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EVENT REGISTRATION SYSTEMS WITH QR CODE

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Abstract : An event registration system with QR code is a digital platform that enables attendees to register for an event and receive a unique QR code that serves as their ticket. The system simplifies the registration process and enhances the security of the event by eliminating the need for physical tickets. The attendees can easily scan their QR code using their mobile devices at the event's entrance to gain access,
reducing the waiting time and making the check-in process faster and more efficient. The system also provides organizers with valuable data about the attendees, such as demographics and attendance patterns, that can be used to optimize future events. Overall, an event registration system with QR code is a convenient and secure way to manage event registrations and enhance the attendee experience.
An event registration system with QR code is a system designed to streamline the process of registering attendees for an event. The system typically generates a unique QR code for each attendee, which can be scanned at the event to confirm their registration and grant them access. This system can be used for events of all sizes, from small seminars to large conferences.
The system typically consists of a web-based platform for event organizers to manage registrations and generate QR codes. Attendees can register online or
on-site, and their information is stored in a database that can be accessed by event staff. The QR codes can be printed on badges or sent to attendees electronically, making the check-in process quick and efficient.
Overall, an event registration system with QR code can improve the attendee experience by reducing wait times and increasing security at events. It also provides event organizers with valuable data on attendance and can help to streamline event planning and logistics.

IndexTerms Event Registration System, QR Code Ticketing, Attendee Check-In, Event Management, Digital Tickets, Registration Process, Attendee Data Analysis

I. **Introduction**

The introduction discusses the inefficiencies and limitations of traditional event registration processes, such as using paper and manual methods, which are often slow, cumbersome, and prone to errors. These traditional methods require significant resources for stationery, printing, and human labor, and they carry risks of data loss or damage. The introduction then proposes a solution in the form of an electronic registration system (e-Vent) that leverages e-registration technology and QR codes to streamline and modernize the process.

e-Vent is an event registration system that integrates e-registration and QR code technology for efficient and effective management of event registration and certificate issuance. With e-Registration, participant data is stored in a database, and QR codes are used as digital tickets sent to participants via email. These

QR codes can be scanned quickly and easily at the event entrance to verify registration and grant access, significantly reducing waiting times and enhancing security.

This system allows participants to register online from any location and at any time, using smartphones or other mobile devices. The registration process becomes faster and more precise, eliminating the need for physical paper and reducing the risk of errors or data loss. Additionally, the QR codes serve as both admission tickets and validation for certificates, further simplifying the process.

The event system employs CodeIgniter as a development framework for web administration, facilitating the registration and data management process for event organizers. This system not only reduces the logistical and financial burden associated with traditional methods but also enhances the overall efficiency and effectiveness of event management.

The introduction highlights the widespread impact of advanced information technology across various sectors, including education, business, health, and government. This technological proliferation underscores the need for modern solutions in event management to keep pace with other fields. By adopting e-registration and QR code technologies, event planners can address many challenges associated with traditional methods, such as high costs, inefficiencies, and security risks.

The introduction also emphasizes the role of smartphones and cellular technology in modernizing event registration. With nearly ubiquitous smartphone use, these devices offer a convenient and effective platform for implementing the e-Vent system. Smartphones can easily read QR codes through their built-in cameras, making them an ideal tool for event validation.

Transitioning to an e-registration system with QR code validation offers numerous benefits. For participants, the system provides convenience and flexibility, allowing them to register and confirm attendance at their leisure. The QR code, easily accessible on their smartphones, simplifies the check-in process and eliminates the need for physical tickets or re-registration forms.

For organizers, the e-vent system offers significant cost savings by reducing the need for paper, printing, and registration staff. It also minimizes logistical challenges, as all registration data is stored electronically and can be accessed and managed efficiently. The system enhances data accuracy and consistency, reduces the risk of unauthorized access, and improves the overall participant experience.

The introduction further discusses the cost and time savings associated with the e-vent system. By eliminating physical tickets and registration forms, organizers can reduce their environmental footprint and operational costs. The use of QR codes for participant verification streamlines the re-registration process, reducing queues and wait times at the e-vent.

The introduction concludes by highlighting the benefits of e-Vent for both participants and organizers. Participants enjoy the ease and flexibility of online registration and the convenience of using QR codes for e-vent access. Organizers benefit from reduced costs, improved efficiency, and enhanced data management capabilities. The system also facilitates the issuance of digital certificates, further reducing costs and environmental impact.

Overall, the e-vent system represents a significant advancement in e-vent management technology, offering a modern, efficient, and secure solution for registration, ticketing, and certificate issuance. By leveraging e-registration and QR code technologies, e-vent planners can overcome the limitations of traditional methods and provide a superior experience for both participants and organizers.

I. RESEARCH METHODOLOGY

The methodology of an event registration system with QR code can be brokendown into several key steps:

Requirement gathering: The first step in developing an event registration system with QR code is to gather the requirements of the system. This involves identifying the needs and goals of the event, as well as the specific features and functionalities that are required for the registration process. This may involve consulting with stakeholders, such as event organizers, attendees, and vendors.

