# **Problem Statement & Objectives**

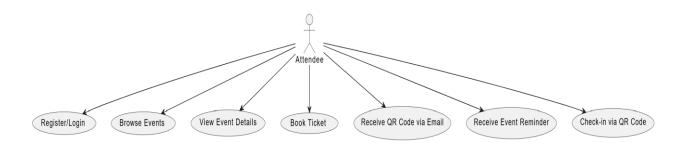
#### **Problem Statement**

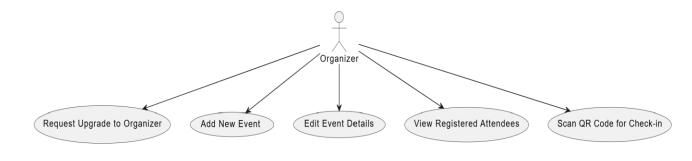
The current event organization process faces several challenges, including inefficient communication, lack of task coordination, and difficulty in managing attendees and team members. Existing solutions do not provide a centralized platform that integrates event scheduling, task assignment, and real-time notifications. This project aims to develop a streamlined system that enhances event planning efficiency, improves collaboration among organizers, and ensures attendees stay informed.

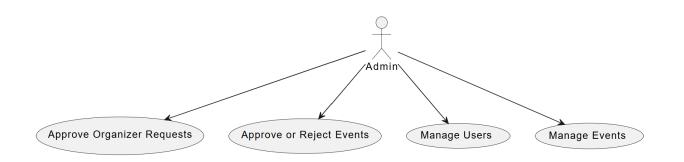
### **Objectives**

#### 1. Identify System Actors and Interactions

• Utilize **Use Case Diagrams** to map out user roles and system interactions.







#### **Description:**

- Organizer: Creates events, assigns tasks, and sends notifications.
- Attendee: Receives updates and registers attendance.
- Admin: Manages users and monitors system performance.

### 2. Define Functional & Non-Functional Requirements

• Clearly outline what the system should do and the constraints it must adhere to.

### Functional Requirements:

The system should allow event organizers to create new events.

2 Notifications should be sent in real-time for event updates.

Users should be able to register attendance via the platform.

#### **Non-Functional Requirements:**

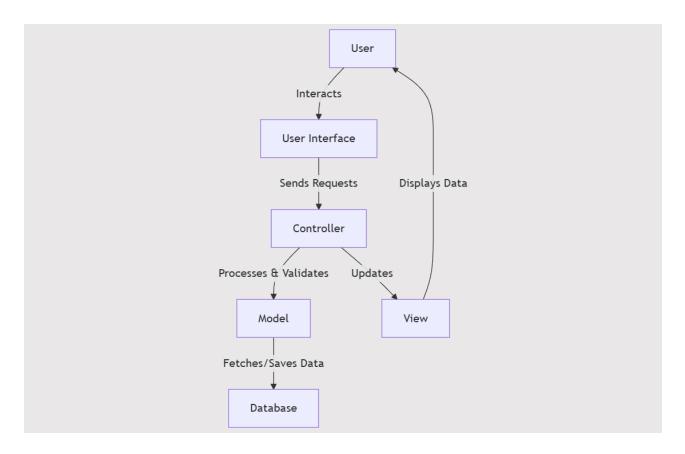
The system should respond to user actions within 2 seconds.

Different user roles should have varying levels of access.

The platform should be accessible on both mobile and desktop.

#### 3. Establish Software Architecture

• Develop a high-level system design, defining key components and their interactions (e.g., MVC pattern, microservices).



