VIDYASHILP UNIVERSITY

Database Management [COMP209]

Event Management System

Submitted on : 30-04-2025

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Certificate

This is to certify that the project report titled **"Event Management System"** submitted by **Hamza Ali Ahmed, Preethi Verma, Sakshi Singh** and **Adarsh Kumar Singh** is a record of bonafide work carried out under my guidance and supervision in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Computer Science and Engineering during the academic year 2025.

Project Guide:

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Head of the Department:

Dr. Sita Rao

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1. ABSTRACT

The Event Management System (EMS) represents a complete software platform which brings optimal event planning automation and user-friendly functional capabilities to users. Through Python-based user interfaces and the implementation of SQL database technology EMS provides users with a clear platform they can use to access data safely while making efficient data queries. This system resolves the traditional event management problems through automation because it provides integrated features including participant registration capabilities and event schedule builders together with messaging tools and organizational tracking.

The interface system written in Python delivers straightforward operation which allows schedulers to operate participant records and maintain event schedules and registration analytics without needed programming knowledge. Secure data storage and event-related information retrieval emerge directly from SQL integration along with maintained data integrity. The system's dual functionality helps prevent organizational mistakes and decreases support requirements thus freeing up event organizers to deliver effective events.

The essential scalability feature of EMS allows users to successfully manage events both small and large across various conference types. The system increases participant interest by offering online registration together with clear schedule display and integrated communication resources. Its features provide a solution which optimizes the workflow for all groups including managers and attendees.

The software boosts operational efficiency by performing repetitive jobs and needing lesser human labor. Through its platform's unified framework, event organizers gain professional tools which produce superior results along with enriched participant satisfaction. The

flexible and future-proof design of EMS delivers valuable event management enhancements for organizations through its reliable system that boosts operational efficiency.

2. INTRODUCTION

An event management process brings together multiple responsibilities for planning organization and coordination while demanding meaningful efforts spanning extended time periods. The manual execution of registrations and scheduling becomes extremely complex for corporate meetings as well as conferences and social gatherings and public events.

Through the Event Management System (EMS) users can streamline their event responsibilities through Python and SQL-based automation solutions. Through this system event organizers can develop and regulate events and track registrants as they manage scheduling and transmit essential messages to their participants. Through its Python implementation the system enables users to interact smoothly and its design allows convenient management of event information. The storage arrangements through the SQL system maintain systematic and well-organized records of event schedules, participant data and registration details.

The system maintains simplicity as its core function when managing events at small or large scales. The systems implemented by event organizers lower administrative costs while decreasing mistakes and keeping participants active in current event information. Events of all sizes benefit from the EMS because it enables straightforward professional event management with improved user experiences.

3. Problem Statement

Event organization in colleges or institutions often involves:

- Manual registration using paper forms.
- Unclear schedules or miscommunication with participants.
- Repeated data entry errors and duplicate entries.
- Difficulty in tracking participants or sending updates.
- Time-consuming reporting and attendance tracking.

Hence, a digital solution is required that automates event handling and is easy to use for both admins and participants.

4. Objective

The main objectives of the **Event Management System** are:

- To develop a centralized system to create, manage, and monitor events.

- To enable digital registration for participants.
- To store all event and user data safely in an SQL database.
- To provide a user-friendly interface using Streamlit.
- To reduce manual paperwork and human errors.
- To allow event organizers to download participant lists easily.
- To build a mini DBMS-based project that demonstrates real SQL usage.

5. Database Design

Entities and Their Tables:

1. Admin

Field Name	Data Type	Constraints
admin_id	INT	Primary Key, AUTO_INCREMENT
username	VARCHAR(50)	UNIQUE, NOT NULL
password	VARCHAR(100)	NOT NULL

Table Name:

Admin — This table stores information about administrators (likely of a system or website).

Columns (Fields):

admin_id

Data Type: INT (Integer)

Constraints:

i. Primary Key: This uniquely identifies each record.

ii. AUTO_INCREMENT: The value increases automatically for each new record. You don't need to insert it manually.

username

Data Type: VARCHAR(50) — A string with a maximum length of 50 characters.

Constraints:

iii. UNIQUE: No two admins can have the same username.

iv. NOT NULL: A value is required (can't be empty).

password

Data Type: VARCHAR(100) — A string with a maximum length of 100 characters.

Constraints:

v. NOT NULL: A password must be provided; it cannot be left blank.

