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Event Planning Platform Powered by Artificial Intelligence

Tushar Maurya[1], Surya Prakash Singh[2], Sarvajeet Chauhan[3], Suraj Gupta[4], Mr. Harendra Singh[5], Dr. Saumya Chaturvedi[6], Dr. Suresh Wati[7]

[1, 2, 3, 4]*Department of Computer Applications, Greater Noida Institute of Technology (Engg. Institute), Greater Noida, India*
[5, 6, 7]*Asst Prof, Department of Computer Applications, Greater Noida Institute of Technology (Engg. Institute), Greater Noida, India*

Abstract: ***This study aims to develop an event management system, a web-based application that makes use of a digital event management planning system. EMS enables the customers to organize events on a single console, removing the need to travel to a different console and therefore making the process more convenient. There are four strategies to conduct the research which are technical research, EMS development, mixed method data collection, and data analysis. In addition, this study also presented the system architecture, project plan and implementation of the EMS. Then, the EMS has been tested and allows the user to pick the day and time of the event, as well as the location and event equipment, among other things. And then browse various hotel venues and book one that meets their needs, as well as browse various food catering services and book from them. They may check on the availability of party decorators and DJs and make appropriate appointments. Prior to making any bookings, the consumer may study the company's ratings, pricing, and sample work. by 2 users in both client and admin side.***
Keywords: User, Event Management, Database.

I. INTRODUCTION

The Event management is the application to manage and development of festivals, events and conferences. Proposed work Involves study of identifying the target of budget, cost, and analysis. Post event analysis and ensuring a return on investment have become significant drivers for the event industry. This is an online event management system, software project that serves the functionality of an event manager. The project provides most of the basic functionality required for an event. It allows the user to select from list of event types. Events Management System is very helpful for events. This application being as a platform to know the events, to apply for the events. Event organizer is an application under project management for managing festivals or social events like gathering, colleges, events, conferences etc. To understand use of this application. consider the flow of actions happening, by this application user can register the students, after registering, user can login, after login, event details including name, contact, address, venue of the event, date, event conducting time, cost of events etc. After receiving SMS student can register through application.

The event management system is used to keep track of all the activities associated with the event. In any case, several service providers operate concurrently, making management extremely difficult. Additionally, it is critical for the event organizer to have all the services provider's contact information on hand so that he may call them at any moment to prepare an event at a certain time. All the information is saved in the database, and the user is provided with a receipt number for history her reservation.

The information subsequently sent to the administrator, who may then communicate with the customer in accordance with his requirements. It will undoubtedly aid the event's organizers and marketing staff in their efforts to advertise the events on the internet, resulting in a significant rise in registrations and participation. Additionally, this portal has been developed with various concerns in mind that event organizers experience while attempting to execute a good event in mind. register for an event using the application, which is provided by the system. This is being offered as a web-based application. The project covers most of the fundamental functionality necessary for a certain event type, such as marriage, dance show, birthday party,

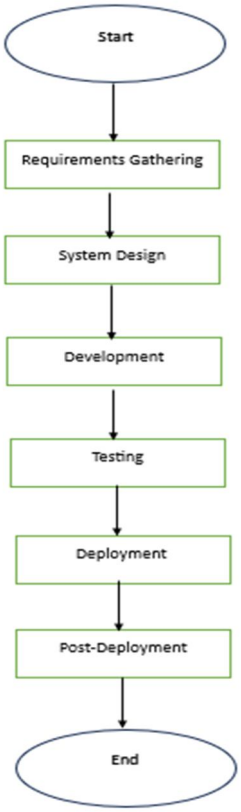
The system then allows the user to pick the day and time of the event, as well as the location and event equipment, among other things. And then browse various hotel venues and book one that meets their needs, as well as browse various food catering services and book from them. They may check on the availability of party decorators and DJs and make appropriate appointments. Prior to making any bookings, the consumer may study the company's ratings, pricing, and sample work.

II. METHODOLOGY

To overcome the limitations of the existing system, Event management system is try to automate the entire process keeping in the view of a contact details It is a wireless event management system using computers. The client interested to organize their function through this event manager or agents have to register in this portal and sign-in before booking.

