

Athletics Hub

Unleashing your full athletic potential



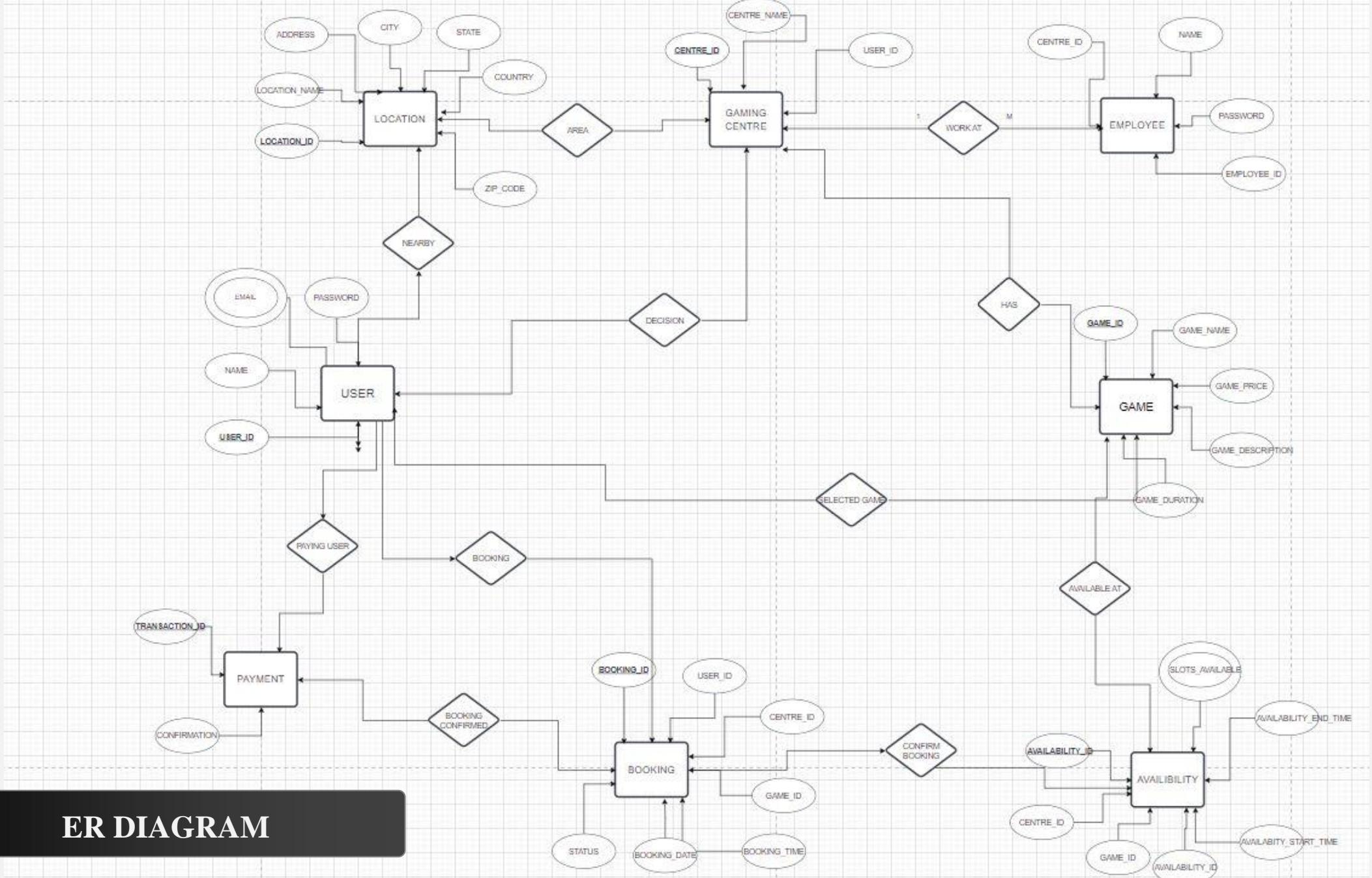
What we aim?