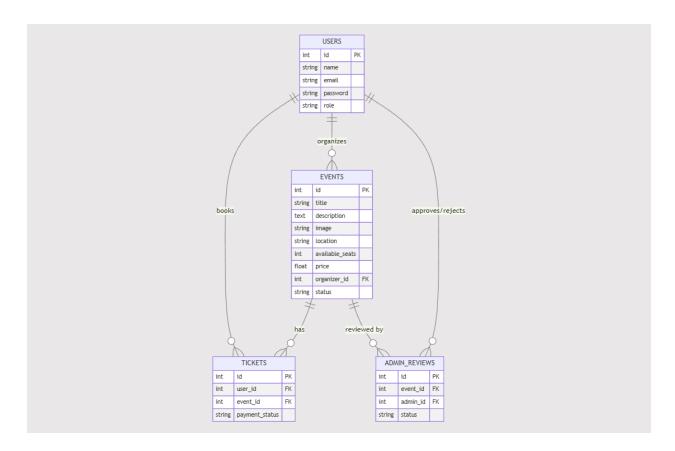
### **Description:**

- Frontend (UI): Displays events and user interactions.
- Backend (Controller & Model): Processes requests and manages data.
- Database: Stores user information, events, and notifications.

This document serves as the foundation for further system analysis and design phases, ensuring a structured development approach.

# **Database Design & Data Modeling**

### **ER Diagram (Entity-Relationship Diagram)**

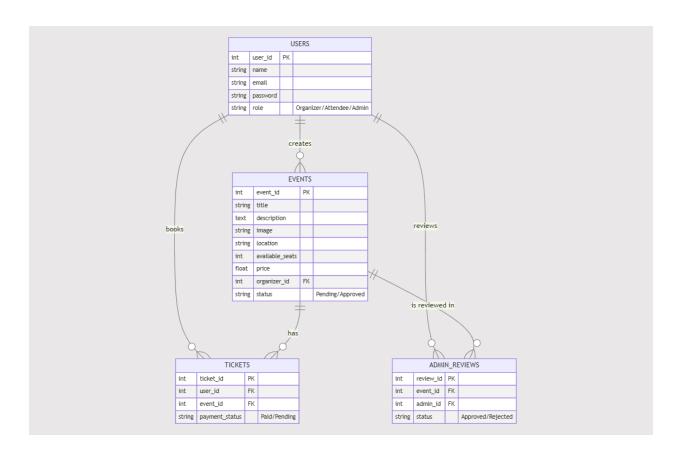


### **Description:**

- Defines entities such as Users, Events, Tickets, and Admin Reviews.
- Illustrates relationships between entities (e.g., One-to-Many, Many-to-Many).

### **Logical & Physical Schema**

Tables, attributes, keys, and normalization considerations.



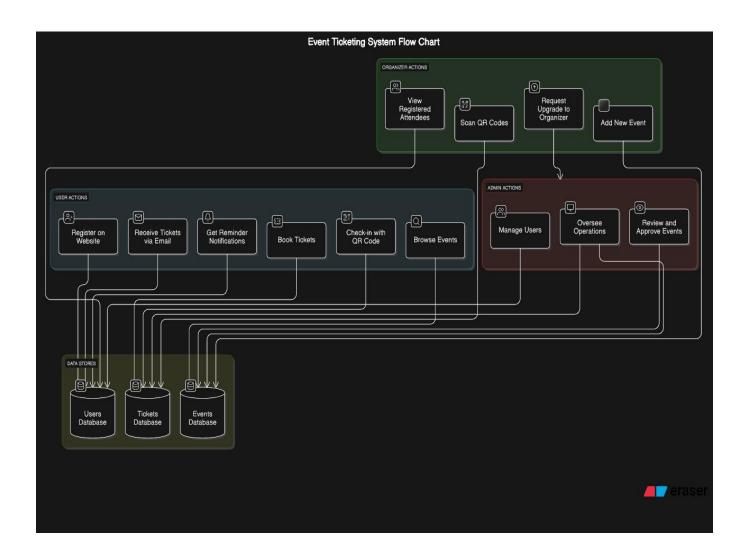
#### **Description:**

- Users Table: Stores user details (ID, name, role, email, etc.).
- **Events Table:** Contains event details (ID, title, description, image, location, seats, price, organizer ID, status).
- Tickets Table: Stores ticket bookings (ticket ID, user ID, event ID, payment status).
- Admin Reviews Table: Tracks event approval process (review ID, event ID, admin ID, status).