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Event booking will be considered as a requisition at first, once the admin verified the event and their time then the booking will be confirmed and the confirmation will be notified to the customer.



III. PROBLEM STATEMENT

Festival, Event, festival, and conference management is the programmed which is utilized to organize, manage, and plan these events. The suggested job involves research in order to identify the cost, budget, and analysis targets. Post-event analysis and ensuring return on investment have become vital drivers for the event industry over the past few years. An online event management system is a software project that offers an event manager's abilities created. The project supplies most of the resources. The majority of event management companies currently handle the booking and planning of events in the conventional way, which involves the customer going to the office and describing to the agent how they would like to organize the event, what they need, where and when they would like to organize the event, how many guests they would like to invite, etc. This consumes a lot of time and energy Most event management firms currently handle the planning and booking of events in the conventional way, which involves the customer going to the office and telling the agent how they would like to carry out the event, what their needs are, where and when they would like to carry out the event, how many people they would like to invite, etc. This consumes a lot of time and energy.

Another problem is that most event management websites provide packages of services like hotel venue, DJ, food catering services, and decorations which customers can select from, but none of them provide a range of alternatives at every step of the planning process as well as none of the event management website offer a direct touch with the event provider or can chat on chat via the website if they have some question. Also, some customers are frustrated by the event management online application because the web application is hard to use and the client does not know how to use it. Besides, most web applications do not offer a platform for customers to message the provider and talk to them if whether they have any inquiries regarding the service. For instance, where do they start organizing and how do they organize an event are just a couple of the aspects that confuse customers. The most basic feature required for an event. It gives the user the facility of choosing from a list of event types. The 'EVENT MANAGEMENT' application has been designed with the problems that could occur when organizing a good event in mind. This enables customers to organize an event on one console, without having to go to another console, thus making it more convenient for them. This programmed makes event planning and management easy.

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IV. LITERATURE REVIEW

A. Analyzing the Existing System

In the current system, the user interacts with the business to run events. It describes the event's objectives, duration, structure (Composition and/or Exposition, for example), anticipated number of representatives, equipment, and supplies requirements, if guest packs or advertising items will be issued, as well as other essential facilities. (Kirui, n.d.) The Event Manager thoroughly researches the event's requirements and implements them utilizing the optimal schedule. The company offers a range of pre-packaged options. If indeed the consumer is willing, the event is scheduled, and the organization collects the advance charge. Reservations are made in accordance with the event's specifications. A comprehensive timetable is created to ensure the event runs smoothly. The Monitoring System assists the management with many responsibilities related to event planning, schedule, and execution. This technology enables immediate access to occurrence data.

B. System Gathering Requirement

Functions and features are described as a combination of features that specify the output behavior of an outside system in the following ways: coherent, straightforward, non-redundant, and noncontradictory. Non-Functional Requirements: It really is the non-functional constraints that define the Journal of Applied Technology and Innovation An online platform has been developed for managing schedules, booking venues, and organizing events. Their research emphasized the usefulness of automation in minimizing human work and maximizing the effectiveness of event planning. Examined the capabilities of web- based EMS in streamlining event planning. Their research highlighted how automation improves registrations, scheduling, and stakeholder communication. They emphasized the role of AI in improving event experiences. Focused on modern web technologies used in EMS, including venue selection, invitation management, an entertainment coordination. Their study proposed integrating media galleries and mapping features to enhance event coordination critically reviewed existing EMS solutions, identifying trends in attendee engagement, scheduling, and interactive features. They suggested AI-driven personalization and multi-location event management as key future improvements. introduced an Android based EMS application that simplifies event planning, particularly for weddings, social events, and conferences. Their study discussed the role of mobile technology in making event coordination more accessible. Presented a website-based EMS aimed at reducing paperwork and improving real-time communication. They emphasized the importance of digital platforms in handling bookings, event modifications, and user interaction. The collective findings from these studies suggest that EMS is evolving towards increased automation, AI-driven analytics, and multi-platform accessibility. However, challenges such as data security, user adaptability, and cost constraints need to be addressed to fully realize the potential of EMS in the future.

