ISSN: 3107-6513

EVENT MANAGEMENT APPLICATION

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Abstract:

Today, many events like college programs, seminars, workshops, and functions are managed manually, which takes a lot of time and effort. To solve this problem, this project focuses on developing an Event Management Application.

The application helps organizers create events, register participants, manage schedules, and share important updates easily. It reduces paperwork and avoids confusion by keeping all event information in one place. The system is simple to use and saves time for both organizers and participants.

This project shows how software technology can be used to manage events smoothly and efficiently. The Event Management Application is useful for colleges and organizations and reflects practical knowledge gained during the Diploma in Computer Engineering course.

Keywords: Event Management, Application Development, Digital Registration, Scheduling, Automation

1.INTRODUCTION:

In today's fast-growing digital world, events such as college programs, technical seminars, workshops, cultural activities, and social functions are organized frequently. These events involve many tasks like planning, participant registration, scheduling, venue management, and communication. When these tasks are handled manually, they require a lot of time and effort and may result in mistakes, miscommunication, and poor coordination.

Traditional event management methods mainly depend on paperwork, phone calls, and manual record keeping. Managing participant details, tracking registrations, sending updates, and maintaining schedules becomes difficult, especially when the number of participants is large. This often leads to confusion, data loss, and delays in event execution.

To solve these issues, this project focuses on the development of an **Event Management Application** that provides a complete digital solution for organizing and managing events. The application allows event organizers to create events, register participants, manage event schedules, and share important information through a single platform. Participants can easily view event details and register without any manual process.

The Event Management Application helps reduce paperwork, saves time, and improves accuracy in managing event-related data. It also improves communication between organizers and participants by providing timely updates and notifications. The system is designed to be user-friendly, reliable, and efficient, making it suitable for colleges, institutions, and organizations.

This project demonstrates the practical application of software development concepts learned during the **Diploma in Computer Engineering** course. It encourages the use of technology to solve real-life problems and highlights the importance of automation in modern event management systems.

2.LITERATURE SURVEY

A literature survey helps in understanding existing systems, technologies, and research work related to event management and online management applications. Many researchers and developers have proposed different systems to simplify event planning and management using software and web-based platforms. This survey reviews some of the important works related to event management systems and highlights their features and limitations.

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1. Online Event Management System

Several studies focus on web-based event management systems that allow users to create events, register participants, and manage schedules online. These systems reduce manual work and provide easy access to event information. However, some systems lack proper notification features and real-time updates, which can affect communication between organizers and participants.

2. College Event Management Applications

Some researchers have developed event management applications specifically for colleges and educational institutions. These applications help manage seminars, workshops, and cultural events. Features such as student registration, event approval, and attendance management are commonly included. Although these systems are useful, many of them are complex to use and require technical knowledge, making them less user-friendly.

3. Mobile-Based Event Management Systems

With the growth of smartphones, mobile-based event management applications have become popular. These applications allow users to register for events and receive notifications on their mobile devices. While mobile apps improve accessibility, they sometimes face issues related to data security and performance when handling a large number of users.

4. Automated Scheduling and Notification Systems

Some event management systems focus mainly on automated scheduling and notification features. These systems help organizers send reminders and updates to participants. Although effective, many such systems do not provide a complete solution that includes registration, event tracking, and reporting in one platform.

5. Limitations of Existing Systems

From the study of existing systems, it is observed that many applications:

- Do not provide a single integrated platform for all event-related activities
- Have limited customization options
- Lack simplicity and user-friendly interfaces
- Do not efficiently handle large-scale events

3.METHODOLOGY

The methodology of the Event Management Application explains the step-by-step approach followed to design, develop, and implement the system. The main objective of this methodology is to provide a structured and efficient way to manage events using a digital platform. The methodology is divided into different phases to ensure smooth development and proper functioning of the application.

3.1 Requirement Analysis

In this phase, the requirements of the system were identified by studying existing event management methods and understanding the problems faced by organizers and participants. Key requirements such as event creation, participant registration, schedule management, and notification handling were analyzed. This phase helped in defining the scope and functionality of the application.

3.2 System Design

After identifying the requirements, the system design was prepared. The overall architecture of the Event Management Application was designed to define how different modules interact with each other. The design includes:

- User interface design for organizers and participants
- Database design for storing event and user information
- Functional modules such as registration, scheduling, and notification

The system design ensures simplicity, usability, and efficient data management.

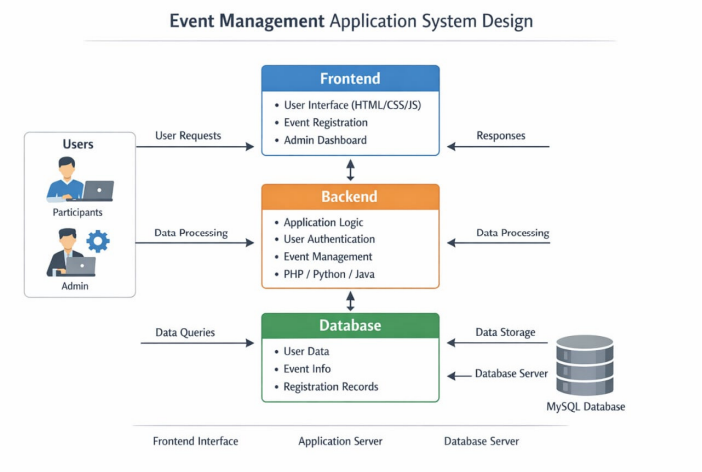

Fig: Event Management Application System Design

ISSN: 3107-6513

3.3 Application Development

In this phase, the actual development of the application was carried out. Different modules were developed using appropriate programming languages and tools. The application logic handles user inputs, event data processing, and interaction with the database. Special attention was given to creating a user-friendly interface and smooth navigation.

