MAR ATHANASIUS COLLEGE OF ENGINEERING

(Affiliated to APJ Abdul Kalam Technological University, TVM)
KOTHAMANGALAM

INITIAL REPORT

ON

CAMPUS CONNECT

EVENT REGISTRATION SYSTEM

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ABOUT THE PROJECT

CampusConnect - Event Registration System

The CampusConnect - Event Registration System is a web-based application developed to streamline and automate the management of events hosted by colleges or educational institutions. This project aims to replace traditional, manual methods of event registration and coordination with a centralized and efficient digital solution. Events conducted as part of tech fests, cultural programs, and other academic activities often face challenges such as managing participant registrations, organizing event schedules, and ensuring seamless communication. The need for an interactive and user-friendly system is essential for enhancing the overall experience of event management.

The existing system for event management in most institutions relies on basic websites, spreadsheets, or Google Forms. These static websites primarily serve as informational portals, offering only limited functionalities such as event details, contact information, and basic registration forms. They lack the capability of a dynamic form builder, which is essential for tailoring forms to the specific requirements of different events. This limitation makes it challenging to collect varied participant information for different types of events. Moreover, such traditional systems often do not provide options for customization in the interface, making it difficult for institutions to create a personalized and professional experience. Communication with participants in such systems is often fragmented, leading to delays and inefficiencies in managing event updates and coordination.

The Porposed System is a comprehensive web-based platform designed to streamline event management in educational institutions. Catering to administrators, organizers, and participants, it offers features like online registration, profile management, and event customization, making it highly adaptable to institutional needs. A key highlight is the Dynamic Form Builder, allowing organizers to create tailored forms to collect event-specific requirements, addressing limitations of traditional systems. The interface is customizable, enabling institutions to align the platform with their branding and functional needs. Participants benefit from simplified registration, profile updates, and access to event history, while organizers can efficiently manage schedules, categories, and participants. Secure fee payment integration, real-time communication via email or SMS, and ticket generation with QR codes ensure seamless event operations.

The system is built using modern web technologies, including HTML, CSS, and JavaScript for an interactive and responsive frontend, PHP for robust server-side logic, and MongoDB for efficient and flexible data storage and management.

In summary, the CampusConnect - Event Registration System revolutionizes event management by addressing the limitations of traditional systems. Its dynamic and customizable features, combined with modern technology, make it an indispensable tool for educational institutions, enhancing the experience for both organizers and participants.

BUSINESS RULES

Event Registration:

- Participants must register for events before the specified registration deadline.
- A participant can register for multiple events but must complete the registration process for each event individually.
- Registrations are processed on a first-come, first-serve basis until event capacity is reached.

Event Payment:

- Participants must make event payments within the designated payment window.
- Payment must be confirmed before participants can receive event tickets or access event materials.

Ticketing and Entry:

- Each participant will receive a ticket.
- Not having event tickets will be denied entry.

Event Updates and Notifications:

- Notifications for any schedule changes or important updates must be sent to participants through the platform (email).

Admin Approval:

- Organizers can only create and manage events after being approved by institutional admins.

Participant Data Privacy:

- All personal data collected during registration must be securely stored and not shared with third parties without the participant's consent.
- Participants have the right to update their registration information at any time.

LIST OF SCENARIOS

1. Website Customization

- Admin login with valid login credentials.
- Customize website interface by choosing preferred font, colour.
- Customize background images and banners by uploading the required resources.
- Customize Interface texts by filling the details.

2. User Registration and Login Scenarios

- An organizer registers on the platform to create and manage events.
- An admin reviews and approves the organizer's account.
- Organizers receives email for approval or rejection with reason.
- Organizers can now login to start creating and manage events.

3. Event Management Scenarios

- An organizer creates a new event by providing event details (name, date, venue, description, ticket price, etc.).
- An organizer uses the jQuery form builder to add specific fields.
- An organizer updates event details after creation.
- An organizer deletes a cancelled event.
- An organizer adds co-organizers to assist in managing events.

4. Registration and Payment Scenarios

- A participant views a list of available events.
- A participant selects an event and completes the registration process.
- A participant uploads required documents for the event during registration.
- A participant makes an online payment for the event and receives a receipt.

5. Ticket Generation and Verification Scenarios

- After successful registration and payment, organizers are assigned to approve/reject the registration.
- After approval participants receives tickets for the events.
- An organizer verifies participant tickets at the event venue for entry verification.

6. Communication and Feedback Scenarios

- A participant provides feedback or reviews on the event after attending.
- An admin addresses participant feedbacks and ensures resolution.

DESCRIPTION OF MODULES

Organizer Management Module:

- Organizers can self-register on the platform with necessary details.
- Organizers' registrations are subject to approval by institutional admins. Once approved, they can access event creation and management features.
- Login credentials are generated during registration, and organizers can login using that credentials.
- Organizers can then add Co-organizers for collaboration.

Event Management Module:

- Approved Organizers and can create, update, and manage event details, including schedules, categories, and venue information.
- Utilizes the Dynamic Form Builder to create customized registration forms for specific events.
- Enables event organizers to manage participant registrations and generate event reports.
- Enables organizers to send updates to participants registered for events via email.

Participants Management Module:

- Participants can register for single or multiple events via an intuitive interface.
- Participants are notified about event-related updates or changes in real time.
- Organizers can monitor and manage participant registrations and track registration statuses.
- Participants can view fee details and make secure online payments through integrated payment methods.

