

**A  
Project Report  
On  
"Event Management"**

**Prepared by**  
Mohammadsafik(20IT141)

**Under the guidance of**  
Dr. Purvi Prajapati

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Charotar University of Science and Technology  
for Partial Fulfillment of the Requirements for the  
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in Information Technology  
( 8<sup>th</sup> Semester Software Project Major-IT447 )

**Submitted at**



**SMT. KUNDANBEN DINSHA PATEL DEPARTMENT OF  
INFORMATION TECHNOLOGY**  
Chandubhai S. Patel Institute of Technology  
At: Changa, Dist: Anand – 388421

April 2024

## **CANDIDATE'S DECLARATION**

I hereby declare that the project entitled "**Event Management**" is my/our own work conducted under the guidance of **Dr. Purvi Prajapati** and **Ms Astha**.

I further declare that to the best of my/our knowledge, the project for B. Tech does not contain any part of the work, which has been submitted for the award of any degree either in this University or in other University without proper citation.

**Mohammadsafik Shaikh**  
**(20IT141)**

**Dr. Purvi Prajapati**  
**Assistant Professor**

**Smt. Kundanben Dinsha Patel Department of Information Technology,  
Faculty of Technology & Engineering,  
Changa – 388425.**



## **INTERNSHIP COMPLETION CERTIFICATE**

This is to certify that **Mohammad Safik Shaikh**, B.Tech (IT) students of Smt. Kundanben Dinsha Patel Department of Information Technology, CSPIT, CHARUSAT, Changa has completed an internship on “React Js” at **Sparks To Ideas** from **19<sup>th</sup> December 2023 to 13<sup>th</sup> April 2024**.

We wish him all the best for his bright career.

Thanking you.

Sincerely,

**Ashish Meghani**

**Sparks To Ideas**

A handwritten signature in blue ink that appears to read "Ashish Meghani".

**Managing Director**

**Sparks To Ideas**



**CHARUSAT**  
CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

## CERTIFICATE

This is to certify that the report entitled "**Event Management**" is a bonafied work carried out by **MOHAMMADSAFIK SHAIKH (20IT141)** under the guidance and supervision of **Dr. Purvi Prajapati & Ms Astha** for the subject **Software Project Major (IT447)** of 8<sup>th</sup> Semester of Bachelor of Technology in **Information Technology** at Faculty of Technology & Engineering – 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.

Under supervision of,

**Sparks To Ideas**

Dr. Purvi Prajapati  
Assistant Professor  
Smt. Kundanben Dinsha Patel Department  
of Information Technology  
CSPIT, Changa, Gujarat.

Ms. Astha  
Project assistant  
Developer team  
Spark To Idea.

Dr. Parth Shah  
Head & Professor  
Smt. Kundanben Dinsha Patel Department of Information  
CSPIT, Changa, Gujarat.

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**Chandubhai S Patel Institute of Technology**

At: Changa, Ta. Petlad, Dist. Anand, PIN: 388 421. Gujarat

## ABSTRACT

Event planning can be a daunting task, whether it's organizing a small family gathering or orchestrating a large-scale corporate event. The complexity of finding the right venue, staying within budget constraints, and coordinating all the necessary details can often lead to frustration and stress for organizers. To address these challenges, our project focuses on the development of a comprehensive website aimed at simplifying the event planning process for users of all backgrounds and event sizes. This website serves as a versatile tool, allowing individuals to effortlessly organize a wide range of events, from intimate birthday parties to grand weddings and professional conferences. By providing intuitive features such as venue selection, budget management, and seamless communication tools, our platform aims to streamline the entire event planning workflow. Through user-friendly interfaces and robust functionality, we aspire to empower users to plan and execute successful events with confidence and ease. Our project aims to revolutionize the way events are organized, making event planning accessible, efficient, and enjoyable for all users.

## **ACKNOWLEDGEMENT**

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many hands. I would like to extend my sincere thanks to all of them.

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“We may not achieve everything we dream, but we cannot achieve anything unless we dream.”

Mohammadsafik (20IT141)

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## CHAPTER 1 INTRODUCTION

### 1.1 PROJECT OVERVIEW

The constraints of conventional manual event planning techniques are transformed by the use of the Event Management System (EMS). Its design is painstakingly created to answer the various issues that event organisers have, providing a simplified method for precisely and efficiently organising, planning, and carrying out events. Event managers are given the ability to make important decisions from the beginning of event planning using EMS, such as choosing the best time and venue and establishing the theme components that will define the overall experience of the event. EMS relieves event planners of the burden of time-consuming administrative duties by centralising and automating critical planning and administration functions. This frees them up to concentrate on the strategic and creative parts of event organisation.

### 1.2 OBJECTIVE

The Event Management System's primary objective is to minimise the time and effort needed by event organisers while optimising efficiency and effectiveness in event preparation. EMS streamlines the process of organising and managing events by offering an easy-to-use interface for entering crucial information about the event, such as its name, date, time, location, and registration criteria. This simple method guarantees that those in charge of events can effortlessly handle the intricacies of event management, leading to flawlessly planned events that fulfil the goals of both organisers and guests.

### 1.3 SCOPE

The scope of the Event Management Project encompasses the development of an Event Management System (EMS) that revolutionizes traditional event planning techniques by offering a comprehensive suite of functionalities, including event creation and management, venue selection, time scheduling, theme definition, participant management, task assignment, budgeting, communication, and reporting. Key considerations within this scope include defining user roles and permissions, integrating with external systems, ensuring scalability, prioritizing usability and user experience, implementing robust security measures, providing training and support, conducting thorough testing and quality assurance, gathering feedback

for iterative improvement, ensuring regulatory compliance, and offering customization options to suit diverse organizational needs. By addressing these aspects, the project aims to deliver a sophisticated EMS that empowers event organizers with the tools necessary to plan, execute, and evaluate events efficiently and successfully.

## **1.4 TOOLS AND TECHNOLOGY USED**

The Event Management Project utilizes a combination of tools and technologies to develop a robust and efficient Event Management System (EMS). React.js is employed as the frontend JavaScript library, providing a powerful and flexible framework for building dynamic user interfaces. For backend database management, MySQL is selected, offering reliability, scalability, and performance for storing and managing event-related data. Additionally, XAMPP, a local server solution, is utilized to create a development environment that includes Apache, MySQL, PHP, and Perl, facilitating seamless integration and testing of the EMS components. This technology stack enables the development team to leverage modern web development practices and tools to create a user-friendly and feature-rich EMS that meets the needs of event organizers and stakeholders.

## CHAPTER 2 PROJECT MANAGEMENT

### 2.1 PROJECT PLANNING

The project planning phase of the Event Management Project involves a systematic approach to defining project objectives, establishing timelines, allocating resources, and outlining tasks and milestones. This phase begins with a comprehensive analysis of requirements gathered from stakeholders and end-users to determine the scope and key functionalities of the Event Management System (EMS). Following this, a project plan is developed, outlining the project's goals, deliverables, timelines, and resource requirements. Tasks are then broken down into manageable units, and dependencies between tasks are identified to create a detailed project schedule. Key milestones, such as prototype development, testing phases, and deployment, are established to track progress and ensure alignment with project objectives. Throughout the planning process, communication and collaboration among team members are emphasized to foster a cohesive and efficient project execution. Additionally, contingency plans are devised to address potential risks and uncertainties that may arise during the project lifecycle, ensuring that the project remains on track to deliver a successful EMS that meets the needs of event organizers and stakeholders.

#### 2.1.1 Project Development Approach and Justification

- 1 Requirement Analysis: Conduct a thorough assessment of stakeholder needs and system requirements.
- 2 System Design: Develop a comprehensive blueprint for the architecture and functionality of the EMS.
- 3 Database Design: Design an efficient and scalable database structure to store and manage event-related data.
- 4 UI Design: Create an intuitive and user-friendly interface for seamless interaction with the EMS.
- 5 Development: Implement the EMS according to the design specifications and requirements.
- 6 Testing: Conduct rigorous testing to ensure the reliability, performance, and usability of the EMS.
- 7 Deployment: Roll out the EMS to production environments following successful testing.

- 8 User Training: Provide comprehensive training to users to maximize proficiency and utilization of the EMS.
- 9 Maintenance and Support: Offer ongoing maintenance and support to address issues and ensure system stability.
- 10 Enhancements and Upgrades: Continuously improve the EMS through enhancements and upgrades based on user feedback and evolving requirements.

### **2.1.2 Roles and Responsibilities**

In the Event Management Project, various roles and responsibilities are distributed across the project team to ensure effective execution and successful delivery of the EMS. The Project Manager plays a central role in overseeing the project's progress, managing resources, and ensuring that timelines and milestones are met. They are responsible for coordinating with stakeholders, managing risks, and resolving any issues that may arise during the project lifecycle. Working closely with the Project Manager, the Business Analyst gathers and analyzes requirements from stakeholders, translating them into actionable project tasks and ensuring alignment with the project's objectives and scope. They act as a bridge between business stakeholders and the development team, facilitating clear communication and understanding of requirements.

Within the development team, roles are divided to cover various aspects of the EMS's creation. The System Architect designs the overall architecture and technical framework of the EMS, ensuring scalability, performance, and security. The Database Administrator is responsible for designing and managing the database structure, ensuring data integrity, security, and efficiency. The UI/UX Designer focuses on creating an intuitive and visually appealing user interface, enhancing user experience and usability. Developers implement the EMS according to design specifications and requirements, while Quality Assurance/Testers conduct rigorous testing to identify and resolve any defects or issues. Finally, the Deployment Team manages the deployment process, ensuring a smooth transition to production, while the Training Specialist provides comprehensive training to users to maximize proficiency and utilization of the EMS.

## 2.2 PROJECT WORK SCHEDULING

Over the course of the 10-week project timeline, a structured approach is essential to ensure the efficient allocation of resources and timely completion of project milestones. In the initial week, the focus lies on comprehensive Requirement Analysis, involving the gathering and analysis of requirements from stakeholders. This phase is crucial for establishing a clear understanding of project objectives and setting the foundation for subsequent development phases. Additionally, a kickoff meeting is conducted during this period to align stakeholders on project goals and expectations, fostering a shared vision for the project.

Moving into weeks 2 and 3, attention shifts towards System Design and Database Design. The System Design phase involves the development of a detailed architecture and functionality blueprint for the Event Management System (EMS). Simultaneously, the Database Design phase focuses on designing the database structure to ensure efficient data management and integrity. These concurrent efforts lay the groundwork for the development phase by providing a clear technical framework and data model to guide implementation.