V. AI IN EVENT MANAGEMENT

Artificial Intelligence (AI) has significantly transformed event management by automating processes, enhancing attendee engagement, and optimizing logistics. The integration of AI in event planning improves efficiency, personalization, and security while enabling seamless multi-location event management. One of the primary applications of AI in event management is machine learning and predictive analytics, which analyse historical event data to forecast attendance, optimize scheduling, and provide recommendations. Chatbots and virtual assistants enhance attendee experience by offering real-time support, answering queries, and facilitating networking. Facial recognition and security AI play a crucial role in ensuring safe event environments byverifying attendees and preventing unauthorized access. Automated marketing and personalization tools tailor promotional campaigns and engagement strategies based on attendee behaviour, ensuring more targeted and effective outreach. Additionally, real-time data processing provides instant insights into event performance, helping organizers make on-the-spot improvements. In multi-location event management, AI plays a critical role in synchronizing schedules, ensuring real-time monitoring of logistics, and optimizing resource allocation. AI-driven language translation tools enhance communication for international events, while automated resource allocation ensures that personnel and equipment are distributed efficiently across multiple venues. These advancements make large-scale, multi-venue event coordination more streamlined and efficient. The benefits of AI in event management are substantial. Efficiency and automation reduce manual efforts in registrations, ticketing, and scheduling, minimizing human errors and saving time. AI-powered personalization enhances the attendee experience by recommending sessions, networking opportunities, and customized itineraries. Cost reduction is another advantage, as AI-driven automation reduces labour expenses and optimizes budget allocation. AI provides real-time data insights, allowing event organizers to analyse attendee engagement, measure success, and make immediate adjustments when needed. Furthermore, AI-driven security and risk management* tools such as facial recognition and fraud detection enhance event security, reducing the risk of unauthorized access or fraudulent activities. Despite these advantages, challenges such as data privacy concerns, integration with legacy systems, high implementation costs, and the

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reliability of AI predictions must be addressed. However, future advancements In AI, including augmented reality (AR) and virtual reality (VR) for immersive event experiences, AI-driven networking, and blockchain-based security, will further enhance AI's role in event management. Overall, AI-powered event management is revolutionizing the industry by increasing efficiency, reducing costs, and improving engagement, making it a vital technology for modern event planning and execution.