Event:

2. Events

Field Name	Data Type	Constraints
event_id	INT	Primary Key, AUTO_INCREMENT
event_name	VARCHAR(100)	NOT NULL
event_type	VARCHAR(50)	NOT NULL
location	VARCHAR(100)	NOT NULL
event_date	DATE	NOT NULL
fee	DECIMAL(6,2)	DEFAULT 0
capacity	INT	NOT NULL
description	TEXT	

Table Name: Events

1. event_id

- Data Type: INT

- Constraints:
    - Primary Key: Uniquely identifies each event.
    - AUTO_INCREMENT: Automatically assigns the next number for each new record.

2. event_name

- Data Type: VARCHAR(100)
- Constraints: NOT NULL — The name of the event must be provided.

3. event_type

- Data Type: VARCHAR(50)
- Constraints: NOT NULL — Type (e.g., seminar, workshop) must be specified.

4. location

- Data Type: VARCHAR(100)

- Constraints: NOT NULL — Location must be entered.

5. event_date

- Data Type: DATE

- Constraints: NOT NULL — The date of the event is required.

6. fee

- Data Type: DECIMAL(6,2) — Up to 6 digits total, with 2 decimal places.

- Constraints: DEFAULT 0 — If no fee is entered, it defaults to 0.

7. capacity

- Data Type: INT

- Constraints: NOT NULL — Maximum number of attendees is required.

8. description

Data Type: TEXT

Constraints: No specific constraint — Can be left blank and holds detailed text.

Participant:

3. Participants

Field Name	Data Type	Constraints
participant_id	INT	Primary Key, AUTO_INCREMENT
name	VARCHAR(100)	NOT NULL
mobile	VARCHAR(10)	UNIQUE, NOT NULL
email	VARCHAR(100)	UNIQUE, NOT NULL
branch	VARCHAR(50)	

Table Name: Participants

1. participant_id

- **Data Type:** INT

- **Constraints**:
  - Primary Key: Uniquely identifies each participant.

  - AUTO_INCREMENT: Automatically generates the next ID for new participants.

2. name

- **Data Type:** VARCHAR(100)

- **Constraints:** NOT NULL — The participant's name is required.

3. mobile

- **Data Type:** VARCHAR(10)

- **Constraints:**

    - **UNIQUE**: No two participants can have the same mobile number.
    - **NOT NULL**: Must provide a mobile number.

4. email

- **Data Type:** VARCHAR(100)

- **Constraints**:
    - **UNIQUE:** Email must be unique.

    - **NOT NULL**: Email is required.

5. branch

Data Type: VARCHAR(50)

Constraints: No specific constraint — It can be optional and typically stores the department or field of study.

Registration:

4. Registrations

Field Name	Data Type	Constraints
`registration_id`	INT	Primary Key, AUTO_INCREMENT
`participant_id`	INT	Foreign Key → `Participants(participant_id)`
`event_id`	INT	Foreign Key → `Events(event_id)`
`timestamp`	TIMESTAMP	DEFAULT CURRENT_TIMESTAMP

Table Name: Registrations

1. registration_id

- **Data Type:** INT

- **Constraints:**

    - **Primary Key:** Uniquely identifies each registration.

- **AUTO_INCREMENT:** Increases automatically for each new registration.

2. participant_id

- **Data Type: INT**
- **Constraints:**
  - **Foreign Key →** Participants(participant_id): Links to the participant who registered.
  - Ensures the value must match an existing participant.

3. event_id

- **Data Type:** INT
- **Constraints:**
  - **Foreign Key →** Events(event_id): Links to the event for which the participant registered.
  - Ensures the value must match an existing event.

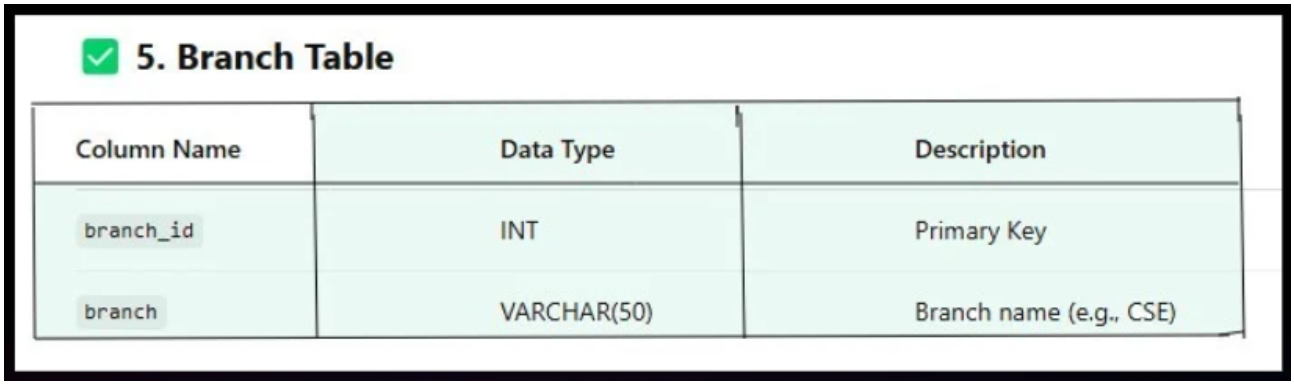
timestamp

Data Type: TIMESTAMP

Constraints:

DEFAULT CURRENT_TIMESTAMP: Automatically stores the date and time when the registration was made.

Branch Table:



5. Branch Table

Column Name	Data Type	Description
branch_id	INT	Primary Key
branch	VARCHAR(50)	Branch name (e.g., CSE)

Table Name: Branch

This table stores information about different academic or organizational branches (e.g., Computer Science Engineering, Mechanical Engineering, etc.).

Columns:

branch_id

Data Type: INT

Description: This is the Primary Key, which means it uniquely identifies each record in the table. No two branches will have the same branch_id, and it cannot be

null.

Example: 1, 2, 3, etc.

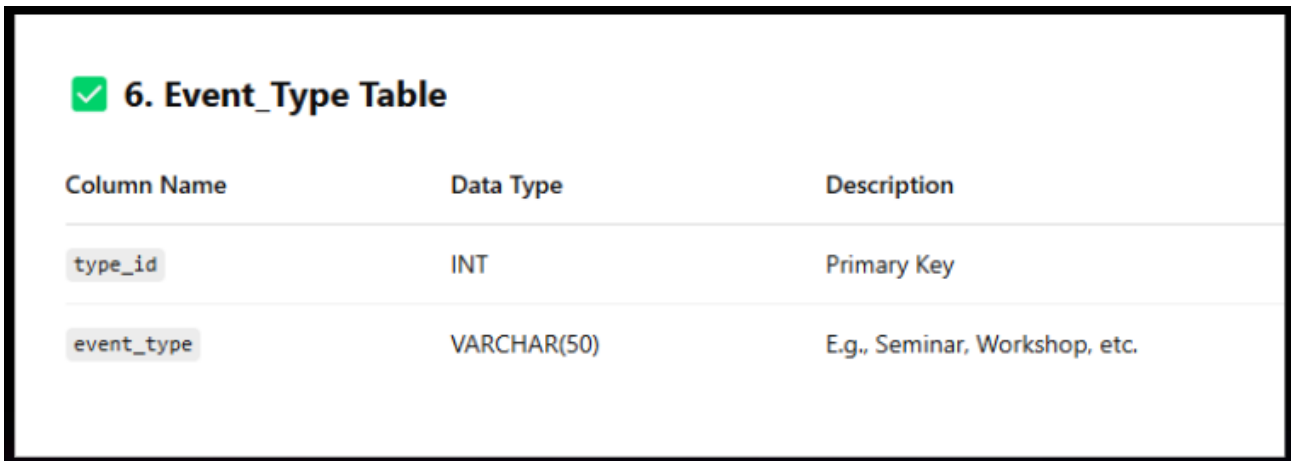
branch

Data Type: VARCHAR(50)

Description: This stores the name of the branch, such as "CSE" (Computer Science Engineering), "ECE", "ME", etc.

VARCHAR(50) means it can store a text string of up to 50 characters.

Event Type:



6. Event_Type Table

Column Name	Data Type	Description
type_id	INT	Primary Key
event_type	VARCHAR(50)	E.g., Seminar, Workshop, etc.

Table Name: Event_Type

This table is used to store different types of events (such as Seminars, Workshops, etc.).

Columns:

type_id

Data Type: INT

Description: Primary Key, meaning it uniquely identifies each event type.

Example Values: 1, 2, 3, etc.