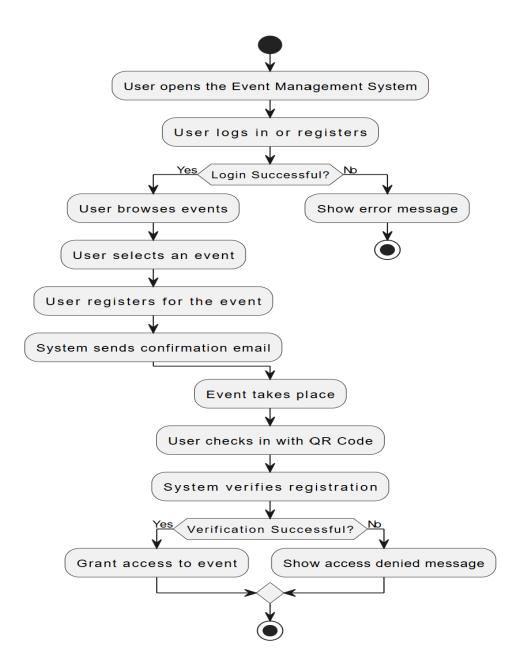
This section ensures a well-structured database model to support the system efficiently.

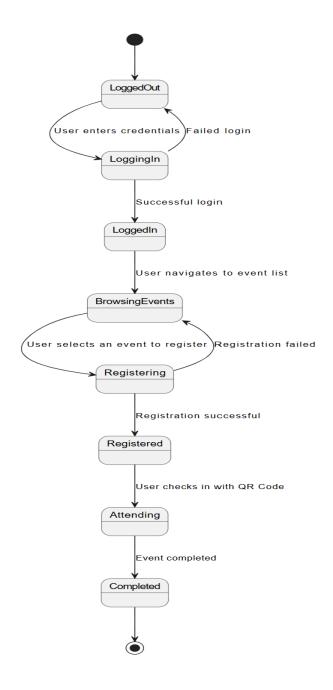
# **Data Flow& System Behavior**

**DFD (Data Flow Diagram)** 

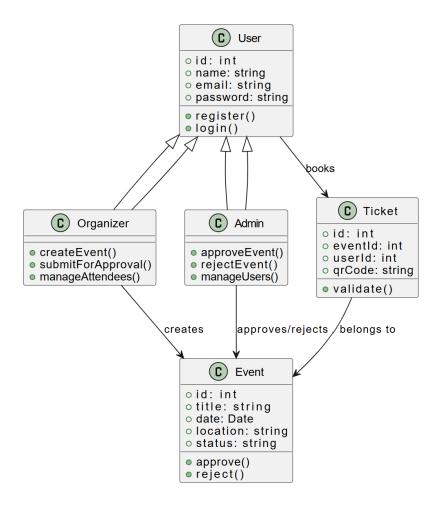