- ✓ We aim at introducing a platform wherein people can check in to view the availability and book the desired game slot they wish to play in the various gaming centers in their locality.
- ✓ The platform is a method of integrating the gaming hubs in a particular area for the user in order to save time and money.
- ✓ The project requires the development of frontend and backend for the proper functioning of the Database Management System.



COMPONENTS

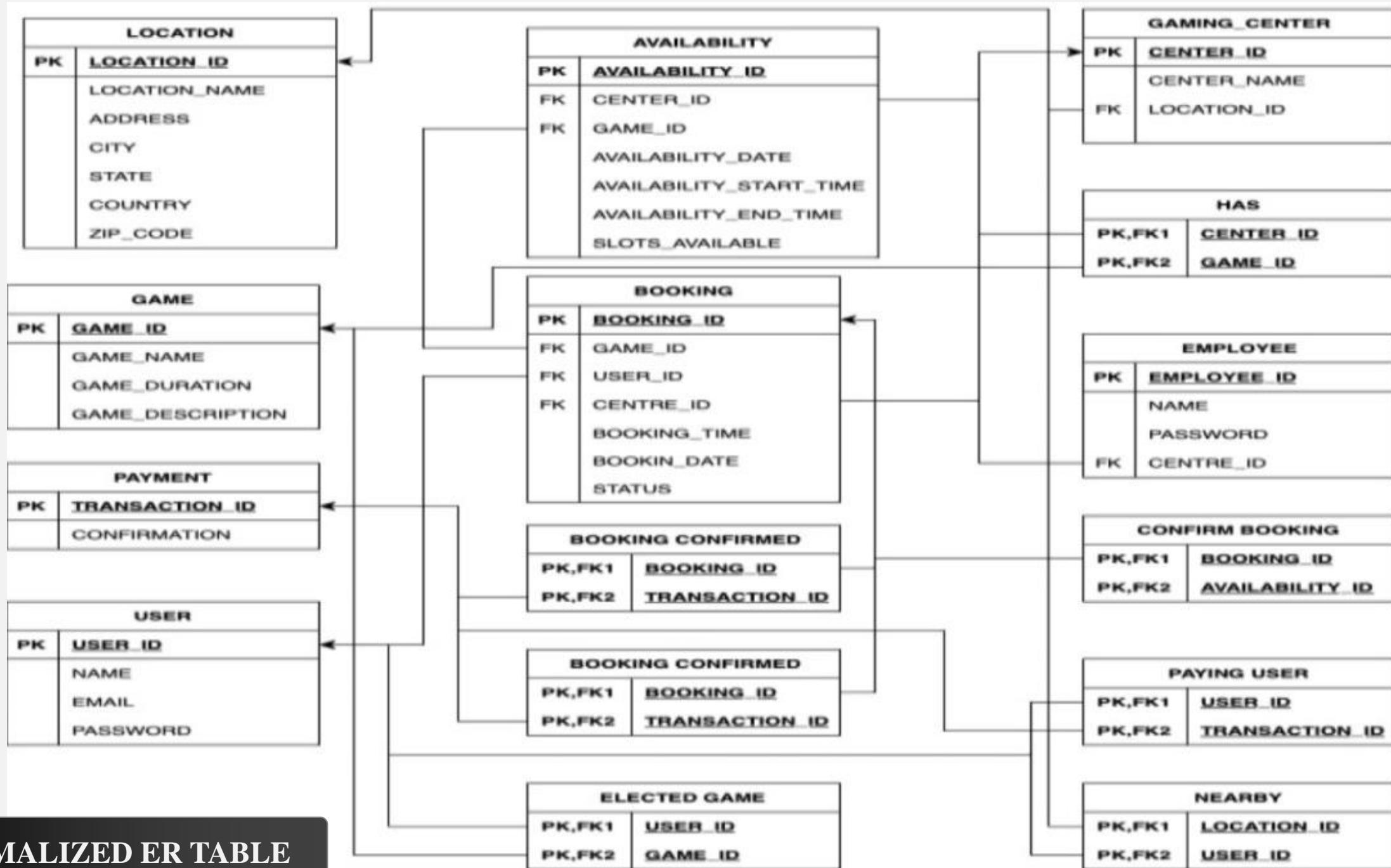
- **Frontend** - HTML, CSS, and JavaScript are three essential technologies used for building frontend web applications. HTML provides the structure of a web page, CSS defines its appearance and layout, while JavaScript is responsible for adding interactivity and dynamic behavior.
- **Backend** - Node.js is a powerful and popular open-source server-side JavaScript runtime environment that enables developers to build scalable and efficient backend web applications.
- **Database Management System** - MySQL is a popular open-source relational database management system (RDBMS) that is widely used for web-based applications. It is fast, scalable, and reliable, and supports multiple platforms and programming languages.