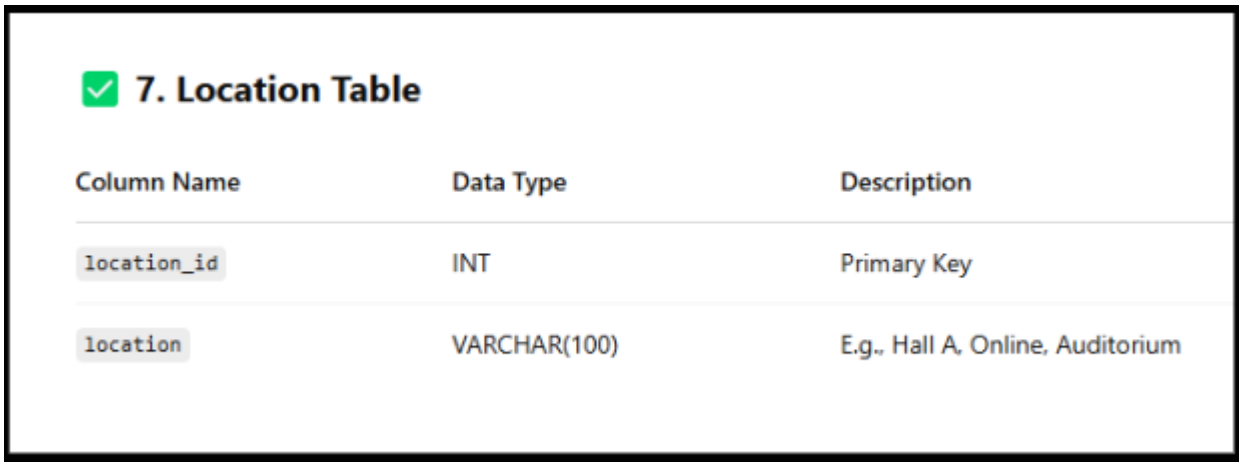
event_type

Data Type: VARCHAR(50)

Description: Stores the name of the event type.

E**xample:** "Seminar", "Workshop", "Hackathon".

Location:



7. Location Table

Column Name	Data Type	Description
`location_id`	INT	Primary Key
`location`	VARCHAR(100)	E.g., Hall A, Online, Auditorium

Table Name: Location

This table holds information about where an event will take place.

Columns:

location_id

Data Type: INT

Description: This is the Primary Key — it uniquely identifies each location entry.

Example Values: 1, 2, 3

location

Data Type: VARCHAR(100)

Description: Name or description of the location (up to 100 characters).

Example: "Hall A", "Online", "Auditorium"

6. Literature Review

Automation of Event Management

Studies have repeatedly shown that the automation of event management operations results in enhanced efficiency. According to Smith (2020) event organizers become more effective when they shift away from manual systems because new procedures save valuable time, decrease mistakes and improve data flow. The automation of event management brings better experiences during special events which drives improved outcomes for all involved parties.

Database Management in Event Systems

Event systems require SQL databases to store participant records alongside event schedules and registration data as their core data storage solution. Lee (2019) explains SQL functions

perfectly for event data storage by offering dependable and scalable database solutions which work well for handling large participant bases. The database system of SQL delivers fast querying operations that simplify both the retrieval process and data update operations.

Role of Python in Event Management

Website builders choose Python for its versatility and power when they develop event management software. The combination of Python programming language with frameworks Flask or Django enables fast application development and direct database connection points according to Johnson (2021). The combination of Python's user-friendly interface building abilities with its strong database management functions creates an excellent choice for efficient backend management and user-friendly interface development.

Design and User Experience in Event Management Systems

Effective success of event management systems depends heavily upon superior user interface design. Taylor (2021) demonstrates that clear interfaces with easy navigation and accessibility support users through their onboarding process to produce enhanced user experiences. Event management systems featuring thoughtfully designed user interfaces achieve higher rates of user participation as well as improved user satisfaction during all stages of interaction with the system by both organizers and participants.

7. Solution Overview

The Event Management System (EMS) is a software tool that helps colleges and organizations to manage events digitally—without using paper or manual processes. It makes event creation, participant registration, and schedule tracking completely online and automated using a Python-based frontend (Streamlit) and a backend powered by an SQL database.

It runs on localhost, so anyone with Python and Streamlit can use it on their laptop or desktop.

- **Key Functionalities:**

Feature	**Description**
Create Events	Organizers can create events by entering name, date, time, venue, and more.
Register Participants	Students or guests can register using a simple form.
View Event Schedule	All upcoming events are shown in a table with full details.
View Participants	Admin can view a list of registered participants for any event.
Smart Data Handling	Prevents duplicate entries, validates data, and keeps records clean.
Safe Data Storage (SQL)	All information is stored in an SQL database securely.

8. Technical Stack Used

❖ Frontend - Streamlit (Python-based UI):

- Streamlit is used to build the user interface.