System design: Based on the requirements gathered, the system design is created. This includes defining the various components of the system, such asthe registration form, QR code generation process, and check-in process. The design should take into account factors such as user experience, data security, and scalability.

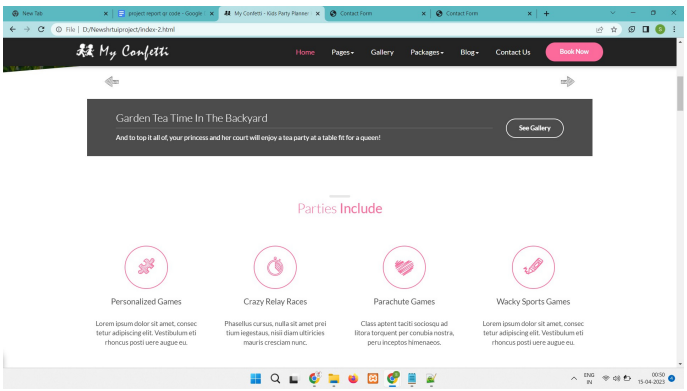
Implementation: Once the system design is finalized, the implementationprocess can begin. This involves coding and developing the various components of the system, integrating any necessary third-party tools or software, and conducting rigorous testing to ensure the system works as intended.

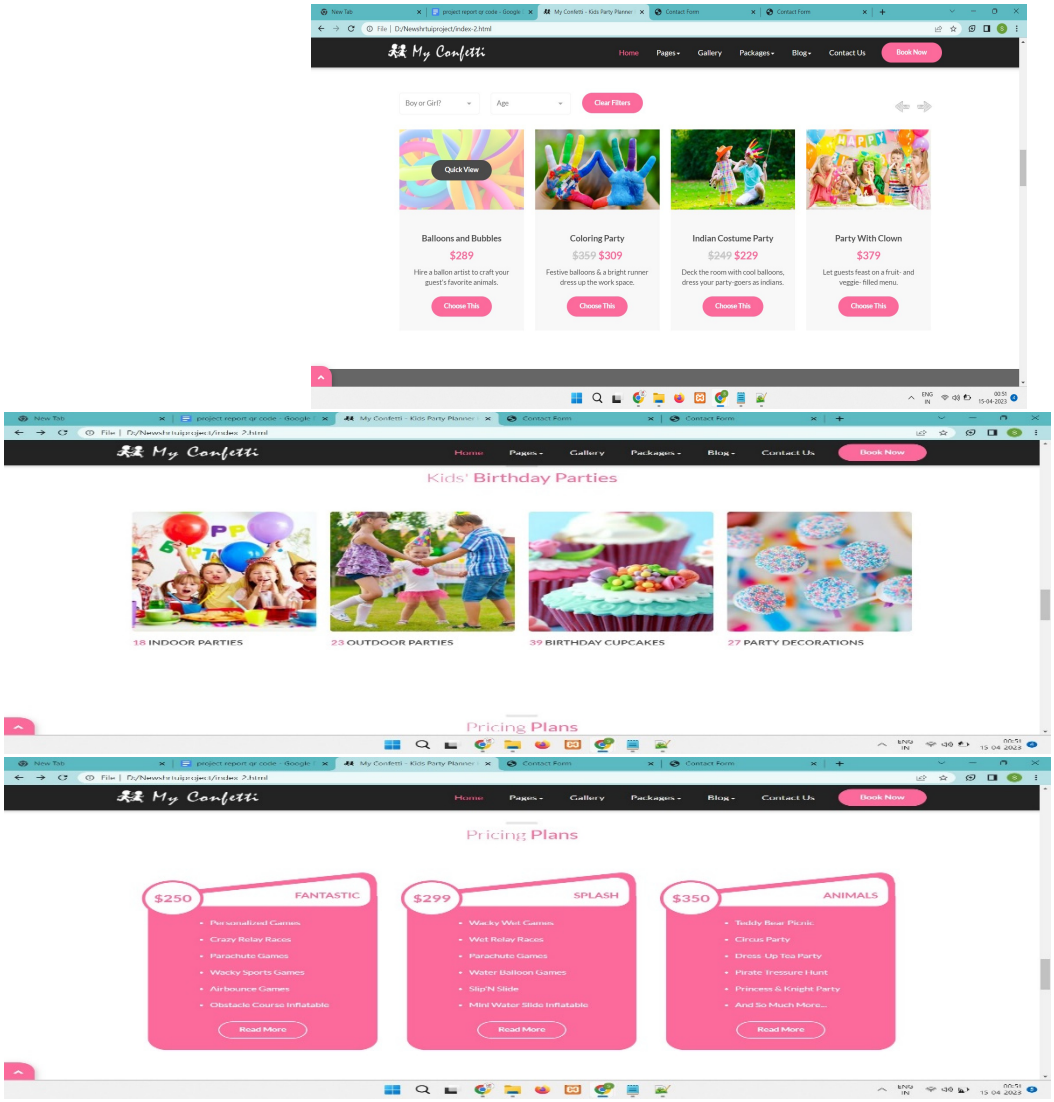
Launch: After the system has been fully implemented and tested, it can be launched to the public. This involves setting up the event registration website, marketing the event to potential attendees, and preparing staff members to manage the check-in process.