## **Sequence Diagrams**



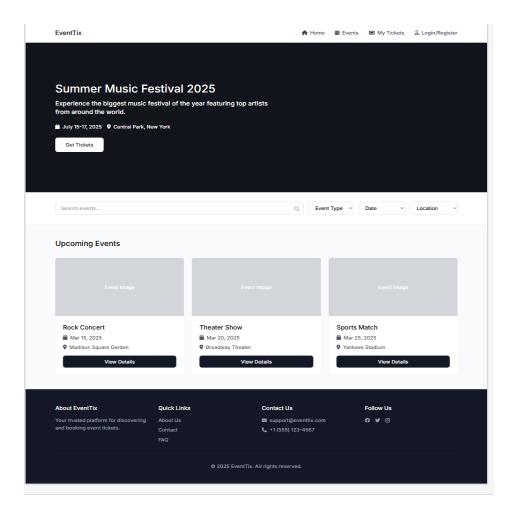


# **Class Diagram**

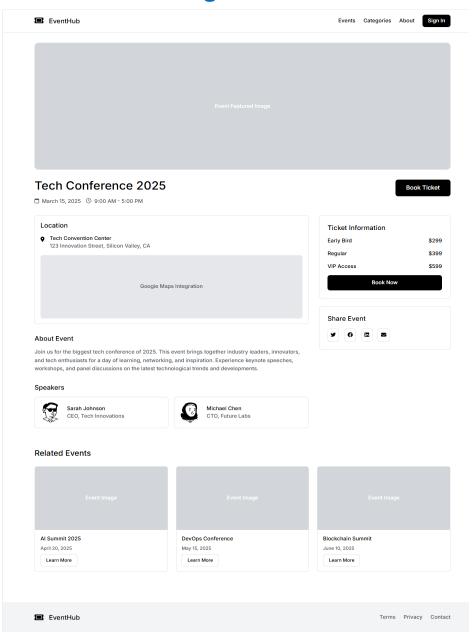


# **UI/UX Design & Prototyping**

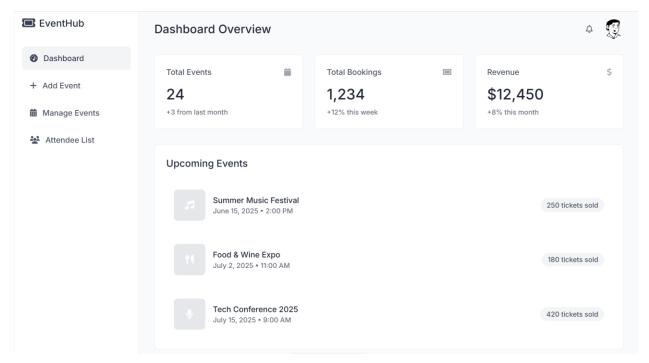
1. Home Page (Event Listing)