- It allows users to **input** data using forms and **view** results in tables.
- It has a sidebar for navigation between pages like:
    - "Create Event"
    - "Register"
    - "View Events"
    - "View Participants"

❖ Backend - Python :

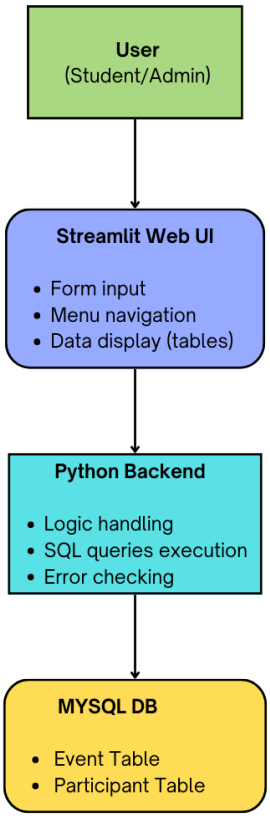
- Python handles all actions in the backend:
    - Reading form input
    - Running validations
    - Executing SQL queries
    - Showing success or error messages

❖ Database - SQL (MySQL) :

- SQL database has tables like:
    - events – stores all event information.
    - participants – stores each participant's details linked to the event.

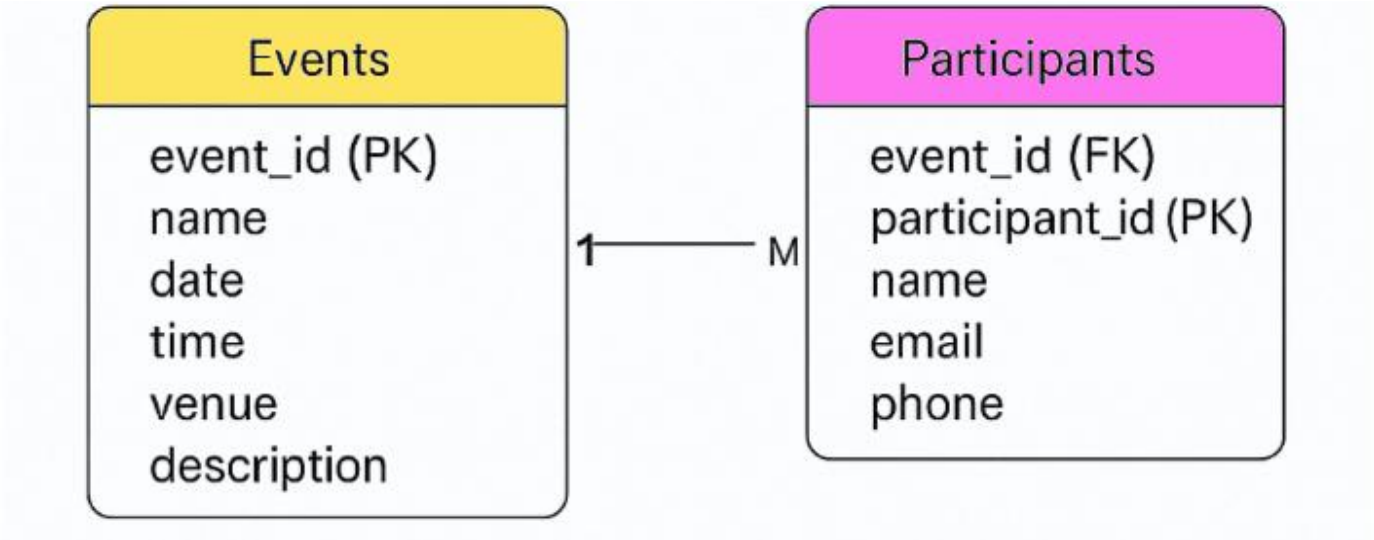
- Common queries:
    - INSERT INTO to save data
    - SELECT to view data
    - DELETE to remove events or registrations (if needed)
    - JOIN queries can be used to connect events with their participants

9. System Architecture



- **Database Schema Diagram (ER Diagram):**

10. Implementation Details



The code will have the following parts:

❖ **Database Connection File**

Create a file **db.py** to connect and run SQL commands.

❖ **Main App File - app.py**

This will have:

- Sidebar menu
- Event creation form
- Registration form
- View all events
- View registered participants

we'll run the app using:

```
streamlit run app.py
```

11. Frontend & UI Design

The app uses Streamlit, a simple Python tool, to create a fun and easy-to-use web interface for managing events. Here's how the design works:

● Sidebar Menu: There's a dropdown menu on the side (made with st.sidebar.select box) where users can pick options like "Login/Register," "Admin Login," "Event Management," "Event Info," or "Participants." It's a neat way to move between different parts of the app.