ER DIAGRAM

ENTITIES, ATTRIBUTES, RELATIONSHIPS

- ✓ User – The entity indicates the users that check in to view and book the game in the desired gaming center. The essential attributes include user_id ,name, email and password where user_id is the primary key and email is a multi-valued attribute.
- ✓ Location – This entity indicates the location specified to the gaming center and that which the user selects to find the center in. The attributes include location_id (PK), location_name, address, city, state, country, zip_code.
- ✓ Gaming_center-This entity indicates the gaming centers in various localities in the country. The attributes include center_id (PK),center_name,location_id (FK).
- ✓ Game- This entity refers to the games selected by the user under the chosen gaming center. Individual games have specified time slots and prices accordingly. The attributes include game_id (PK),game_name, game_description, game_duration.
- ✓ Booking - This entity is used both by the user and the gaming center in order to book the time slots of the selected game. The attributes include booking_id (PK, user_id (FK),center_id (FK),game_id (FK), booking_time, booking_date and status.
- ✓ Availability – This entity checks and confirms for the availability of time slots to the user and updates the center database if the booking is confirmed. The attributes include availability_id (PK), center_id (FK), game_id (FK), availability_date, availability_start_time, availability_end_time-slots_available.
- ✓ Payment – This entity takes record of the transaction id and payment confirmation made by the user.
- ✓ Employee – This acts as a admin portal wherein the employee of the center can manually update the database in case of offline bookings. The attributes include name , password,center_id and employee_id.