By weeks 4 and 5, the project enters the Development phase, where the actual implementation of the EMS begins. This phase is complemented by the UI Design phase, during which an intuitive and user-friendly interface is crafted to enhance user experience. These parallel activities ensure a cohesive approach to system development, with a focus on both technical functionality and user-centric design. As development progresses, regular communication and collaboration among team members are essential to address any emerging challenges and ensure alignment with project objectives.

Timelines	Start date	End date
Project Kickoff	19/12/2023	23/12/2023
Initial Analysis	25/12/2023	30/12/2023
Detailed Requirements Gathering	01/01/2024	06/01/2024
Design Phase	08/01/2024	13/01/2024
Development Phase (Coding)	15/01/2024	20/01/2024
Continued Development	05/02/2024	10/02/2024
Integration and Testing	12/02/2024	17/02/2024
User Acceptance Testing (UAT)	19/02/2024	24/02/2024

Table 2.2 Project Charter

<b>Timelines</b>	<b>Start date</b>	<b>End date</b>
Definition	25/12/2023	30/12/2023
Analysis	01/01/2024	06/01/2024
Admin Design	08/01/2024	13/01/2024
Admin Sign in	15/01/2024	20/01/2024
Post category	05/02/2024	10/02/2024
Event post	12/02/2024	17/02/2024
User design	19/02/2024	24/02/2024
Sign up	26/02/2024	02/03/2024
Sign in	04/03/2024	09/03/2024
Home page	11/03/2024	16/03/2024
About page	18/03/2024	23/03/2024
Events	25/03/2024	30/03/2024
Testing	01/04/2024	06/04/2024
Documentation	08/04/2024	13/04/2024

Table 2.3 Project Plan

## CHAPTER 3 SYSTEM REQUIREMENTS STUDY

### 3.1 USER CHARACTERISTICS

- 1 Event Organizers: These users are responsible for planning, coordinating, and managing events. They require comprehensive tools for creating and managing events, including features for scheduling, venue selection, participant management, budgeting, and task assignment.
- 2 Attendees: Attendees are individuals who participate in events organized through the EMS. They may require functionalities such as event registration, ticket purchasing, access to event information, and communication with event organizers.
- 3 Speakers and Performers: These users are invited to speak or perform at events. They may need features for managing their participation, including communication with event organizers, scheduling, and access to event materials.
- 4 Sponsors: Sponsors provide financial support or resources for events. They may require features for sponsorship management, including communication with event organizers, sponsorship package selection, and tracking of sponsorship benefits.
- 5 Administrators: Administrators are responsible for managing the EMS system itself, including user accounts, permissions, and system configurations. They require tools for system administration, user management, and system maintenance.

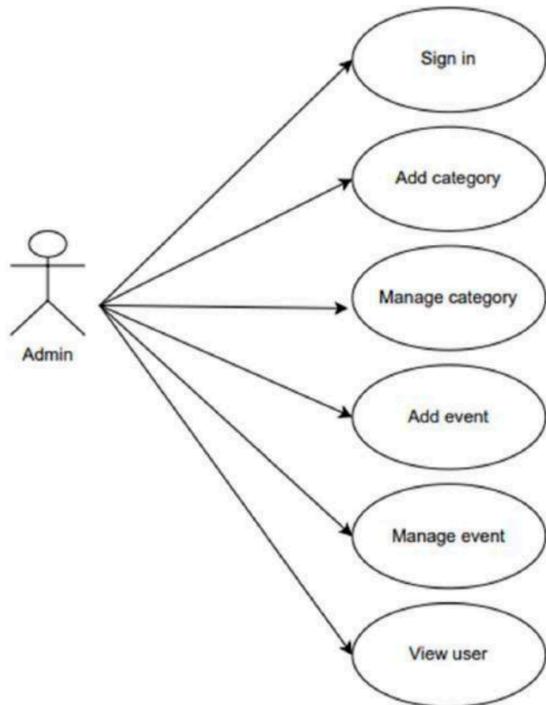
**Admin :**

Fig 3.1 Use case Diagram for Admin

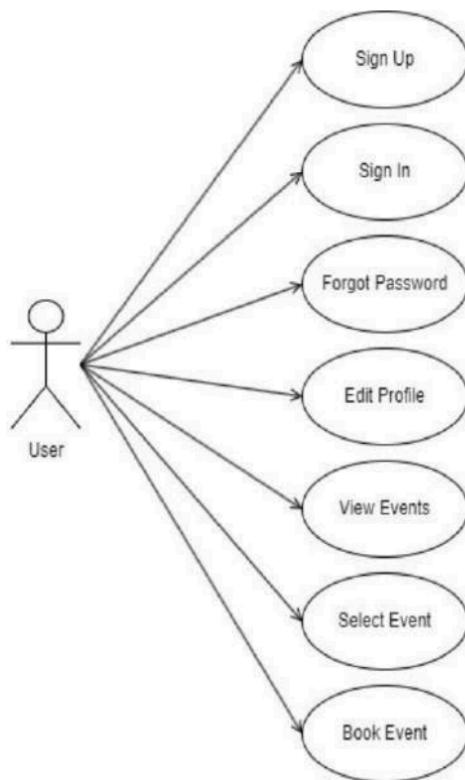
**User :**

Fig 3.2 Use case Diagram for User

**3.2 HARDWARE AND SOFTWARE REQUIREMENTS**

<b>Software Requirement</b>	
Front End	React.js
Backend	Node.js
Framework	Express
Database	MySQL
Development tool	Visual studio code
Operating System	MacOS

Table 3.1 software requirement

<b>Hardware Requirement</b>	
processor	M2 chip
RAM	8 GB
Hard Disk	256 GB

Table 3.2 Hardware requirement

### 3.3 ASSUMPTIONS AND CONSTRAINTS

Assumption : Several key assumptions underlie the planning and implementation of the Event Management System (EMS). Firstly, it is assumed that the organization will shoulder the expenses associated with hardware costs, as well as licenses for the operating system and backend infrastructure. This assumption simplifies the cost estimation process by excluding these expenditures from consideration, allowing a more focused analysis of development costs and operational requirements. Additionally, the decision to adopt the EMS is based on a recommendation from the event owner, who operates within the retail business sector. This assumption underscores the alignment of the EMS with the strategic objectives and operational needs of the event owner, ensuring its relevance and potential effectiveness within their specific industry context.

Constraints : The development and implementation of the Event Management System (EMS) are subject to several constraints that shape its design and functionality. Firstly, there may be constraints related to the availability of required resources, such as skilled personnel, technology infrastructure, and budgetary limitations. These constraints can impact the project timeline, scope, and overall feasibility, necessitating careful resource allocation and management throughout the development process. Additionally, the EMS operates within the constraint that application data cannot be accessed online from anywhere. This limitation may influence user accessibility and system usability, requiring alternative solutions or workarounds to ensure efficient data access and management.

Furthermore, the EMS must adhere to strict security constraints to safeguard user data and protect against unauthorized access. This includes implementing robust encryption mechanisms to secure sensitive information and employing access control measures to prevent data breaches. Compliance with data protection regulations and industry standards is

paramount to maintain user trust and confidentiality. Moreover, the EMS may encounter scalability constraints, particularly concerning the maximum number of attendees and events it can effectively handle. This constraint necessitates careful planning and scalability testing to ensure that the system can accommodate increasing user loads and event complexities over time. By acknowledging and addressing these constraints proactively, the EMS can be designed and implemented to meet user needs while mitigating potential risks and limitations.

## CHAPTER 4 SYSTEM ANALYSIS

### 4.1 STUDY OF EXISTING SOLUTION

Coordination is key to the success of any event, yet the lack thereof can lead to a cascade of complications. From venue reservations to décor and entertainment, each element must be seamlessly synchronized to ensure a harmonious event experience. Failure to coordinate these aspects effectively can result in a disjointed event that falls short of expectations, leaving both organizers and attendees dissatisfied.

Moreover, the limited customization options offered by many event management systems further exacerbate the challenge of crafting unique and memorable events. Without the ability to tailor every aspect to the specific needs and preferences of customers, events risk feeling generic or uninspired. This lack of customization not only diminishes the overall quality of the event but also fails to create the personalized experiences that today's discerning clientele demand.

### 4.2 Limitations of Existing Solution

The existing event management solutions present several limitations that hinder their effectiveness and usability. Firstly, they often lack sufficient customization options, constraining event organizers' ability to tailor the system to their specific requirements. This limitation can lead to inefficiencies and obstacles in event planning and management processes. Additionally, many existing solutions suffer from complexity, making them challenging to navigate, particularly for users with limited technical proficiency. This complexity contributes to user frustration, errors, and reduced productivity during event organization and execution. Moreover, poor user experience is prevalent in many solutions, characterized by unintuitive interfaces, confusing workflows, and outdated design elements, which negatively impact user satisfaction and adoption rates, ultimately affecting the system's overall success. Furthermore, limited scalability is a common issue, as some solutions struggle to accommodate growing event volumes and data, resulting in performance issues and degraded user experiences during peak usage times. Security concerns also abound, with vulnerabilities exposing sensitive user data to risks such as unauthorized access and data breaches, eroding trust in the system. Integration challenges with other systems and platforms, as well as the lack of adequate mobile

accessibility, further compound these limitations, emphasizing the need for a more robust and user-centric event management solution.

### **4.3 REQUIREMENTS OF PROPOSED SYSTEM**

Requirements of the proposed system encompass both functional and non-functional aspects, ensuring the comprehensive functionality and performance of the Event Management System (EMS).

#### **4.3.1 Functional Requirements:**

- 1 Event Creation and Management: Allow event organizers to create, edit, and manage events, including specifying event details, dates, locations, and ticketing options.
- 2 Venue Management: Provide functionality for selecting, booking, and managing event venues, including availability, capacity, and amenities.
- 3 Registration and Attendee Management: Enable attendees to register for events online, manage their registration details, and allow event organizers to track attendee information.
- 4 Schedule and Agenda Management: Allow event organizers to create and manage event schedules, agendas, and sessions, including scheduling speakers, sessions, and breaks.
- 5 Reporting and Analytics: Generate reports and analytics on event attendance, revenue, feedback, and other metrics to evaluate event performance and make data-driven decisions.