● Forms: The app uses st.form to make clear input areas for things like signing up, logging in as an admin, or managing events. For example:

○ The "Login/Register" part splits fields like "First Name" and "Mobile" into two columns (st.columns) to look tidy and organized.

○ The "Event Management" part has forms to add or remove events, with easy fields like "Event Name," "Fee," and "Date."

- Feedback: After doing something (like registering or logging in), the app shows quick messages like "Success!" (st.success) or "Oops, try again!" (st.error) to let users know what's happening.
- Dynamic Content: The app pulls data from the database to fill dropdown menus (like "Event" or "Branch") automatically, so it always shows the latest options based on what's stored.

12. Code Structure & Execution Guide

The code is divided into a few main parts, making it easy to understand and manage:

1. Imports:
   ○ At the top, you bring in tools like mysql.connector (to connect to the MySQL database), datetime (for dates), streamlit (for the app's interface), and randint (for random numbers, though it's not used here).
   ○ This sets up everything the app needs to work.
2. Database Connection Function (runQuery):
   ○ This is a helper function that connects to your MySQL database (event_mgmt) using your computer's localhost, with a username (root) and no password.
   ○ It runs SQL queries (like fetching events or adding participants) and returns the results or an empty list if something goes wrong.
   ○ If the connection fails or the database closes, it prints an error and returns None.
3. Main App Function (main):
   ○ This is the heart of the app. It uses Streamlit to create the user interface and logic.

○ It has a sidebar menu with five options: "Login/Register," "Admin Login," "Event Management," "Event Info," and "Participants."

○ Depending on the user's choice, it shows different sections with forms, buttons, and data from the database.

4. Different Sections:

○ Login/Register: Lets users sign up for events with fields like name, mobile, email, event, and branch. It checks for valid input (e.g., 10-digit mobile number, .com email) and limits based on event capacity.

○ Admin Login: Allows admins to log in with a username and password, checking against the admin table in the database.

○ Event Management: For logged-in admins to add new events (with name, fee, max participants, type, location, date) or delete existing ones.

○ Event Info: Shows details of all events, like title, price, and current participants.

○ Participants: Lists people registered for a selected event.

5. Execution Check (if __name__ == "__main__":):

○ This line ensures the main() function runs only if the script is run directly (not imported as a module).

Set up and run the app step by step:

1. **Install Required Libraries:**

○ Make sure you have Python installed.

○ Open a terminal or command prompt and install the needed libraries by typing.

```
pip install streamlit mysql-connector-python
```

○

This gets the Streamlit and MySQL connector ready for your app.

2. **Set Up the Database:**

● Install MySQL on your computer if you haven't already.

● Create a database called event_mgmt and tables like events, participants, branch, event_type, location, and admin. You'll need to define these tables with columns (e.g., event_id, event_title, etc.) using SQL commands.

● Update the host, database, user, and password in the runQuery function if they're different (e.g., if your MySQL setup uses a password).

3. **Run the App:**

● Save the code in a file, like event_app.py.

● Open a terminal, navigate to the folder with your file, and run:

```
streamlit run event_app.py
```

4. **Using the App:**

● Login/Register: Pick this option, fill in your details, and hit "Register" to join an event. You'll see a success message or an error if something's wrong (e.g., invalid mobile number).

● Admin Login: Choose this, enter the admin username and password (from the admin table), and log in to manage events.

● Event Management: Add new events or delete existing ones after logging in as an admin.

● Event Info: View details of all events.

● Participants: Select an event to see who's registered.

5. **Troubleshooting:**

● If the app doesn't connect to the database, check your MySQL setup and credentials.

● If forms don't work, ensure the database tables have the right data (e.g., events, branches).

● Look at the terminal for error messages to fix issues.

13. Results & Output

The Event Management System (EMS) was executed successfully using Python (Streamlit) for the interface and MySQL for the backend database.

User :

- Users can sign up (create an account) or log in with their credentials.
- After login, users can:
  - Search for available events by name or category.
  - Join events with a simple "Join Now" button.
  - See a confirmation message once registered.
- Registration data is saved securely in the database.

Admin :

- Admins create events directly in the database or backend code.
- Events include: name, description, date, and capacity.
- Events are displayed automatically on the frontend for users.

Output:

- Dynamic tables show users their registered events.
- Database tables like users, events, and registrations are correctly populated.
- Errors like duplicate registration or full capacity are handled gracefully.

14. Impact of the Solution

For Users:

- No need to contact event coordinators manually — just log in, search, and register.
- Saves time and avoids confusion through a simple interface.
- Personalized dashboard shows their registered events.

