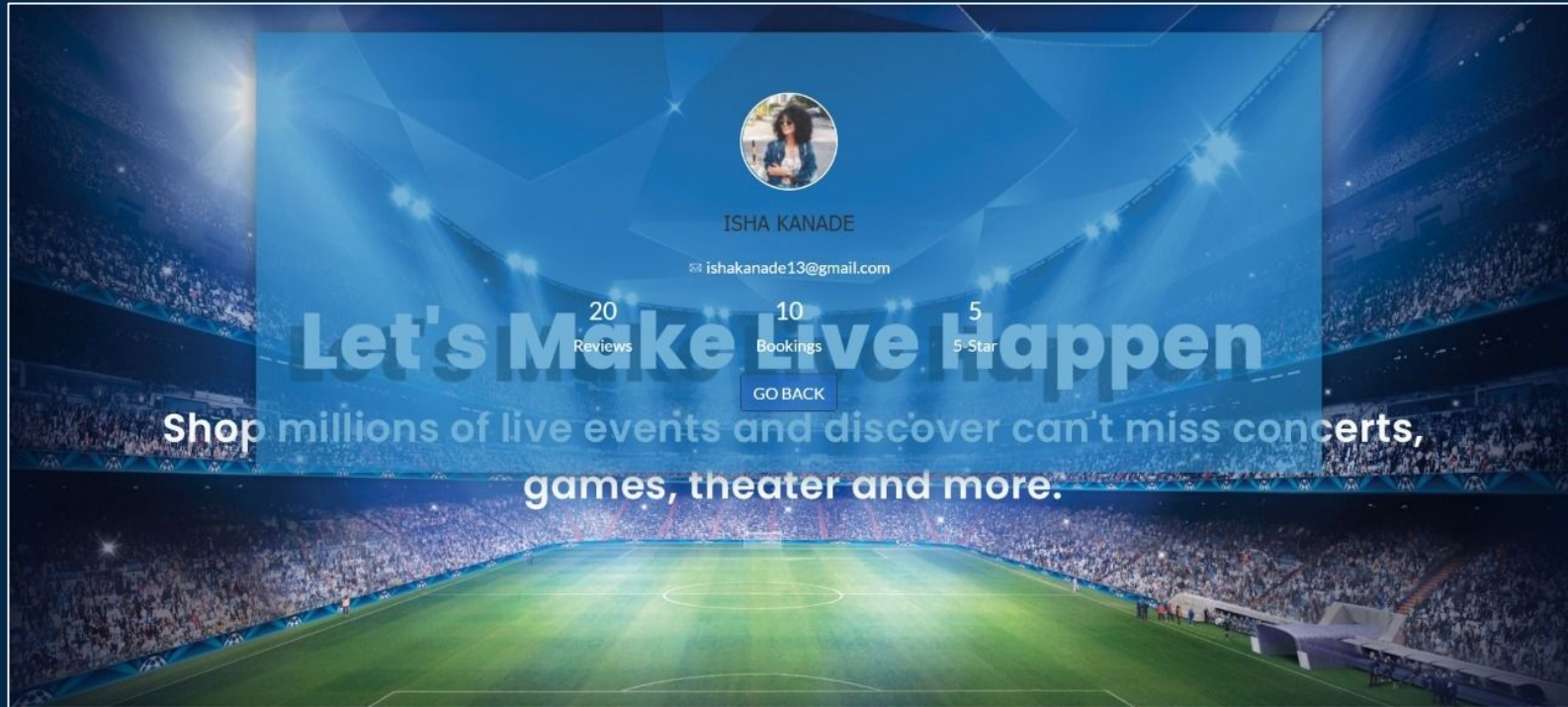
Isha

Payment Method

Credit Card

Transaction-ID

Profile page





Backend




The screenshot displays the MongoDB Atlas web interface. The top navigation bar includes the organization name 'Bhavana's Org - 202...', an 'Access Manager' dropdown, a 'Billing' link, and a 'All Clusters' dropdown. The main header shows 'Project 0' and navigation icons for 'Atlas', 'Realm', and 'Charts'. A left sidebar contains a 'DEPLOYMENT' section with 'Databases' highlighted, and a 'DATA SERVICES' section with 'Data API' set to 'PREVIEW'. Below these are 'SECURITY' options like 'Database Access' and 'Network Access'. The main content area is titled 'StadiumTicketSystem.users' and shows collection statistics: 'COLLECTION SIZE: 431B', 'TOTAL DOCUMENTS: 2', and 'INDEXES TOTAL SIZE: 36KB'. It includes tabs for 'Find', 'Indexes', 'Schema Anti-Patterns', 'Aggregation', and 'Search Indexes'. A filter bar contains the text '{ field: 'value' }' and an 'OPTIONS' dropdown. Below the filter, it says 'QUERY RESULTS 1-2 OF 2'. The first result is a JSON document:


```
{
  "_id": ObjectId("619e75e9e5dfed38e8cd05ac"),
  "name": "Bhavana Vasant Bafna",
  "email": "albuswand.123@gmail.com",
  "password": "$2b$10$0N212xEsUqZd13jAQe.UEuVdGy2.6n4K91X4uYiS06xD73mgnt17u",
  "mobile": "9595481431",
  "gender": "Female",
  "dob": "2001-11-18T00:00:00.000+00:00",
  "__v": 0
}
```

. An 'INSERT DOCUMENT' button is located at the top right of the results area. A chat icon is visible in the bottom right corner.

 Bhavana's Org - 202...  Access Manager ▾ Billing


All Clusters Get Help ▾ Bhavana ▾

Project 0 ▾  Atlas  Realm  Charts

 DEPLOYMENT


Databases

Data Lake

 DATA SERVICES

Triggers

Data API PREVIEW

 SECURITY

Database Access

Network Access

Advanced

QUERY RESULTS 1-2 OF 2

```
_id: ObjectId("619e75e9e5dfed38e8cd05ac")
name: "Bhavana Vasant Bafna"
email: "albuswand.123@gmail.com"
password: "$2b$10$ON212xEsUqZd13jAQe.UEuVdGy2.6n4K91X4uYi5D6xD73mgnt17u"
mobile: "9595481431"
gender: "Female"
dob: 2001-11-18T00:00:00.000+00:00
__v: 0
```

```
_id: ObjectId("619f0e9c5346a54180341a7e")
name: "bindi"
email: "bindi@gmail.com"
password: "$2b$10$aaPsDCZZ0xPTzKgDDEQ5n0iNmXFjSZ0z3Z7gpSiQHP.40ZDfxxFA2"
mobile: "9579158848"
gender: "Female"
dob: 2001-06-27T00:00:00.000+00:00
__v: 0
```



Future Scope

- To design an integrated platform that serves the fans' interests in order to make the process of selling and buying tickets easier.
- The website can be extended to accommodate the functionalities needed by the admin for the management and the storage of data of the Stadium.
- The project can be developed further by optimizing the scalability of the database.
- The software can be made secure for all transactions.
- The website can further be used for multiple stadiums or halls located in an area.
- A functionality can be added so that a user can rent the stadium for a private event.

Conclusion

This project focuses on computerized tickets, crowd control, stadium information management, and facilities management. The data will be carefully maintained, organized, and suitable software will be built to assist in the management of the stadium with the use of a computer system.



Thank You!

RESOURCES

REFERENCES

- Stadium Management Information System. A Casestudy Of Dan Anyiam Stadium Owerri Nigeria
- Design and Implementation of A Computerised Stadium Management Information System
- ONLINE TICKETING SYSTEM CASE STUDY: MBALE MUNICIPAL STADIUM