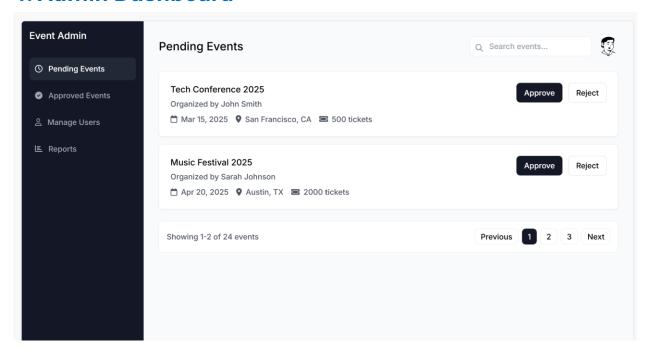
# 2. Event Details Page



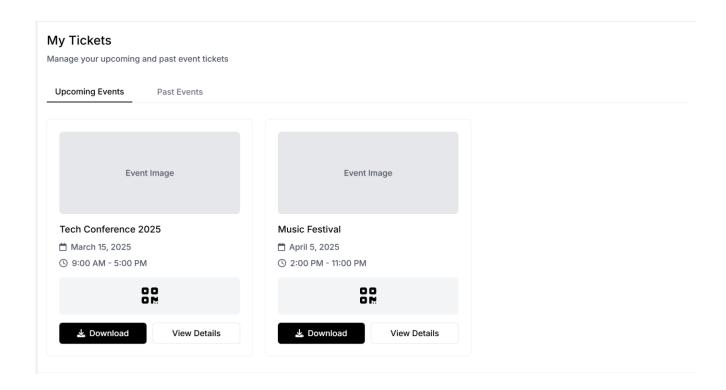
# 3. Organizer Dashboard



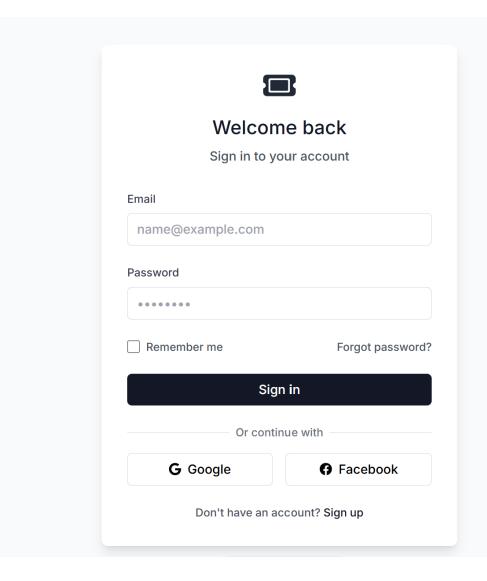
### 4. Admin Dashboard



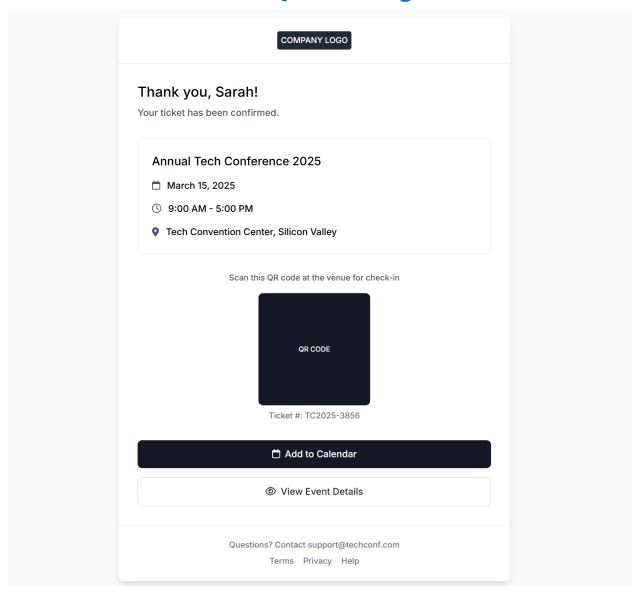
## 5. My Tickets Page (For Attendees)