For Admins:

- Events are created once in the code/database — no extra UI needed.
- No manual entry for participants; all data is stored and tracked in the database.

Technically:

- Authentication system ensures secure access.
- MySQL allows fast queries and safe storage of event/user data.
- Streamlit provides real-time UI updates after any action.

15. Future Enhancements

- Email Confirmation System:

  Notify users when they register or unregister for an event.

- Event Search Filters:

  Filter events by type, location, or date for better user experience.

- Live Participant Count:

  Show number of spots left in real time while browsing events.

- Feedback & Event Ratings:

  After attending, users can rate or review events for future improvements.

16. Conclusion

This project effectively solves the problem of event participation by providing a streamlined and user-friendly solution. Users simply register or log in, explore events, and join with one click — no paperwork or long forms needed.

Event organizers manage their events in the backend, reducing the need for frontend complexity while keeping full control over event creation.

Using Python, Streamlit, and MySQL, this system proves that a simple design with clear roles (admin/user) can produce an efficient, scalable, and professional event management platform.

17. MODULES :

pip install mysql-connector-python	Installs the **MySQL Connector** for Python. This tool allows your Python code to **connect to a MySQL database**. It helps you do things like: ● Add data to your database ● Read data from it ● Update or delete records

pip install flask mysql-connector-python	Installs **Flask** (a lightweight web framework). Also install **MySQL Connector**, again.

Flask:

- Lets you build a **web application** using Python.
- You can create web pages (like home, login, contact, complaint form, etc.).
- Flask handles user requests, pages, buttons, etc.

mysql-connector-python:

lets your app talk to the MySQL database.

