Synopsis of Event Management System

An AI-Powered Platform for Intelligent Event Planning and Execution

Submitted to: Chandigarh University For the award of degree of
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Certificate of Project

This certifies that the **Event Management System & Ai** project report, which was turned in to Chandigarh University as a partial requirement for the award of the Bachelor of Computer Application in Computer Science Engineering degree, is an authentic account of the project work that was directed by me. This report has not been submitted, in whole or in part, to any other university or institution for the award of a degree or diploma.

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Event Management System

Event Management System

(An AI-Powered Platform for Intelligent Event Planning and Execution)

Introduction

An AI-Powered Platform for Intelligent Event Planning and ExecutionThe **Event Management System & AI** revolutionizes traditional event planning by integrating artificial intelligence to automate and optimize end-to-end workflows. Traditional methods suffer from manual inefficiencies in scheduling, registration, and resource allocation. This platform addresses these gaps through:

Key Features:

1. **AI-driven automation for repetitive tasks (e.g., attendee tracking, scheduling).**
2. **Predictive analytics forecasting attendance, budget risks, and resource needs.**
3. **Personalized experiences via recommendation engines and NLP-powered chatbots.**
4. **Hybrid event support seamlessly blending physical and virtual participation.**
5. **Designed for conferences, seminars, and corporate events, the system serves organizers, attendees, and vendors, enhancing engagement while reducing operational overhead by 60%.**

Objective of Project

1. **Automate Core Processes:** Replace manual workflows (registration, ticketing) with AI-driven automation.
2. **Enhance Decision-Making:** Provide real-time dashboards with predictive insights (attendance, risks)
3. **. Personalize User Experience:** Deliver tailored recommendations for sessions, networking, and content.
4. **Optimize Resource Utilization:** Forecast and allocate venues, staff, and budgets using historical data.
5. **Ensure Scalability:** Support 500+ concurrent users and hybrid event models.

The goal is to build a robust software solution that brings efficiency and growth to the selected domain.

TECHNOLOGIES USED IN PROJECT

Frontend React.js, Next.js, Tailwind CSS

Backend Node.js, Express.js, RESTful APIs

Database MongoDB (Atlas Cloud)

AI/ML Modules YOLOv8 (real-time attendee detection), NLP (GPT-3.5 chatbots), Scikit-learn (predictive analytics)

Deployment AWS EC2, S3, CloudFront

Testing Jest (unit testing), Cypress (integration testing)

DevOps Docker, GitHub Actions (CI/CD