NORMALIZED ER TABLE

SOFTWARE DESCRIPTION

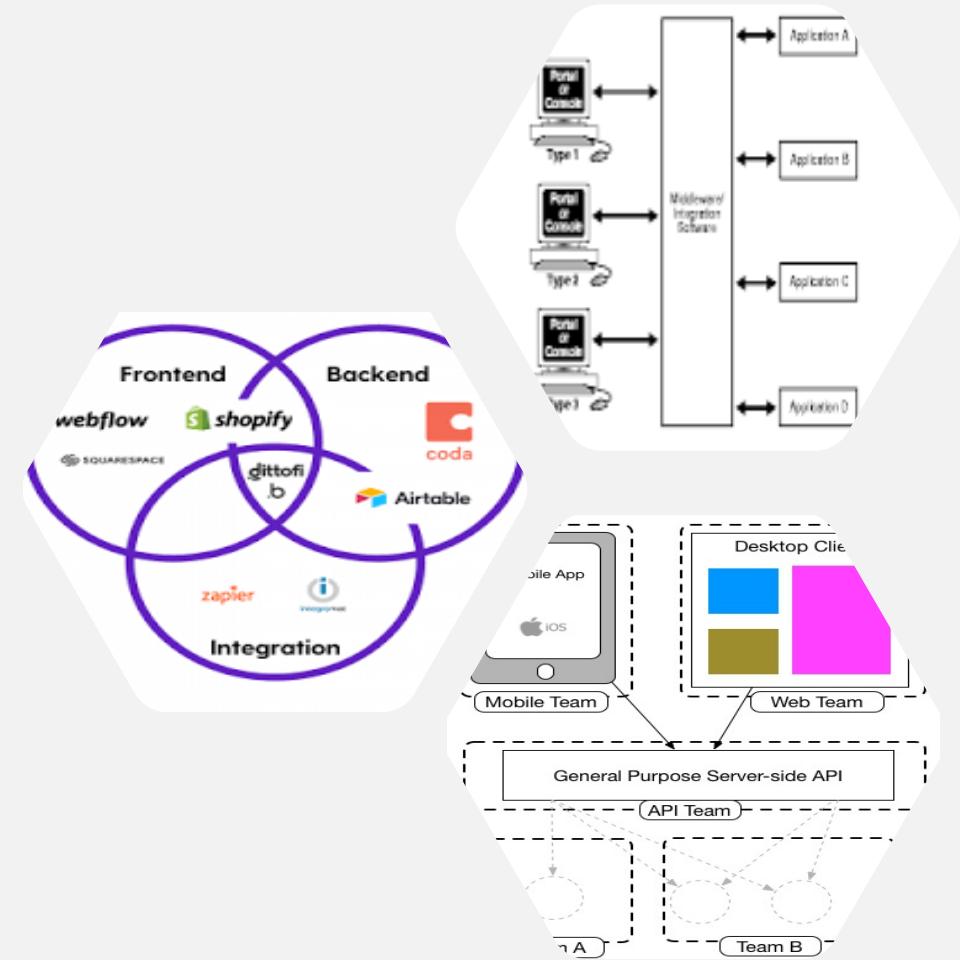
A Database Management System (DBMS) project is a software application that allows users to manage and manipulate data stored in a database. The project typically consists of a graphical user interface (GUI) that allows users to interact with the database and perform various operations, such as creating tables, inserting data, updating data, deleting data, and querying data.

The main features of a DBMS project include:

- ❖ Database Creation and Management: The project allows users to create and manage databases. Users can create new databases, add tables to existing databases, and modify database settings.
- ❖ Data Entry and Management: The project enables users to enter and manage data in the database. Users can add new records, modify existing records, and delete records.
- ❖ Querying and Reporting: The project provides tools for querying and reporting data from the database. Users can create custom queries to retrieve specific data and generate reports based on the query results.
- ❖ User Management: The project includes a user management system that allows administrators to create, modify, and delete user accounts. Users can be assigned different levels of access to the database, depending on their roles and responsibilities.
- ❖ Security and Backup: The project provides security features, such as user authentication and access control, to protect the database from unauthorized access. It also includes backup and recovery tools to ensure that data is not lost in the event of a system failure.

FRONTEND-BACKEND INTEGRATION

- ❖ Frontend and backend integration involves combining the user interface (UI) and user experience (UX) of a frontend application with the functionality and data management of a backend application. This integration is necessary for web applications to work properly and provide a seamless user experience.
- ❖ The frontend of a web application is typically developed using HTML, CSS, and JavaScript, and is responsible for presenting the user interface to the user. It includes the layout, design, and interactive elements of the application, such as forms, buttons, and menus.
- ❖ The backend of a web application is responsible for managing the data and logic of the application. It includes the server-side scripts, APIs, and database management systems that are used to process user requests, manipulate data, and provide responses to the frontend.



Section 1

Atheletics Hub-Unleashing your full athletic potential

Section 5

USER LOGIN

Username

Password

Section 2

Atheletics Hub-Unleashing your full athletic potential

Section 5

USER LOGIN

Select Locality

Select Gaming Center

Select Game

Select the Slots

Check Availability

Section 3

Atheletics Hub-Unleashing your full athletic potential



Booking Successful

The Booking has been successfully purchased and information has been added to your events. Thank you!

TO MY EVENTS

Section 4

Atheletics Hub-Unleashing your full athletic potential

Section 5

EMPLOYEE LOGIN

Username

Password

BASIC OVERVIEW OF WEBPAGE



Thank You

-  Arushi Gupta - 102169008
-  Manas Singhal - 102169009
-  Nishant Gangwar - 102299003

2EM2