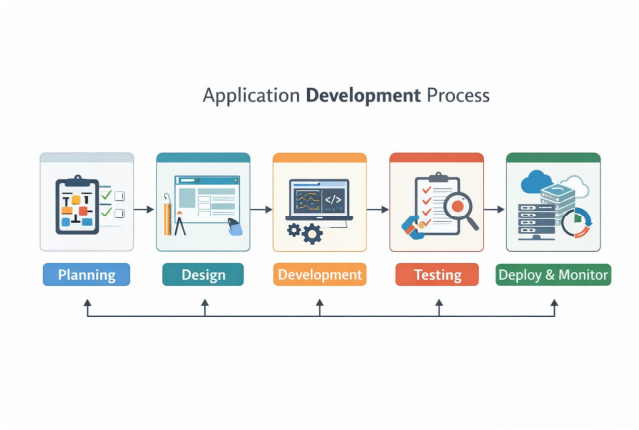

Fig: Application Development Process

3.4 Database Implementation

A database was created to store information related to events, users, registrations, and schedules. Proper database structure was maintained to ensure data accuracy and easy retrieval. This helps in managing large amounts of event-related data efficiently.

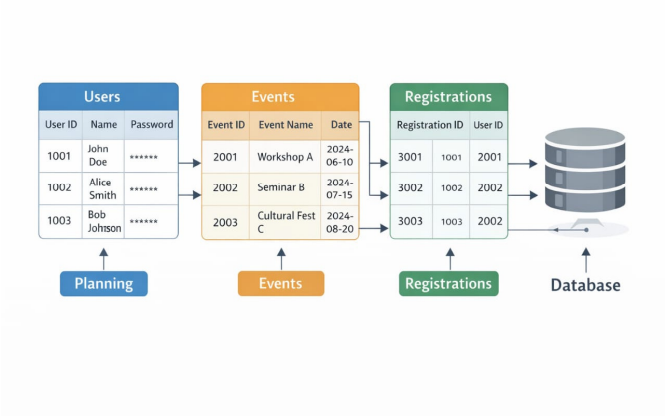

Fig: Database Implementation

3.5 Testing and Validation

Once development was completed, the application was tested to identify and fix errors. Different types of testing such as functional testing and user testing were performed to ensure that all features work correctly. This phase ensures reliability, accuracy, and proper performance of the system.

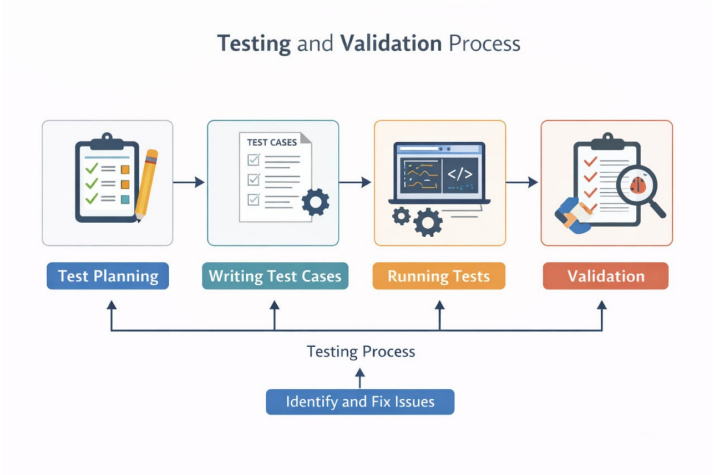

Fig: Testing and Validation Process

3.6 Deployment and Usage

After successful testing, the Event Management Application was deployed for use. The system can be accessed by organizers and participants to manage and attend events. This phase confirms that the application meets the project objectives and works efficiently in a real-world environment.

4. HARDWARE LIST

1. **Desktop / Laptop Computer**
   Used for application development, testing, and server hosting.
2. **Smartphone / Tablet**
   Used by participants and organizers to access the application.
3. **Server System**
   Used to host the application and store the database.
4. **Keyboard**
   Used for data entry and user interaction.
5. **Mouse / Touchpad**
   Used for navigation and system control.
6. **Display Monitor / Mobile Screen**
   Used to display application interface, event details, and notifications.
7. **Internet / Wi-Fi Connectivity**
   Required for communication between client devices and the server.
8. **Power Supply**
   Required to power all hardware devices.

5. SOFTWARE LIST

1. **Operating System (Windows / Linux)**
   Provides the basic platform for application development and execution.

ISSN: 3107-6513

2. **Web Browser (Google Chrome / Microsoft Edge)**
   Used to access and test the Event Management Application.
3. **Programming Languages (.XML)**
   Used for designing and developing the front-end of the application.
4. **Backend Technology (Java)**
   Used to handle application logic, user authentication, and data processing.
5. **Database Management System (Firebase)**
   Used to store event details, user information, and registration data and it is online database
6. **Code Editor / IDE (Android Studio Code)**
   Used for writing, editing, and debugging source code.
7. **Web Server (Emmulator)**
   Used to host and run the application locally or online.
8. **Notification Services (Email / SMS API – Optional)**
   Used to send event updates and confirmations to users.

6.CONCLUSION

The Event Management Application successfully provides a digital solution for managing events in an organized and efficient manner. The system helps in reducing manual work involved in event planning, registration, and data handling. By using this application, event organizers can easily create events, manage participant details, and monitor event activities from a single platform. The application improves accuracy, saves time, and ensures smooth coordination between organizers and participants.

This project demonstrates the practical use of software engineering concepts such as system design, database management, and web application development. The Event Management Application is user-friendly and can be effectively used in colleges and small organizations to manage different types of events.

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