#### **4.3.2 Non Functional Requirements**

- 1 Security: Ensure the security of user data, including encryption of sensitive information, protection against unauthorized access, and compliance with data protection regulations.

- 2 Performance: Ensure the system can handle concurrent user requests, process transactions efficiently, and provide a responsive user experience under varying load conditions.
- 3 Scalability: Design the system to scale horizontally and vertically to accommodate increasing numbers of attendees, events, and data volume over time.
- 4 Reliability: Ensure high availability and uptime of the system, with minimal downtime for maintenance or upgrades, and implement backup and recovery procedures to prevent data loss.
- 5 Usability: Design an intuitive and user-friendly interface for easy navigation, seamless interaction, and accessibility across different devices and platforms.
- 6 Compatibility: Ensure compatibility with a range of web browsers, devices, and operating systems to support diverse user preferences and requirements.
- 7 Maintainability: Design the system with modular, well-documented code, and provide tools for easy maintenance, updates, and enhancements by developers and administrators.

#### **4.4 SYSTEM WORK FLOW**

1. Event Creation: The process begins with event organizers creating new events within the EMS platform. They input essential details such as event name, date, time, location, and description, as well as specifying ticketing options, pricing, and availability.
2. Venue Selection: Organizers can browse through available venues or add new ones to the system. They can view venue details, including capacity, amenities, and availability, and select the most suitable option for their event.
3. Registration and Ticketing: Once the event is created and the venue selected, attendees can register for the event through the EMS platform.

4. Schedule and Agenda Management: Organizers create event schedules and agendas, including sessions, speakers, breaks, and activities. They can assign speakers to specific sessions, set session durations, and manage the overall flow of the event.
5. Attendee Management: Organizers can track attendee registrations, view attendee profiles, and manage attendee lists within the EMS platform. They can access attendee data for marketing purposes, event planning, and post-event analysis.
6. Reporting and Analytics: The EMS generates reports and analytics on various aspects of the event, including attendance rates, ticket sales, revenue, feedback, and attendee demographics. Organizers can use this data to evaluate event performance, identify areas for improvement, and make informed decisions for future events.

