EVENTMATE

Micro Project Report

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No. Title

1. **Introduction**

Brief overview of the project objective and its relevance

The project titled “EventMate – A College Event Management System” is a desktop-based application developed in Java using the Swing framework. The main objective of this project is to simplify and automate the management of college events, allowing students and administrators to easily add, edit, and view event details in an organized manner.

In traditional college environments, event details are often managed manually through notices or spreadsheets, which can lead to inefficiency, data inconsistency, and lack of accessibility. EventMate addresses these challenges by providing a user-friendly graphical interface that integrates event creation, modification, and booking functionalities in a single platform.

The system allows authenticated users to add and edit event details, ensuring that only authorized personnel can make changes to the event database. It also provides a booking option where students can view upcoming events and register for them. The interface is designed using Java Swing, while data storage and retrieval are handled through MySQL using JDBC (Java Database Connectivity).

The project not only demonstrates effective GUI design principles but also showcases modular programming, database connectivity, and user authentication mechanisms — all of which are fundamental skills for software engineering students. EventMate thus serves as a practical and efficient solution for managing college-level events, making the process seamless for both organizers and participants.

1. Scope of the micro-project

The scope of the EventMate system encompasses the design and development of a complete event management application that enables colleges to organize, update, and manage their events in a digital and efficient manner. The project focuses on providing an intuitive and interactive interface for users to perform essential operations such as adding new events, editing existing ones, deleting outdated information, and viewing event details.

The system is intended for use by college administrators, staff, and students, with different levels of access depending on their role. Administrators can log in securely to manage event data, while general users can browse and book available events.

EventMate also demonstrates key software engineering principles including:

Graphical User Interface (GUI) design using Java Swing

Database integration using JDBC and MySQL

User authentication through login and signup forms

CRUD operations (Create, Read, Update, Delete)

1. **Technologies used**

Technologies used (Java, database type – e.g., MySQL, JDBC)

1. **Problem Statement**

In most colleges, event management is handled manually through printed notices, physical registration forms, or informal communication channels such as social media and word of mouth. This traditional approach often leads to several challenges, including:

Lack of centralized information — Event details are scattered across various platforms, making it difficult for students to access accurate and updated information.

Inefficient data handling — Managing participant data, event schedules, and venue information manually increases the chances of human error.

Difficulty in coordination — Event organizers and faculty coordinators face challenges in updating or modifying event details once they are announced.

Limited accessibility — Students may miss important updates due to the absence of a proper digital notification or display system.

The EventMate project aims to overcome these limitations by developing a digital event management system that centralizes all event-related activities in one interactive application. Through a secure login system and a user-friendly interface, the software allows administrators to add, edit, and manage event details efficiently, while students can easily browse or book events.

In summary, the problem addressed by EventMate is the lack of an integrated, user-friendly, and secure platform for managing college events digitally, ensuring better coordination, accessibility, and efficiency within the institution.

1. Literature Review / Background

Event management has evolved significantly with the advancement of information technology. Traditionally, colleges and institutions relied on manual systems such as printed notices, word-of-mouth announcements, and physical registration desks to manage events. While functional for small-scale gatherings, these methods are time-consuming, prone to data loss, and lack real-time updates.

With the emergence of digital management systems, the process of organizing and communicating event-related information has become more structured and efficient. Several research studies and projects have focused on developing automated event management systems using various technologies such as web applications, mobile apps, and desktop software.

1. System Analysis & Design

Database schema design (tables, relationships)

1. System Analysis

The EventMate system is designed to simplify and automate the management of college events through an interactive graphical interface. Before developing the system, an analysis of the existing

manual process was conducted to identify the major limitations, such as time consumption, data redundancy, and difficulty in updating information.

The new system aims to:

Provide a centralized digital platform for managing all college events.

Allow authenticated users (administrators) to add, edit, or delete events.

Enable students to view available events and book them conveniently.

Maintain data integrity and security through a database-driven backend.

The project follows a modular design approach, separating user interface (UI), business logic, and database operations for better maintainability and scalability.

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2. Functional Requirements

User Authentication:

Users can log in or sign up using valid credentials stored securely in the database.

Event Management:

Admin users can add new events, edit existing ones, or delete outdated events from the database.

Event Viewing and Booking:

Students can view all available events and book their participation.

Database Connectivity:

All event data and user details are stored in a MySQL database, accessed via JDBC.

Error Handling and Validation:

Input validation ensures proper data formats and prevents SQL errors or invalid entries.

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3. Non-Functional Requirements

Usability: The system provides a simple, attractive, and intuitive graphical user interface using Java Swing.

Reliability: Ensures stable performance and consistent database connectivity.

Security: User credentials are validated through a secure login system.

Portability: Runs on any system that supports the Java Runtime Environment (JRE).

Scalability: Can be extended to support online event management or mobile integration in the future.

1. **Implementation**

Tools and technologies used (JDK, IDE, Database, JDBC driver)

1. **Details of Java classes and architecture**

Code snippets or explanation of key modules (e.g., database connection, CRUD operations

1. **Results & Discussion**

- Screenshots of the running project (GUI, sample outputs)

Analysis of results and system performance

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1. **Conclusion**

- **References**

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