Customization Module:

- Institutional Admins can customize the platform interface to align with their branding and functional needs.

Feedback Management Module:

- Participants can provide feedback about events, services, or issues encountered.

ACTORS AND THEIR ROLES

The CampusConnect - Event Registration System involves multiple actors, each contributing to the efficient management and seamless execution of events. These actors include Institution Administrators, Organizers, Co-Organizers, and Participants.

Institution Administrator

- Oversees the entire system and manages user access for organizers.
- Sets up institution-specific branding and customization options.
- Manages event categories and institutional preferences.
- Monitors event schedules, registrations, and overall system performance.
- Generates detailed reports on event participation, ticket sales, and system analytics.

Organizer

- Creates and manages event details, including schedules, categories, and venues.
- Utilizes the Dynamic Form Builder to create tailored registration forms for specific events.
- Manages participant registrations and assigns roles to co-organizers.
- Sends notifications or updates to participants via email.
- Tracks registration payments and generates invoices for fee-based events.
- Oversees ticket generation and distribution with QR codes for entry verification.

Co-Organizer

- Assists organizers in managing event details and registrations.
- Handles participant queries and provides necessary support.
- Manages on-site event logistics, including attendance tracking and entry verification.
- Monitors ticket verification and ensures smooth participant entry at venues.

Participant

- Registers for single or multiple events through a user-friendly interface.
- Updates and manages their profile details.
- Receives event-related updates via email.
- Pays event fees securely through integrated payment methods.
- Accesses tickets with QR codes and tracks their event history.
- Provides feedback on events and services to improve the overall experience

TECHNOLOGY/FRAMEWORK

Frontend:
We use HTML, CSS, JavaScript, and jQuery for building the frontend of the web application. HTML is used to create the structure of the web pages, providing ease of learning and integration with other web technologies. CSS is employed to style the pages, ensuring consistency in design and ease of maintenance. JavaScript adds interactivity to the pages, offering a smooth user experience with client-side interactions. jQuery, an essential library, is used for dynamic elements and simplifying complex tasks such as form validation and event handling. Additionally, the jQuery form builder tool is utilized for creating event-specific registration forms, which allows for easy customization to meet the specific needs of each event.

Backend:
The backend is powered by PHP, which handles the server-side logic of the application. PHP processes user requests, interacts with the database, and sends responses back to the client. Its flexibility, ease of use, and compatibility with various operating systems make it an ideal choice for web development. PHP is also an open-source language, reducing development costs. The backend logic includes functionalities like user authentication, event management, and data processing to ensure a smooth workflow for admins, organizers, and participants.

Database:
MongoDB is utilized as the database for the application. It is a NoSQL database, offering high scalability and flexibility for managing unstructured data. MongoDB supports fast data retrieval and provides robust data security, making it suitable for the dynamic nature of the event registration system. It stores various application data, including user profiles, event details, registration information, and payment history, ensuring that all necessary data is available for quick access and manipulatio

PROJECT FEASIBILITY

A project feasibility study is an essential analysis that determines whether a proposed project is viable in terms of technical, economic, and operational factors. It helps assess whether the project can be completed within the defined scope, timeline, budget, and available resources. A feasibility study also highlights potential challenges and ensures that the project can be executed successfully before substantial resources are allocated.

Technical Feasibility
The CampusConnect - Event Registration System is technically feasible due to the use of widely accessible and reliable technologies. The frontend utilizes HTML, CSS, JavaScript, and jQuery for creating an interactive and responsive user interface. The backend relies on PHP, which efficiently handles server-side processes such as user management, event creation, and registration handling. MongoDB is employed as the database, offering flexibility and scalability, making it ideal for managing diverse event data and user profiles. These technologies are well-supported, regularly updated, and widely adopted, ensuring the system will remain

stable and secure. Additionally, the system's responsive design ensures compatibility across devices like computers, tablets, and smartphones, providing a seamless experience for administrators, organizers, and participants.

Economic Feasibility

The CampusConnect - Event Registration System is cost-effective as it leverages open-source technologies like HTML, CSS, JavaScript, PHP, and MongoDB, which do not incur licensing fees. These tools are widely used, enabling the easy availability of skilled developers and lowering labor costs. PHP's efficient processing reduces server load, leading to lower infrastructure costs, while MongoDB's NoSQL architecture allows for flexible data management without requiring expensive resources. The system also reduces operational costs by automating key tasks such as event registration, payment tracking, and user communications, thus minimizing manual work and human error. Hosting, maintenance, and support costs are the primary ongoing expenses, but these are outweighed by the long-term efficiency gains, reduced administrative workload, and improved user experience, making it a financially sound investment for educational institutions.

Operational Feasibility

The CampusConnect - Event Registration System streamlines event management and enhances operational efficiency by using modern web technologies. HTML, CSS, and JavaScript ensure a user-friendly and visually appealing interface, while jQuery simplifies dynamic elements like form building for custom event registration. On the backend, PHP effectively manages tasks such as user authentication, event scheduling, and registration processing. MongoDB provides flexible data storage, ensuring that the system can scale as event participation grows and user data becomes more complex. The system's modular architecture makes it easy to update and maintain, reducing downtime and keeping the platform aligned with evolving needs. By automating routine processes and ensuring accurate data handling, the system enhances overall productivity and reduces administrative overhead. To ensure long-term success, the system will require periodic updates, security patches, and skilled personnel for continuous maintenance, but its scalable design guarantees that it will continue to meet the dynamic needs of institutions.