## 4.5 Class Diagram

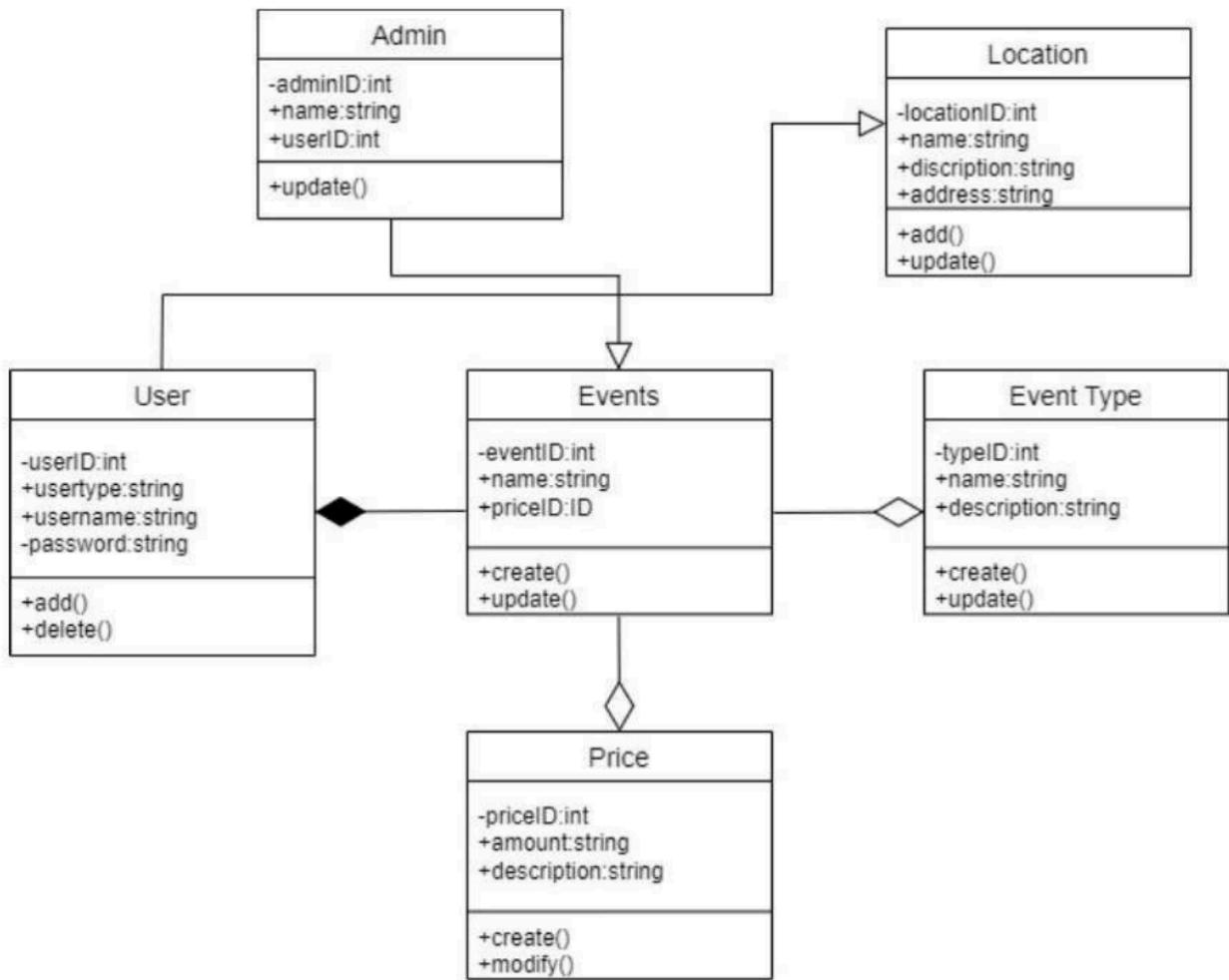


Fig 4.5 Class Diagram

## 4.6 Activity Diagram

**Admin :**

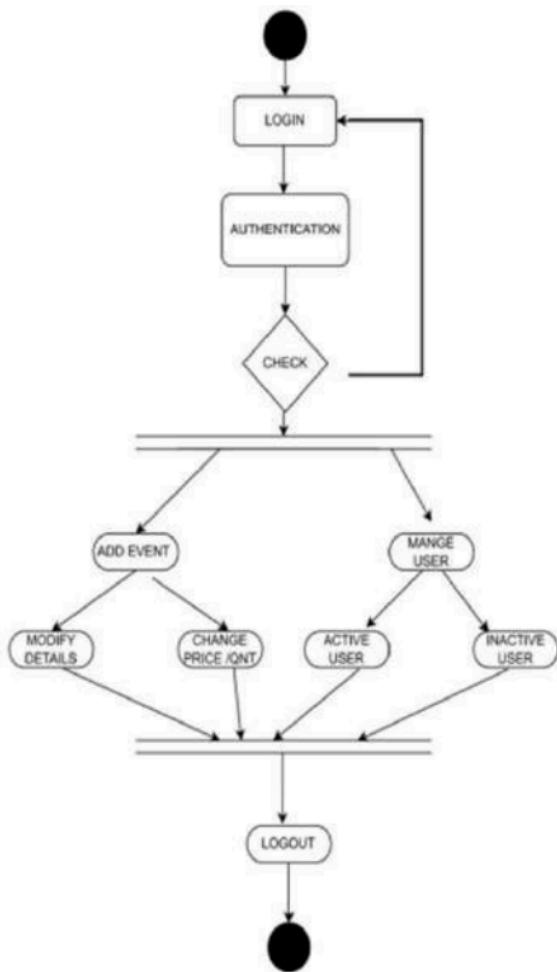


Fig 4.6.1 Activity Diagram for Admin

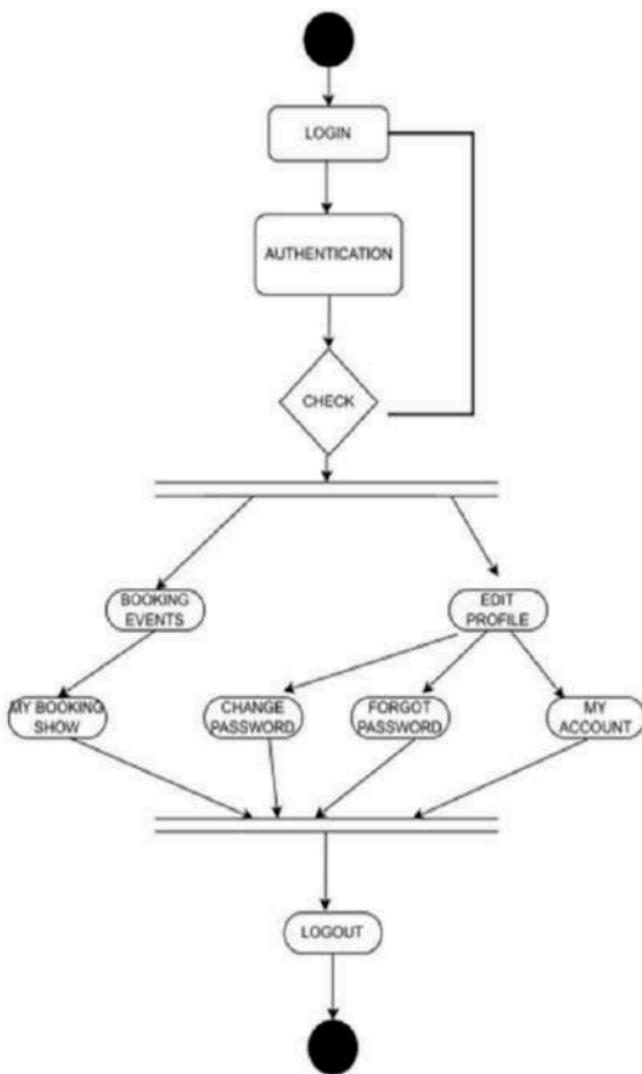
**User :**

Fig 4.6.2 Activity Diagram for user

#### 4.7 Sequence Diagram

**Admin :**

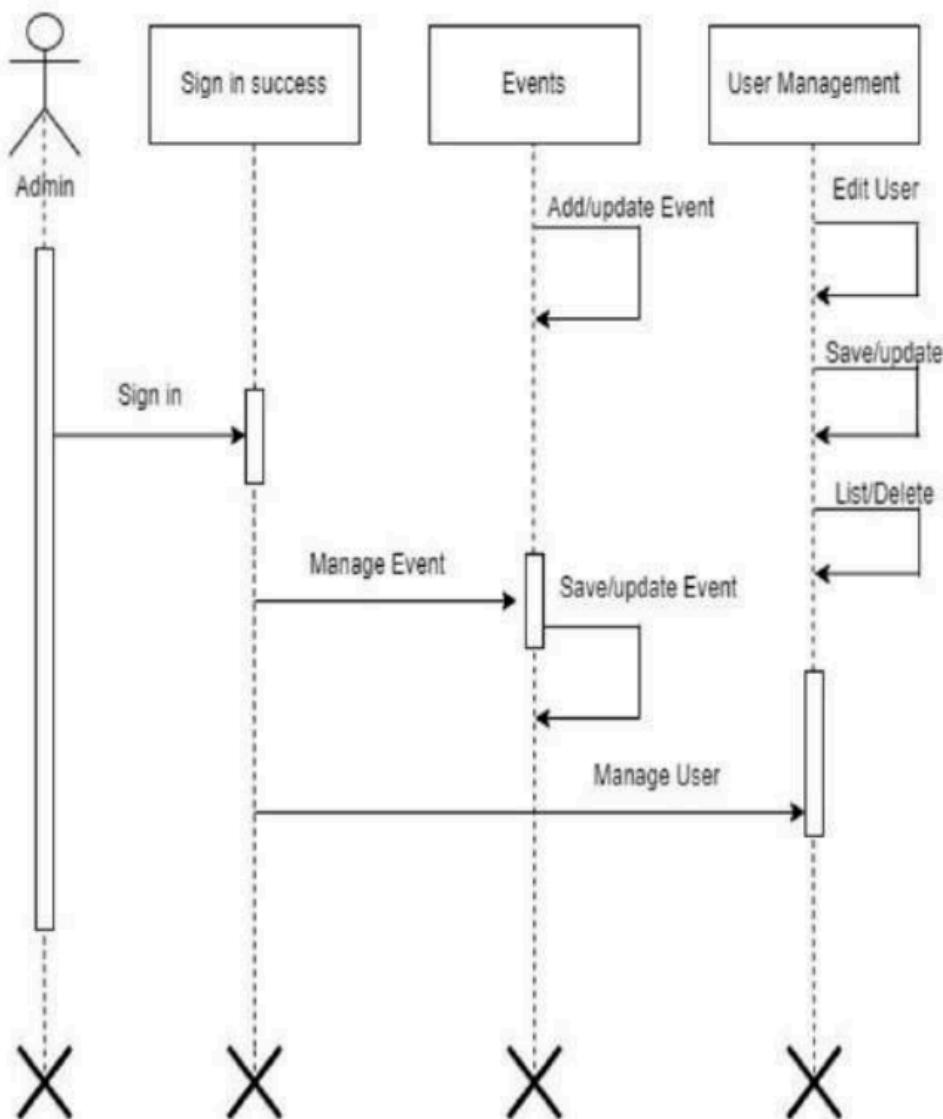


Fig 4.7.1 Sequence Diagram for Admin

## Admin Add Category :

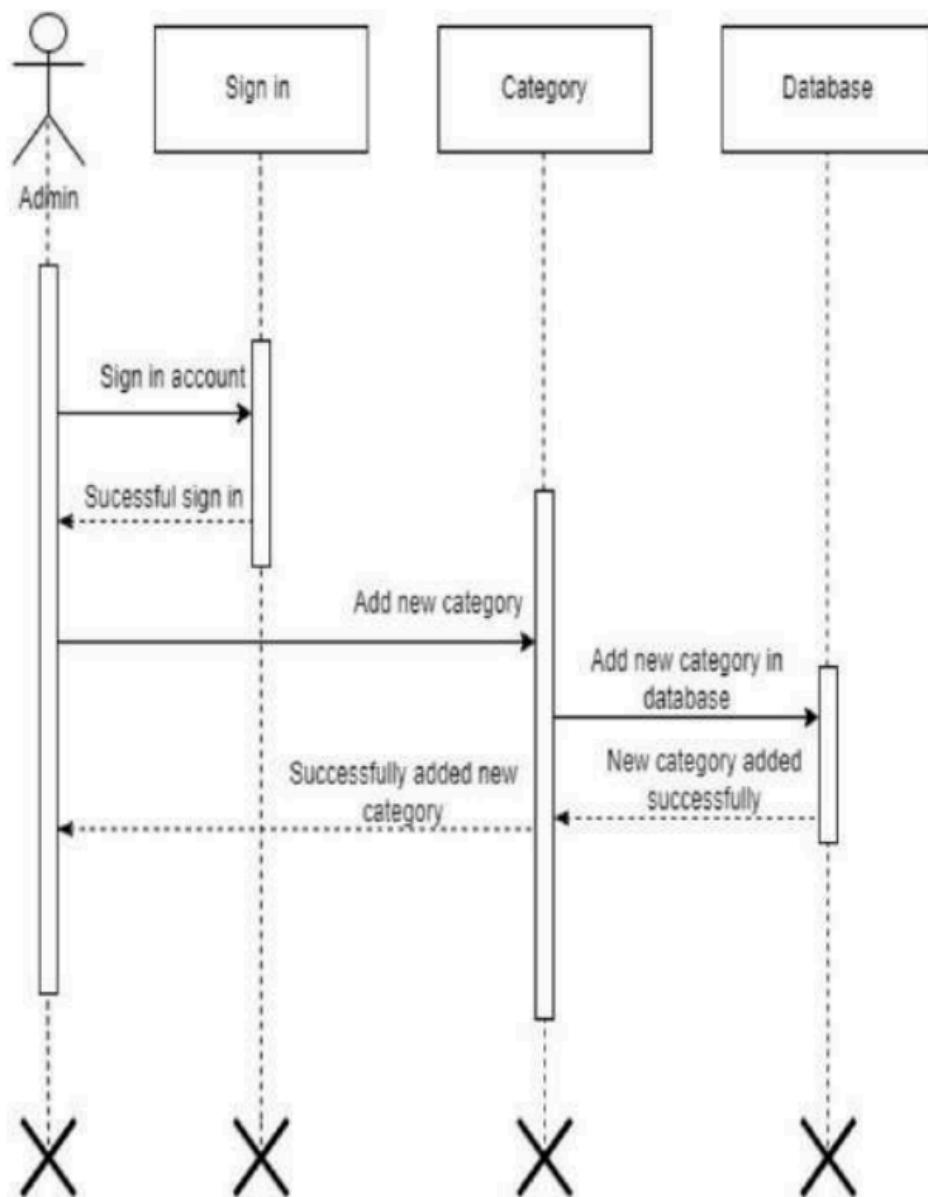


Fig 4.7.2 Sequence Diagram for add category

## CHAPTER 5 SYSTEM DESIGN

### 5.1 DATABASE SCHEMA DESIGN

The database schema design for the Event Management System (EMS) is structured to efficiently organize and manage event-related data. At its core is the Events table, serving as the central repository for event details such as name, date, time, and location. Connected to this table are several other key tables, including Venues, Attendees, Speakers, Sessions, Tickets, Registrations, and Feedback. The Venues table stores information about event locations, while the Attendees table contains attendee details and the Speakers table holds information about event speakers. Sessions are managed in the Sessions table, with each session linked to its corresponding event and speaker. Tickets are stored in the Tickets table, allowing organizers to manage ticket types, prices, and availability. Registrations are recorded in the Registrations table, linking attendees to specific events, while feedback provided by attendees is stored in the Feedback table. These tables are interconnected through foreign key constraints, enabling efficient retrieval and manipulation of data. This database schema design ensures the integrity, accessibility, and scalability of event-related information within the EMS, facilitating smooth event planning, execution, and evaluation processes.

### 5.2 DATA DICTIONARY

The data dictionary is a document that provides detailed information about the data elements used in the software. It includes information about the data types, field lengths, validation rules, and other metadata related to the data. The data dictionary is an essential component of the software documentation and helps to ensure consistency and accuracy in the data used by the software.

## Table Name: User

No.	Field Name	Data Type	Constraint	Description
1	id	Integer	Primary key	Unique identifier for each user
2	name	Varchar	Not null	User name details
3	area_id	Integer	Foreign key	Reference of area
4	email_id	Varchar	Not null	Stores email address