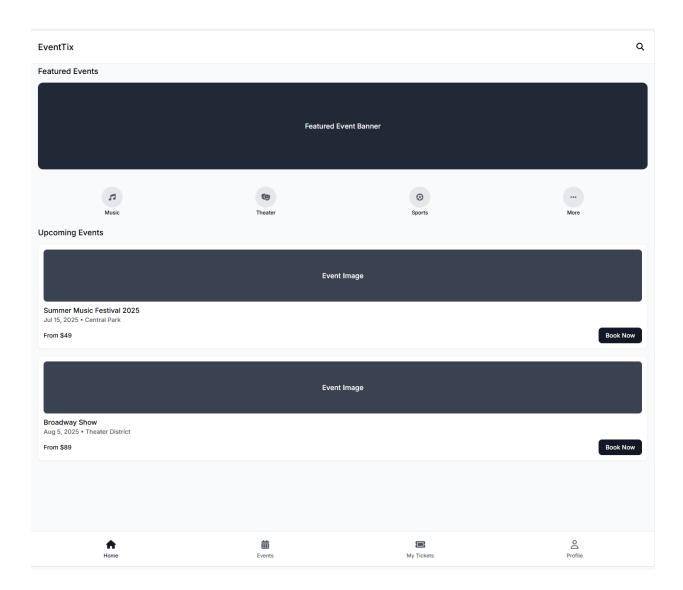
# 6. User Registration & Login Page



# 7. Email Confirmation & QR Code Page



## 8. Mobile View Adaptation



# **System Deployment & Integration**

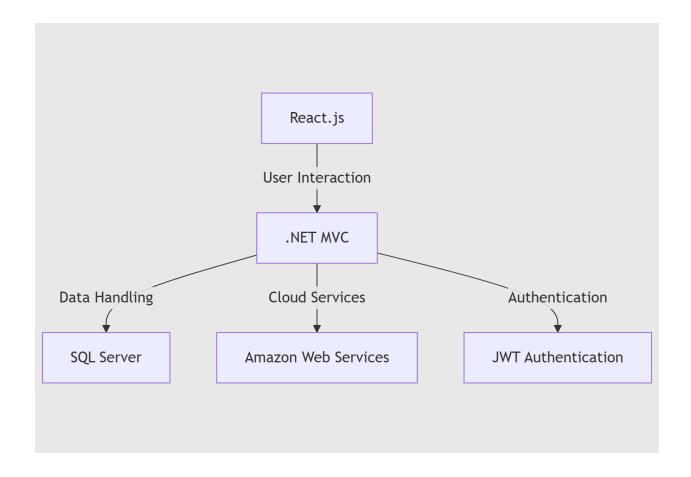
## **Technology Stack**

Backend: .NET MVC

Frontend: React.js

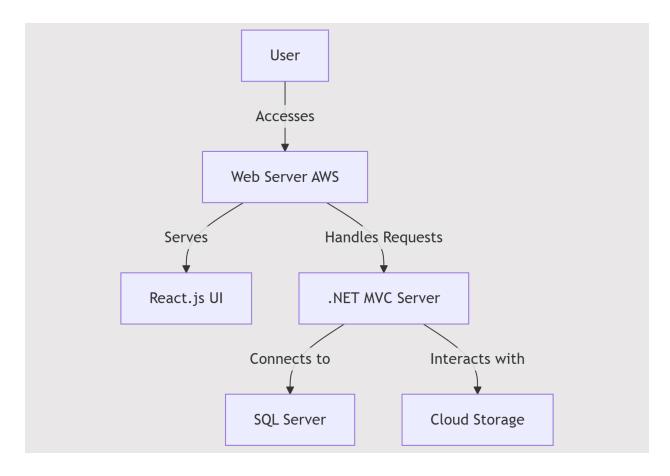
• Database: SQL Server

• Deployment Environment: Cloud-based (e.g., AWS, Azure)



**Description:** Visual representation of the chosen technologies and their interactions.

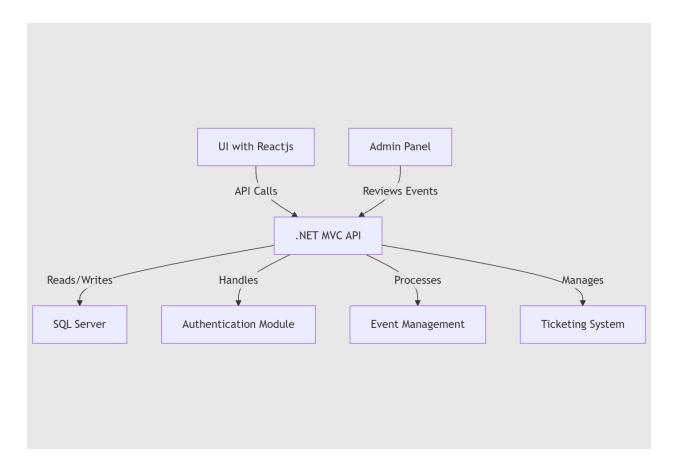
# **Deployment Diagram**



### **Description:**

- Frontend: React.js UI hosted on a cloud service.
- **Backend:** .NET MVC server handling requests and responses.
- Database: SQL Server managing all data.

# **Component Diagram**



#### **Description:**

- User Interface (React.js) → API Controller (.NET MVC) → Database (SQL Server).
- Authentication Module, Event Management, Ticketing System as core backend components.

This section ensures proper deployment planning and a clear understanding of system components and interactions.