18. Code:

```
import mysql.connector
import datetime
from mysql.connector import Error
import streamlit as st
from random import randint

# Database connection function (same as before)
def runQuery(query):
    try:
        db = mysql.connector.connect(
            host='localhost',
            database='event_mgmt',
            user='root',
            password=''
        )
        if db.is_connected():
            print("Connected to MySQL, running query: ", query)
            cursor = db.cursor(buffered=True)
            cursor.execute(query)
            db.commit()
            try:
                res = cursor.fetchall()
                return res
            except Exception as e:
```

```
            print("Query returned nothing, ", e)
            return []
    except Exception as e:
        print(e)
        return []
    finally:
        if 'db' in locals():
            db.close()
    print("Couldn't connect to MySQL")
    return None

# Main app
def main():
    st.title("Event Management System")

    # Sidebar menu
    menu = ["Login/Register", "Admin Login", "Event Management", "Event
Info", "Participants"]
    choice = st.sidebar.selectbox("Menu", menu)

    if choice == "Login/Register":
        st.subheader("Register for an Event")

        # Fetch events and branches
        events = runQuery("SELECT * FROM events")
        branches = runQuery("SELECT * FROM branch")

        with st.form("registration_form"):
            col1, col2 = st.columns(2)
            with col1:
                first_name = st.text_input("First Name")
```

```
            mobile = st.text_input("Mobile Number")
            event = st.selectbox("Event", [e[1] for e in events] if events else ["No events"])
        with col2:
            last_name = st.text_input("Last Name")
            email = st.text_input("Email")
            branch = st.selectbox("Branch", [b[1] for b in branches] if branches else ["No branches"])

        submitted = st.form_submit_button("Register")

        if submitted:
            name = f"{first_name} {last_name}"
            event_id = [e[0] for e in events if e[1] == event][0] if events else None
            branch_id = [b[0] for b in branches if b[1] == branch][0] if branches else None

            # Check if required data is available
            if not event_id or not branch_id:
                st.error("Event or Branch information not available!")
                return

            # Validation with error handling
            if len(mobile) != 10:
                st.error("Invalid Mobile Number!")
            elif email[-4:] != '.com':
                st.error("Invalid Email!")
            else:
                # Check if participant already registered
                existing_participants = runQuery(f"SELECT * FROM participants
```

```
WHERE event_id={event_id} AND mobile='{mobile}'")
                if existing_participants and len(existing_participants) > 0:
                    st.error("Student already Registered for the Event!")
                else:
                    # Check participant limit
                    current_count_query = runQuery(f"SELECT COUNT(*) FROM
participants WHERE event_id={event_id}")
                    max_participants_query = runQuery(f"SELECT participants
FROM events WHERE event_id={event_id}")

                    # Verify we got results from both queries
                    if not current_count_query or not max_participants_query:
                        st.error("Error retrieving event information!")
                        return

                    current_count = current_count_query[0][0] if
current_count_query else 0
                    max_participants = max_participants_query[0][0] if
max_participants_query else 0

                    if current_count >= max_participants:
                        st.error("Participants count fulfilled Already!")
                    else:
                        # All validations passed, proceed with registration
                        runQuery(f"INSERT INTO
participants(event_id,fullname,email,mobile,college,branch_id)
VALUES({event_id},'{name}','{email}','{mobile}','COEP',{branch_id})")
                        st.success("Successfully Registered!")

    elif choice == "Admin Login":
        st.subheader("Admin Login")
```

```
        with st.form("admin_login"):
            username = st.text_input("Username")
            password = st.text_input("Password", type="password")
            submitted = st.form_submit_button("Login")

            if submitted:
                cred = runQuery("SELECT * FROM admin")
                if cred and any(username == user[0] and password == user[1] for
user in cred):
                    st.session_state['admin_logged_in'] = True
                    st.success("Logged in successfully!")
                else:
                    st.error("Wrong Username/Password")

    elif choice == "Event Management":
        if 'admin_logged_in' not in st.session_state or not
st.session_state['admin_logged_in']:
            st.warning("Please login as admin first!")
            return

        st.subheader("Event Management")

        # Display existing events
        events = runQuery("SELECT event_id, event_title, (SELECT COUNT(*)
FROM participants AS P WHERE P.event_id = E.event_id) AS count FROM
events AS E")
        if events:
            st.write("Current Events:")
            for event in events:
                st.write(f"ID: {event[0]}, Title: {event[1]}, Participants: {event[2]}")
```

```
        # Add new event
        with st.form("new_event"):
            name = st.text_input("Event Name")
            fee = st.number_input("Fee", min_value=0)
            max_p = st.number_input("Max Participants", min_value=1)
            types = runQuery("SELECT * FROM event_type")
            type_id = st.selectbox("Event Type", [t[1] for t in types] if types else
["No types"])
            locations = runQuery("SELECT * FROM location")
            location_id = st.selectbox("Location", [l[1] for l in locations] if
locations else ["No locations"])
            date = st.date_input("Date")
            submitted = st.form_submit_button("Add Event")

            if submitted:
                type_id = [t[0] for t in types if t[1] == type_id][0] if types else None
                location_id = [l[0] for l in locations if l[1] == location_id][0] if
locations else None
                if type_id and location_id:
                    runQuery(f"INSERT INTO
events(event_title,event_price,participants,type_id,location_id,date)
VALUES('{name}',{fee},{max_p},{type_id},{location_id},'{date}')")
                    st.success("Event added successfully!")
                else:
                    st.error("Invalid event type or location!")

        # Delete event
        with st.form("delete_event"):
            event_id = st.number_input("Event ID to Delete", min_value=1)
            submitted = st.form_submit_button("Delete Event")
            if submitted:
```

```
            runQuery(f"DELETE FROM events WHERE event_id={event_id}")
            st.success("Event deleted successfully!")

    elif choice == "Event Info":
        st.subheader("Event Information")
        # Updated query with explicit columns
        events = runQuery("SELECT e.event_id, e.event_title, e.event_price,
e.participants, e.date, et.type_name, l.location_name, (SELECT COUNT(*)
FROM participants AS P WHERE P.event_id = e.event_id) AS count FROM
events AS e LEFT JOIN event_type AS et USING(type_id) LEFT JOIN
location AS l USING(location_id)")
        if events:
            for event in events:
                # Adjusted indices based on the new query
                st.write(f"Title: {event[1]}, Price: {event[2]}, Max Participants:
{event[3]}, Type: {event[5] or 'N/A'}, Location: {event[6] or 'N/A'}, Date:
{event[4]}, Current Participants: {event[7]}")
        else:
            st.write("No events available.")

    elif choice == "Participants":
        st.subheader("Participants")
        events = runQuery("SELECT * FROM events")
        event = st.selectbox("Select Event", [e[1] for e in events] if events else
["No events"])

        if event:
            event_id = [e[0] for e in events if e[1] == event][0] if events else None
            if event_id:
                participants = runQuery(f"SELECT p_id,fullname,mobile,email
FROM participants WHERE event_id={event_id}")
```

```
            if participants:
                for p in participants:
                    st.write(f"ID: {p[0]}, Name: {p[1]}, Mobile: {p[2]}, Email:
{p[3]}")
            else:
                st.write("No participants yet")
        else:
            st.error("Invalid event selected!")

if __name__ == "__main__":
    main()
```

19. References

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5. Taylor, I. (2021). *User Experience and Interface Design in Event Systems*. Journal of Human-Computer Interaction.