5	password	Varchar	Not null	Stores password
6	address	Varchar	Not null	Users address
7	contact	Varchar	Not null	Stores contact number
8	is_active	Enum	Not null	1,0
9	u_date	datetime	Not null	Shows created date
10	u_update	Datetime	Not null	Shows updated date

Table 5.2.1 Data dictionary for user

**Table Name: Admin**

No.	Field Name	Data Type	Constraint	Description
1	id	Integer	Primary key	Unique identifier for each event
2	name	Varchar	Not null	Name of the event
3	email_id	Varchar	Null	Stores email address
4	contact	Varchar	Not null	Stores contact number
5	password	Varchar	Not null	Stores password
6	image	Varchar	Not null	Stores image
7	is_active	Enum	Not null	1,0
8	a_cdate	Datetime	Not null	Shows created table
9	a_udate	Datetime	Not null	Shows updated table

Table 5.2.2 Data dictionary for admin

**Table Name: Event**

No.	Field Name	Data Type	Constraint	Description
1	id	Integer	Primary key	Unique identifier for each event
2	name	Varchar	Not null	Name of the event
3	description	Varchar	Null	Description of the event
4	start_date	Varchar	Not null	Start date and time of the event
5	end_date	Varchar	Not null	End date and time of the event
6	location	Varchar	Not null	Physical location of the event
7	as_active	Enum	Not null	1,0
8	c_cdate	Datetime	Not null	Shows created date
9	e_update	Datetime	Not null	Shows updated date

Table 5.2.3 Data dictionary for event

**Table Name: Category**

No.	Field Name	Data Type	Constraint	Description
1	cat_id	Integer	Primary key	Unique identifier for each event
2	cat_name	Varchar	Not null	Name of the event
3	cat_status	enum	Not null	Show category table
4	is_active	enum	Null	1,0
5	c_cdate	Datetime	Not null	Shows Created table
6	c_udate	datetime	Not null	Shows updated table

Table 5.2.4 Data dictionary for category

**Table Name: Contact**

No.	Field Name	Data Type	Constraint	Description
1	id	Integer	Primary key	Unique identifier for each event
2	user_id	Bigint	Primary key	Unique identifier for each event
3	name	Varchar	Not null	Name of the event
4	is_active	enum	Null	1,0
5	c_cdate	Datetime	Not null	Shows created date
6	c_udate	Datetime	Not null	Shows updated date

Table 5.2.5 Data dictionary for contact

### 5.3 Screen Layout

Screen layout refers to the arrangement and presentation of elements on a user interface screen. In the context of the Event Management System (EMS), the screen layout plays a crucial role in ensuring a user-friendly and intuitive experience for event organizers, attendees, speakers, and other stakeholders.