VI. BENEFIT OF AI IN EVENT MANAGEMENT

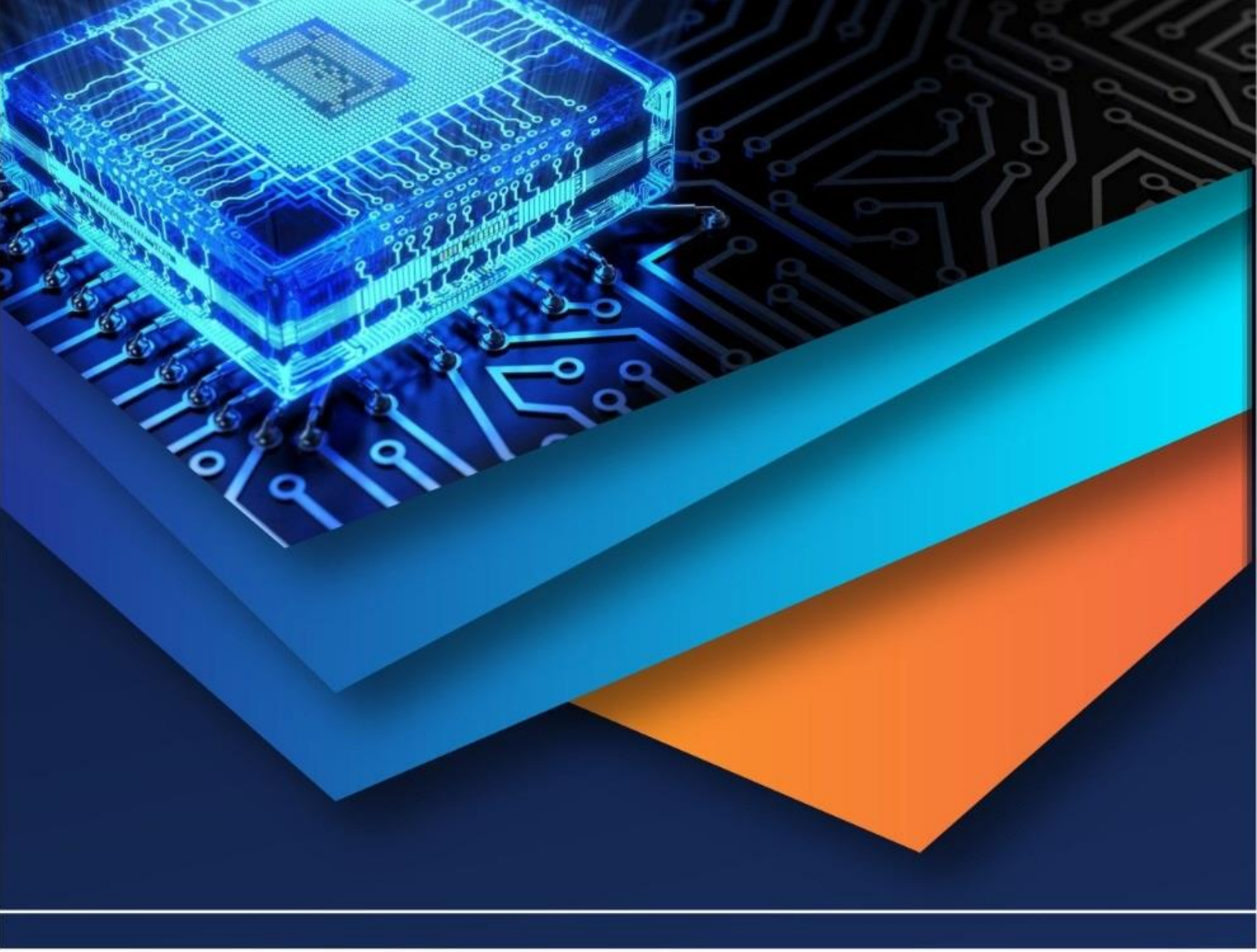
AI-powered event management offers numerous benefits, enhancing efficiency, attendee experience, cost savings, data insights, and security. Efficiency and automation reduce manual tasks such as registrations, ticketing, and scheduling, minimizing human errors and improving time management. Enhanced attendee experience is achieved through AI-driven personalization, which tailors event experiences to individual preferences, increasing engagement and satisfaction. Cost reduction is another significant advantage, as AI automates various processes, reducing labor expenses and optimizing budget allocation. AI also provides real-time data insights, enabling event organizers to analyze attendee behavior instantly and make necessary adjustments. Furthermore, security and risk management benefit from AI-driven facial recognition, fraud detection, and surveillance, ensuring a safe event environment. Despite these advantages, AI implementation in event management comes with challenges. Data privacy concerns arise due to the collection and processing of sensitive attendee information, requiring strict compliance with privacy regulations. Integration with legacy systems can be complex, as AI platforms must seamlessly work with existing event management software. Initial implementation costs are high, making AI adoption challenging for smaller organizers. Lastly, AI prediction reliability depends on continuous refinement, as inaccurate forecasts can affect event planning. Overcoming these challenges will be essential for AI to continue transforming the event management industry.

VII. CONCLUSION AND FUTURE WORK

This paper discusses the "Event Management System "project been planned and put to the test. It has been created by integrating functionality from all of the used software components. With the assistance of evolving technology. The project has been carried out successfully. Project will unquestionably lessen human effort and simplify task for users, customers, and administrators. It is simple to use and to improve. Consequently, bearing in mind the benefits and uses. We are creating event management software with complete customer management control and appropriate service for various events. The future of event management has been exhaustively examined over the past 18 months by specialists who have looked at all indications of a more varied use of digital technologies to improve customer experience. Even while the precise figures are yet unknown, the numerous applications and immense prospects it brings with them point to a paradigm change in event management as we once knew it. Change is frequently initially perceived as a difficult situation that requires time to become acclimated to and adapt to in the best way possible. Similar steps were taken to go from traditional event management to digital event management. When shifted to an online environment, a sector that depends on social interaction and physical networking had to make significant changes.

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