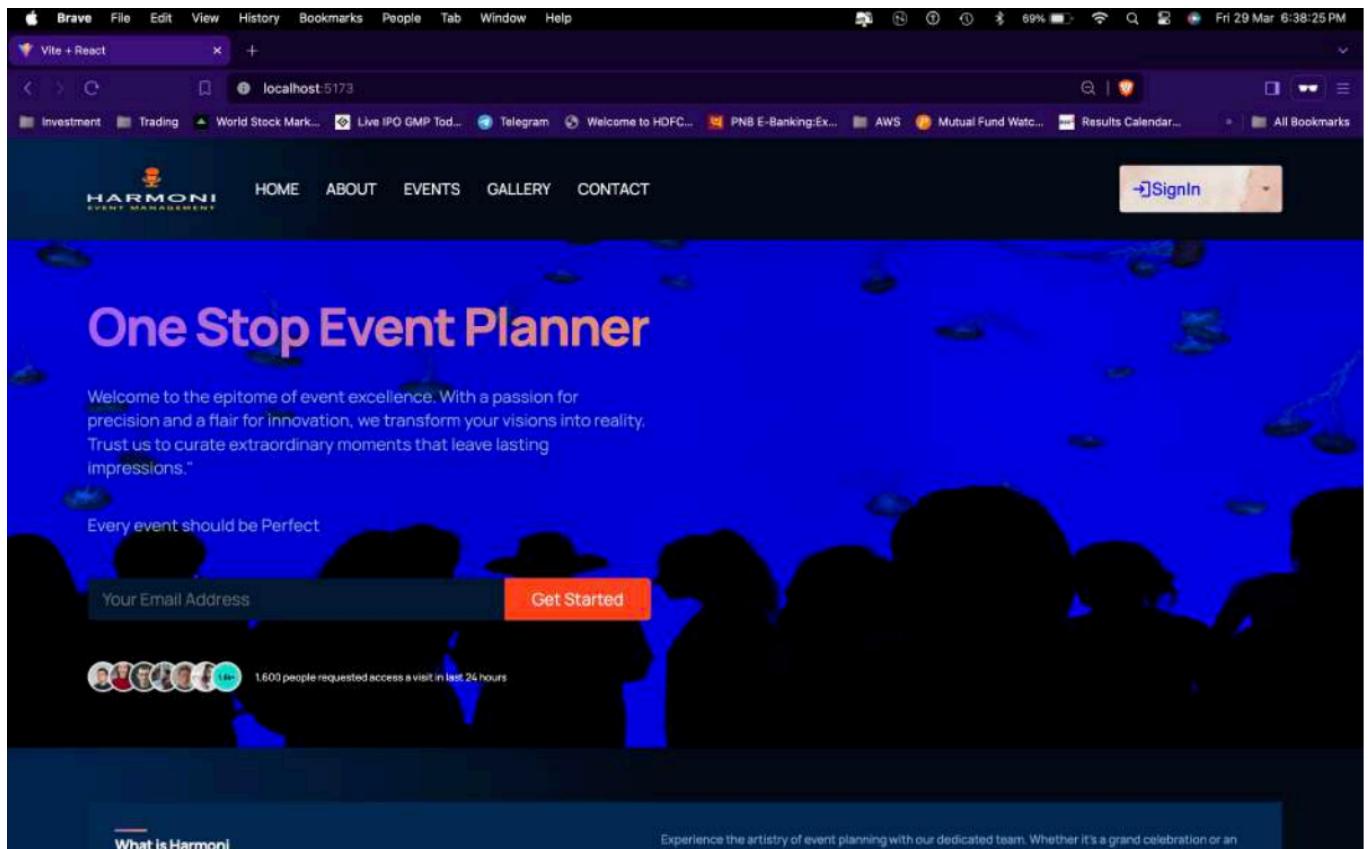


Fig 5.3.1 Dashboard layout

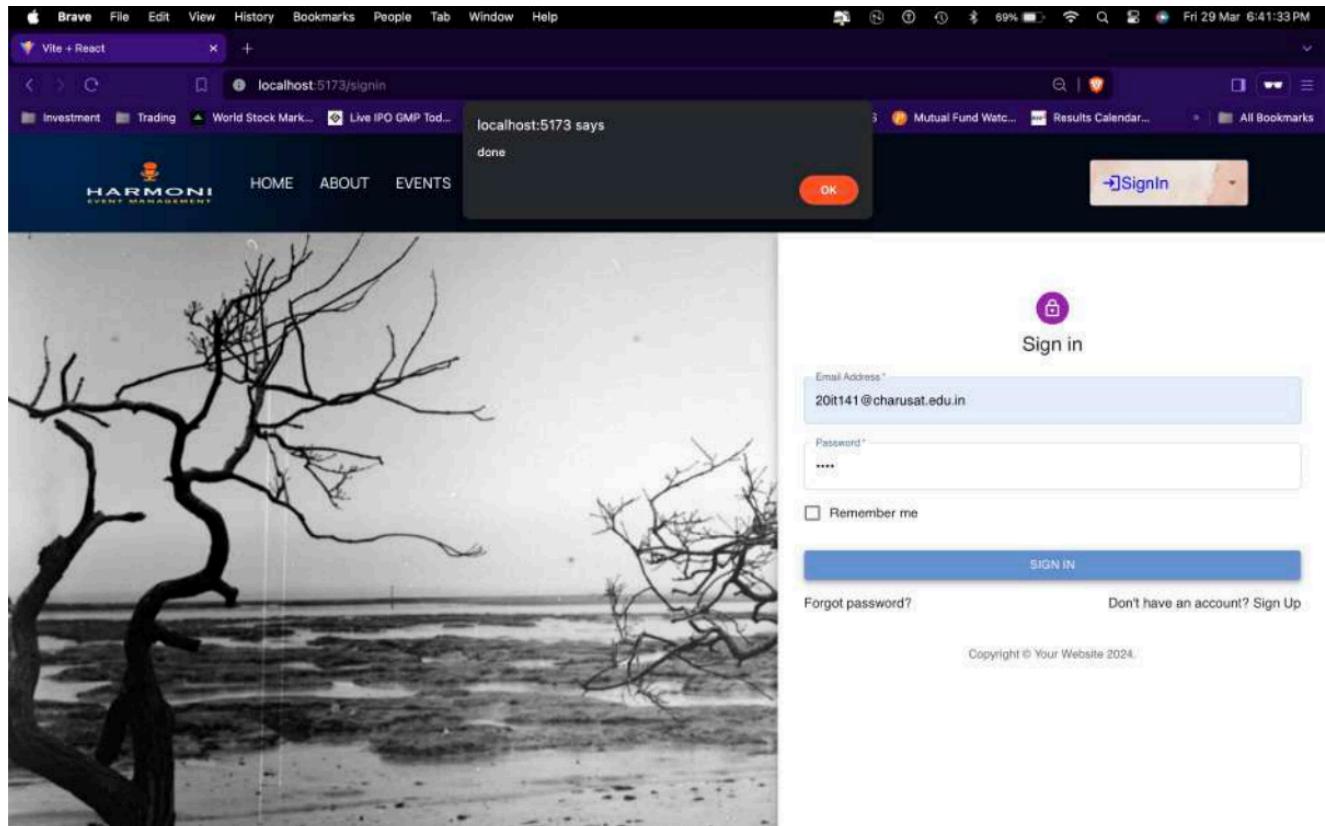


Fig 5.3.2 Sign In Page layout

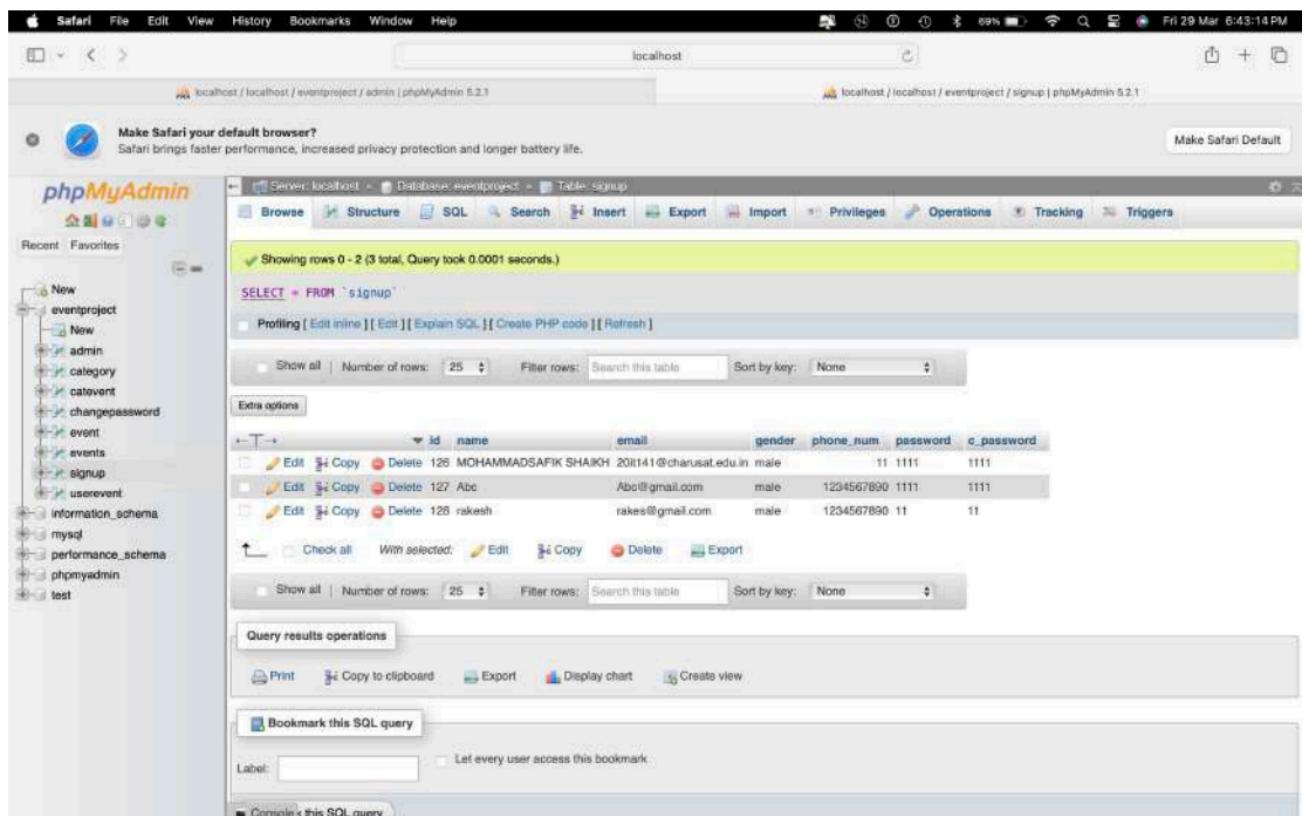


Fig 5.3.4 Local Server Database

no.	Name	Email	Gender	Phone number
126	MOHAMMADSAFIK SHAIKH	20it141@charusat.edu.in	male	11
127	Abc	Abc@gmail.com	male	1234567890
128	rakesh	rakesh@gmail.com	male	1234567890

Fig 5.3.5 User list in admin panel

The screenshot shows the 'Post Event' form. It includes a file upload section with 'Choose file' and 'CHOOSE PIC' buttons. Below this are fields for 'Title \*', 'Event Start Date' (DD/MM/YYYY), 'Event End Date' (DD/MM/YYYY), 'Start Time' (with a clock icon), 'Select Event Category' (dropdown menu), 'location' (text input), and 'Location' (text input). At the bottom is a large blue 'POST' button.

Fig 5.3.6 Post Event section In admin panel

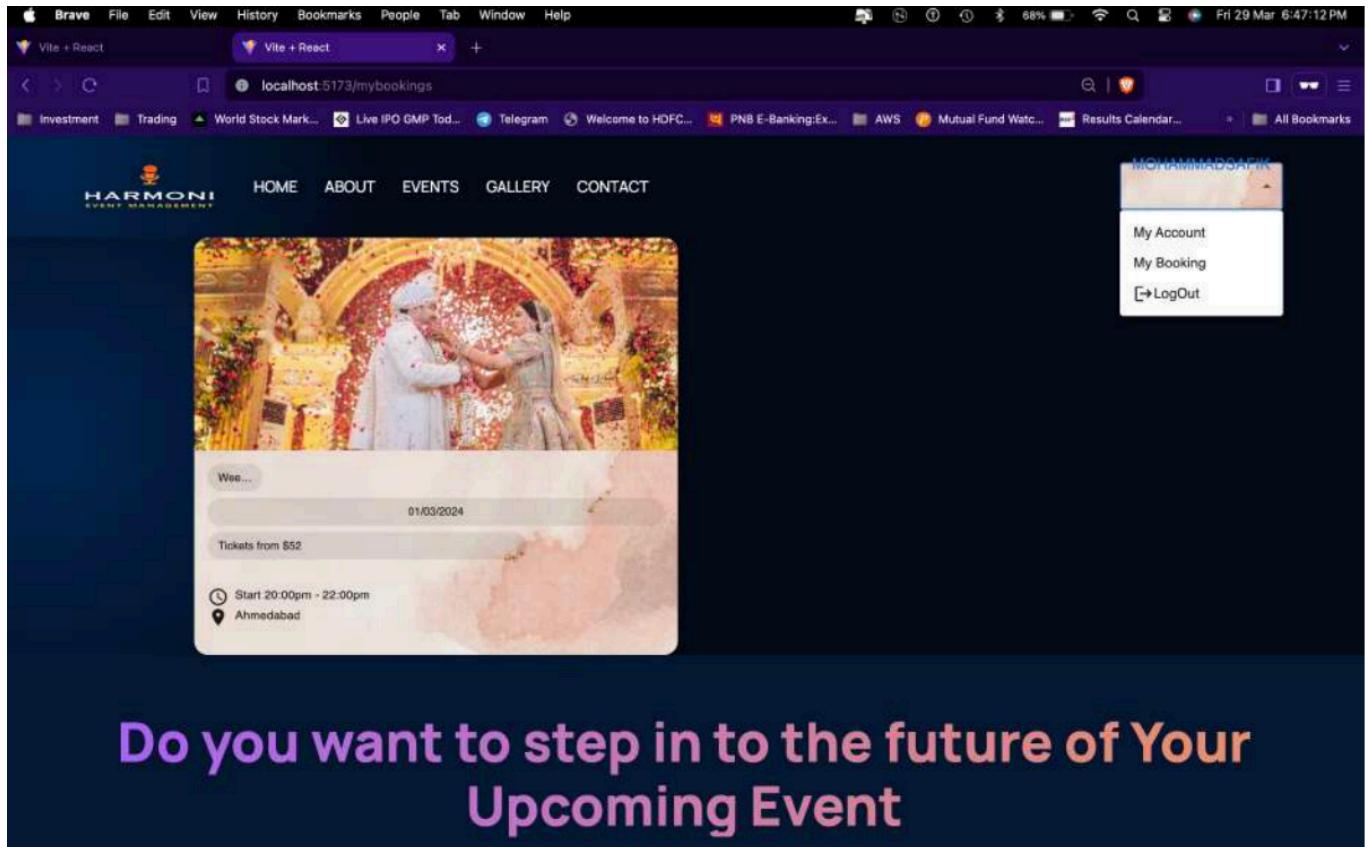


Fig 5.3.7 Event page in user section

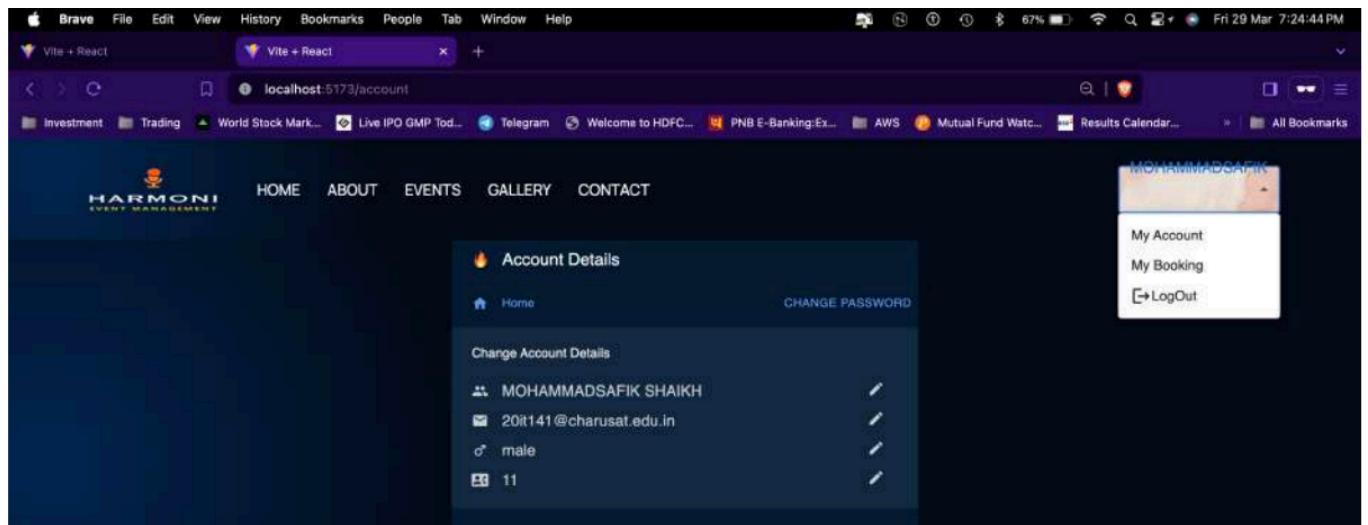


Fig 5.3.8 My account section in user panel

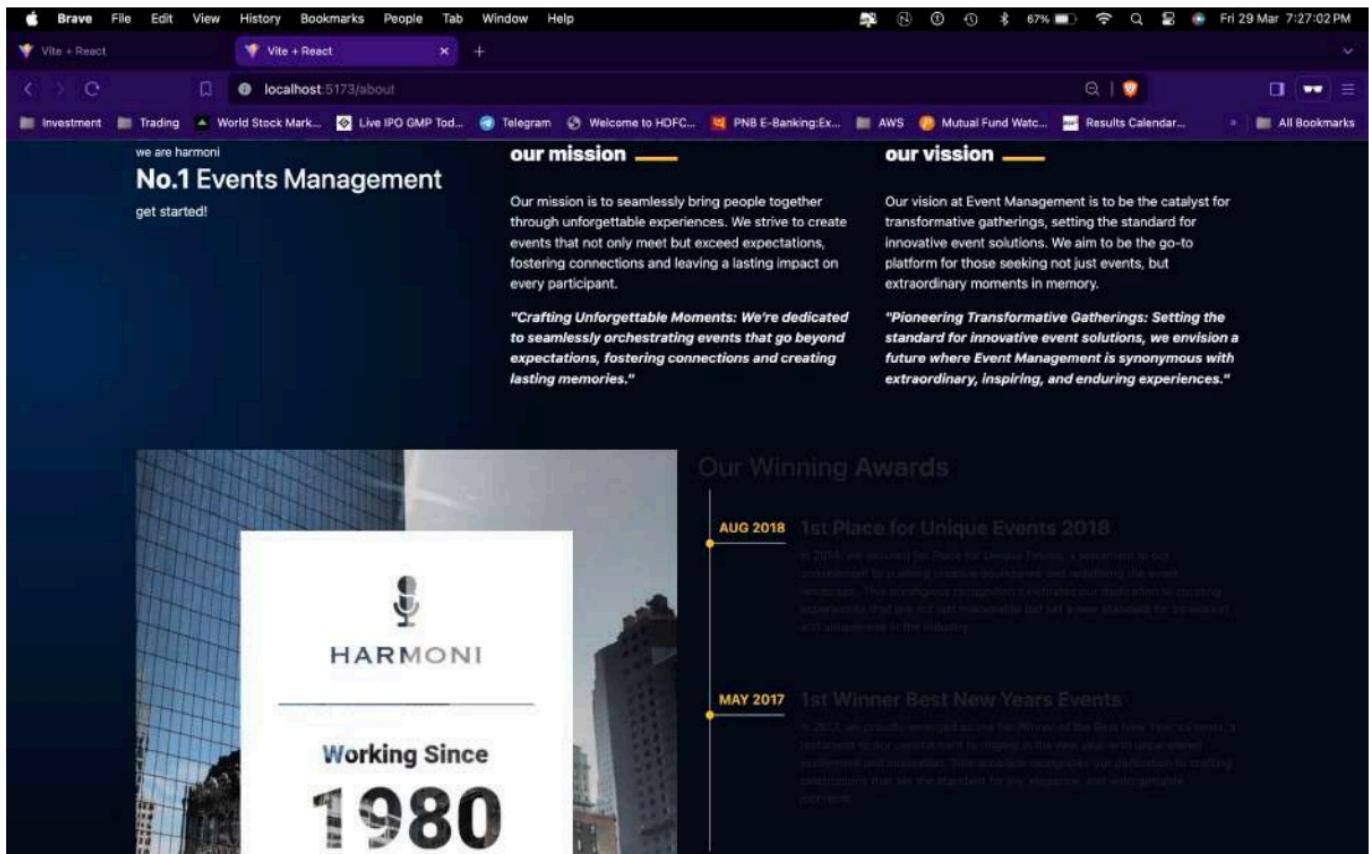


Fig 5.3.9 About us page

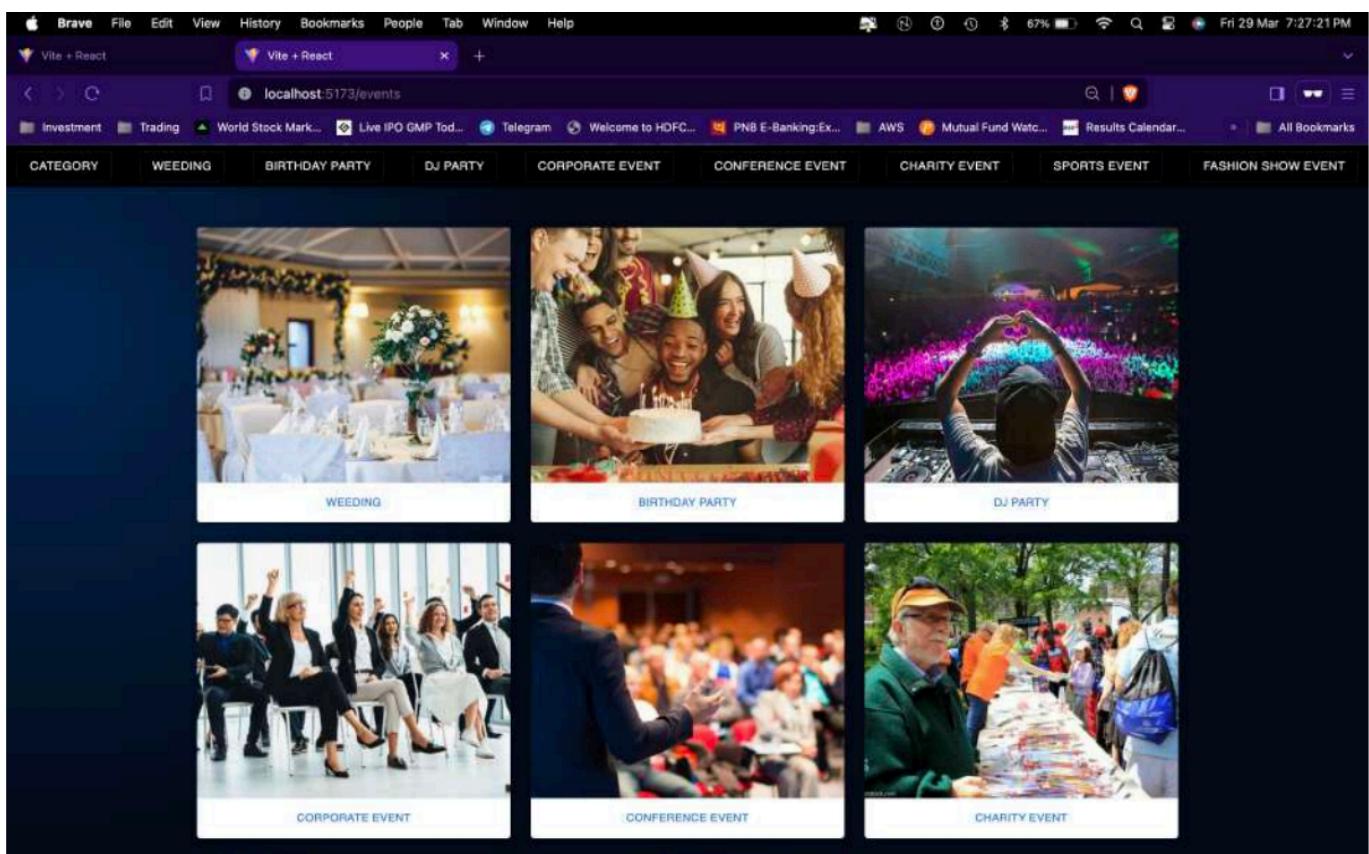


Fig 5.3.10 Event Category

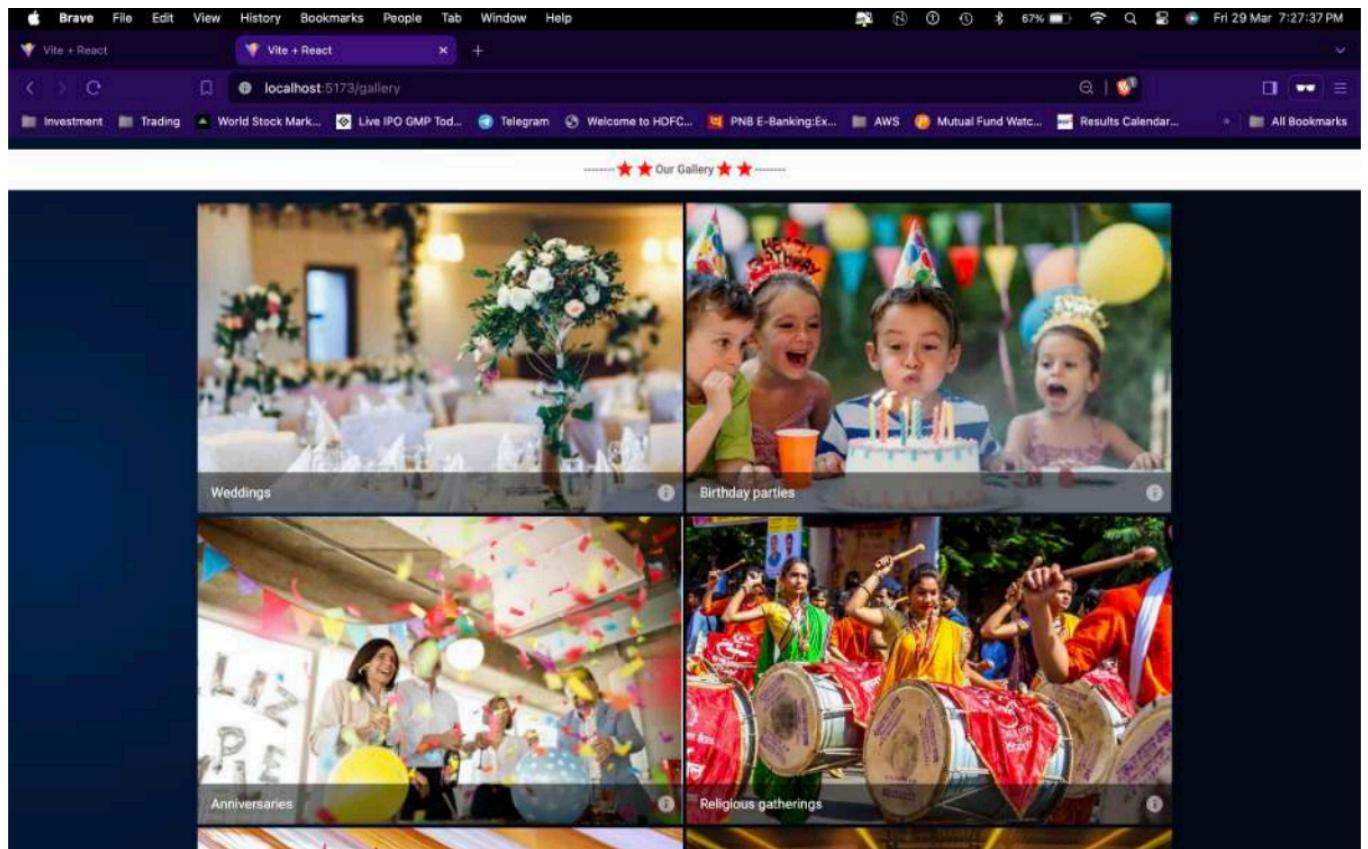


Fig 5.3.11 gallery section in user panel

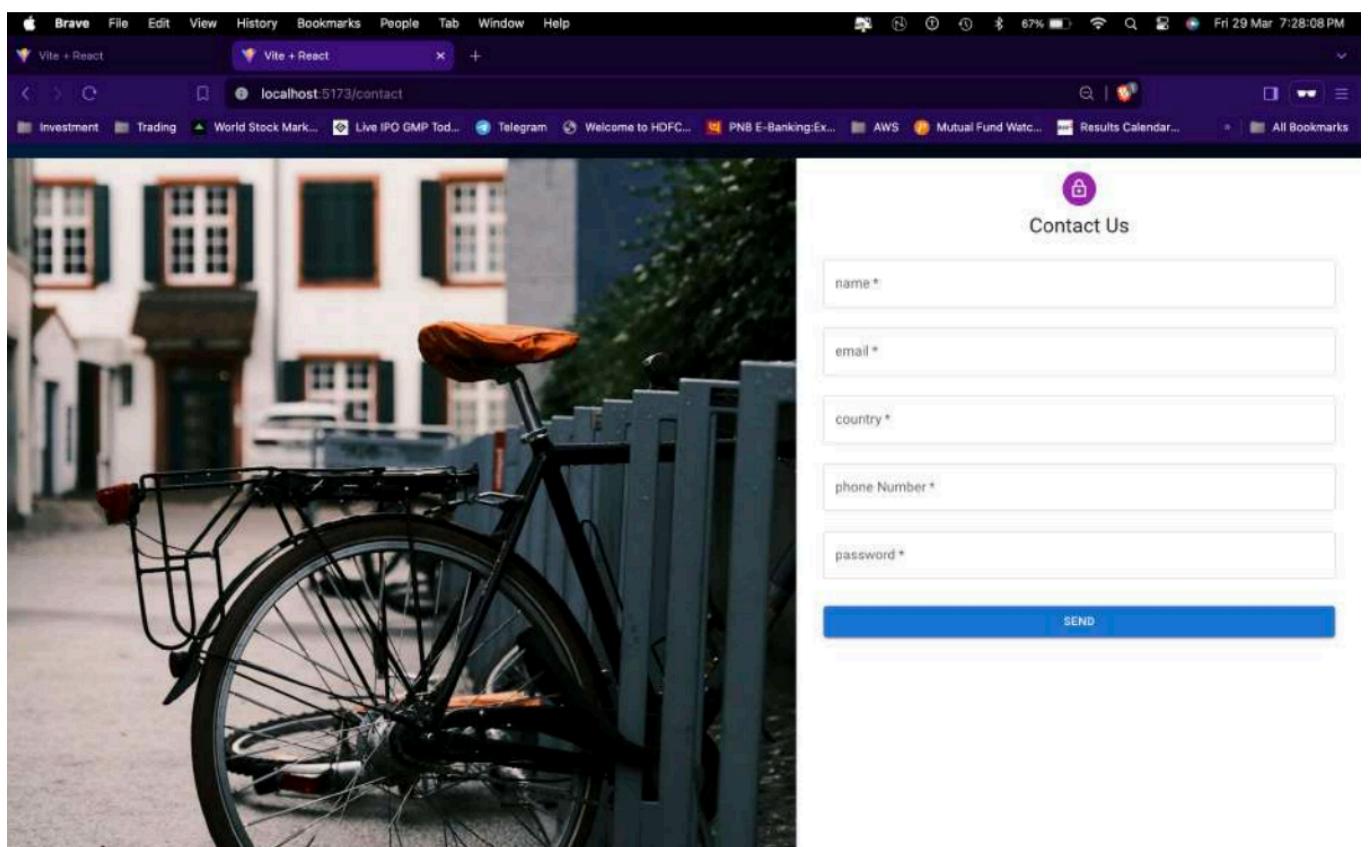


Fig 5.3.12 Contact us page

## CHAPTER 6 SYSTEM IMPLEMENTATION & TESTING

### 6.1 CODING STANDARDS

1. **Formatting and Indentation:** Establish guidelines for code formatting and indentation to ensure uniformity and readability. Use consistent indentation levels (e.g., tabs or spaces) and line lengths to enhance code clarity. Consider using automated code formatting tools or IDE settings to enforce formatting standards.
2. **Documentation:** Require comprehensive documentation for code modules, including function/method headers, class/interface descriptions, and inline comments. Document the purpose, inputs, outputs, and usage examples of each component to facilitate understanding and usage by other developers.
3. **Error Handling and Logging:** Establish guidelines for error handling, exception handling, and logging to ensure robustness and reliability of the code. Define standards for logging levels, message formats, and error reporting mechanisms to facilitate troubleshooting and debugging.
4. **Security Best Practices:** Enforce security best practices and guidelines for handling sensitive data, preventing common vulnerabilities such as SQL injection, XSS (Cross-Site Scripting), and CSRF (Cross-Site Request Forgery). Educate developers on secure coding practices and encourage regular security audits and code reviews.
5. **Testing and Quality Assurance:** Promote test-driven development (TDD) and establish guidelines for writing unit tests, integration tests, and end-to-end tests to ensure code correctness and functionality. Define standards for test naming, coverage thresholds, and test documentation to maintain test suite effectiveness.

### 6.2 TESTING METHODS

In the context of the Event Management System (EMS), various testing methods are employed to ensure the quality, reliability, and functionality of the software. Here are some key testing methods that can be applied during the development and deployment phases:

1. In the context of the Event Management System (EMS), various testing methods are employed to ensure the quality, reliability, and functionality of the software. Here are some key testing methods that can be applied during the development and deployment phases:

2. Integration Testing: Integration testing focuses on testing the interactions and integration points between different modules, components, or services within the EMS. It ensures that these components work together seamlessly and that data flows correctly between them. Integration testing can include testing API endpoints, database interactions, and third-party integrations.
3. System Testing: System testing evaluates the entire EMS system as a whole to verify that it meets the specified functional and non-functional requirements. It involves testing end-to-end scenarios and user workflows to validate the system's behavior from a user's perspective. System testing can include functional testing, usability testing, performance testing, and security testing.

### 6.3 TEST SUITES DESIGN

Designing test suites for the Event Management System (EMS) involves creating a comprehensive set of test cases to verify its functionality, reliability, performance, and security. Here's a structured approach to designing test suites for the EMS:

1. Identify Test Scenarios: Start by identifying key scenarios and use cases that represent typical user interactions with the EMS. These scenarios should cover a wide range of functionalities, including event creation, attendee registration, session management, ticketing, reporting, and feedback submission.
2. Categorize Test Cases: Categorize test cases based on different aspects of the EMS, such as functional testing, integration testing, performance testing, and security testing. Each category should focus on specific aspects of the system's behavior and characteristics.
3. Define Test Objectives: Clearly define the objectives of each test suite, outlining what aspects of the EMS will be tested and what specific criteria will be used to evaluate its performance. For example, the functional testing suite may focus on verifying that all features and functionalities work as expected, while the security testing suite may aim to identify and mitigate potential vulnerabilities.
4. Create Test Cases: Develop detailed test cases for each identified scenario, specifying the steps to be executed, the expected outcomes, and any preconditions or test data required. Test cases should cover both positive and negative scenarios to validate the EMS's behavior under various conditions.

## CHAPTER 7 FUTURE ENHANCEMENT

Future enhancements for the Event Management System (EMS) are designed to propel its capabilities and user experience to new heights. One focal point involves optimizing database tables to streamline content management, ensuring data organization and retrieval processes are efficient. Additionally, plans are underway to augment the system with tailored functionalities to better cater to user needs, thus enhancing overall satisfaction. Modifications to the booking event system are also on the horizon, aimed at improving its usability and efficacy in event attendance and management.

Looking forward, the requirements specification for future releases emphasizes a commitment to continuity and improvement. This involves maintaining existing functionality while integrating new features and addressing identified bugs and deficiencies. Such an iterative approach ensures evolving user needs are met while prioritizing system stability, reliability, and performance. By adhering to these principles and continually refining the system based on user feedback and technological advancements, the EMS is poised to evolve into a robust and versatile platform, capable of meeting the diverse needs of its user base.

## CHAPTER 8 CONCLUSION

### 8.1 SELF ANALYSIS OF PROJECT VIABILITIES

In evaluating the viability of the project, several critical aspects need consideration. Firstly, assessing the market demand for event management systems in the target market is pivotal. This involves thorough research into industry trends, competitor analysis, and gathering potential customer feedback to gauge the level of demand. Additionally, understanding the unique value proposition of the event management system is essential. Identifying its key features, benefits, and advantages compared to existing solutions helps determine its attractiveness to potential users and stakeholders. Technical feasibility is another crucial factor, requiring an assessment of the capabilities of the chosen technology stack, infrastructure requirements, scalability potential, and potential technical challenges that may arise. Adequate availability of resources, including skilled developers, funding, time, and infrastructure, is also imperative for successful project execution and long-term sustainability. Financial viability entails analyzing development costs, potential revenue streams, and projected return on investment to ensure the project's financial feasibility. Moreover, regulatory compliance with relevant laws and standards, user acceptance through feedback gathering, and risk assessment to identify potential challenges and uncertainties are all integral parts of evaluating the project's viability. By thoroughly analyzing these factors and conducting comprehensive research and planning, one can make informed decisions about the project's feasibility and potential for success, ensuring its ongoing viability and relevance in a competitive market landscape.

### 8.2 PROBLEM ENCOUNTERED AND THEIR SOLUTIONS

During the development of the Event Management System (EMS), several challenges were encountered, each requiring innovative solutions for resolution. One significant challenge revolved around optimizing system performance, particularly during peak usage times when there was a surge in user activity. To address this, thorough performance testing was conducted to identify bottlenecks, followed by the optimization of database queries and server-side code. Implementing caching mechanisms and leveraging content delivery networks (CDNs) also proved effective in improving response times and overall system performance. Additionally, ensuring the security of user data and protecting the system from potential cyber threats posed another challenge. To mitigate this risk, comprehensive security audits were conducted, encryption techniques were implemented to secure sensitive data, and stringent access controls

and authentication mechanisms were enforced. User interface complexity was also addressed through UX research, stakeholder feedback, and iterative refinement of the interface based on usability testing results. Furthermore, integration challenges with external systems were overcome through close collaboration with external vendors, thorough integration testing, and the development of robust error handling mechanisms. Finally, scalability concerns were addressed by implementing scalable architecture patterns such as microservices, distributed caching, and cloud-based infrastructure solutions. Through proactive identification and resolution of these challenges, the EMS was successfully developed into a robust and reliable platform that meets the needs of its users effectively.

### **8.3 SUMMARY OF THE PROJECT WORK**

The project involved the development of an Event Management System (EMS) aimed at streamlining the organization and execution of various events, including birthday parties, weddings, anniversaries, and corporate gatherings. Leveraging technologies such as React.js for the frontend and Node.js for the backend, the system offers a dynamic and efficient platform for event management. Key features include event creation, attendee registration, session management, ticketing, reporting, and feedback submission. Throughout the project, challenges such as optimizing system performance, ensuring security, addressing user interface complexity, and overcoming integration and scalability concerns were encountered and successfully addressed through innovative solutions. The project culminated in the delivery of a robust and reliable EMS that meets the diverse needs of event organizers and attendees, offering a seamless and user-friendly experience. Moving forward, the project sets a solid foundation for future enhancements and refinements to further elevate the system's capabilities and user satisfaction.

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# Event Management System

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