Event management: During the event, staff members use QR code readersto check attendees in and track attendance. The system should also provide real-time data and analytics to help organizers manage the event more effectively.

Post-event analysis: After the event is over, organizers can use the data collected by the QR code system to evaluate the success of the event, identifyareas for improvement, and plan future events. This may involve analyzing attendance data, survey responses, and other metrics to assess the overall impact of the event.

Throughout the methodology of an event registration system with QR code, itis important to prioritize user experience, data security, and scalability to ensure the system is effective and efficient.

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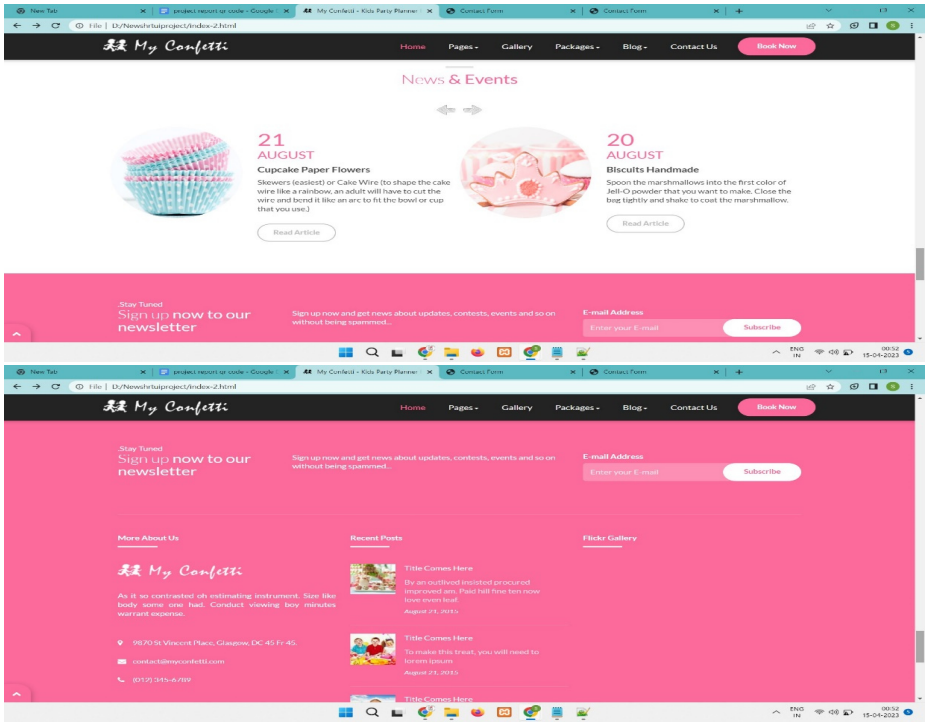

Research Gap

In existing system for ticketing, events held still tend to use physical tickets which require the committee to issue ticket printing costs. Physical tickets purchased by participants after registration must be taken when attending the event as proof of registration. Such physical tickets have the potential to be lost or damaged so that they can harm participants in terms of material.
The use of QR codes for event registration has become increasingly popularin recent years. However, there are still some research gaps in this area, including:

User Experience: There is a need to explore user experience (UX) with QR codes for event registration. How do users perceive the registration process with QR codes? What are the usability issues that they face? How can the registration process be optimized to enhance user experience?

Security and Privacy: There is a need to investigate the security and privacyimplications of using QR codes for event registration. How can the QR codes be secured to prevent fraudulent activities? How can the data collected through QR codes be protected?

Adoption: There is a need to understand the factors that influence the adoption of QR codes for event registration. What are the perceived benefitsand barriers to using QR codes for event registration? How can the adoptionof QR codes be promoted?

Integration: There is a need to explore the integration of QR codes with otherevent technologies such as event management software, attendee management systems, and event analytics tools. How can QR codes be integrated with these technologies to improve the overall event experience

Standardization: There is a need for standardization of QR codes for event registration. How can the use of

QR codes be standardized across different events and venues? What are the best practices for using QR codes for eventregistration?

User adoption and acceptance: While QR codes have been around for several years, their adoption and use among consumers can vary. Research could be done to investigate factors that may influence user acceptance and adoption of QR codes for event registration purposes.

Security concerns: There may be concerns about the security of QR codes for event registration, particularly if sensitive personal information is being shared. Further research could explore potential security vulnerabilities and strategies to mitigate risks.
User experience: The user experience of using QR codes for event registration may vary depending on the technology used, the size and complexity of the event, and other factors. Research could investigate how to optimize the user experience of QR code-based event registration systems.

Comparative analysis: QR codes are not the only technology used for eventregistration. Other options include NFC tags, RFID, and mobile apps. Further research could compare the effectiveness, efficiency, and user experience of different technologies for event registration.

Impact on event attendance: While QR codes can streamline event registration, it is unclear whether they have any impact on event attendance.Further research could explore whether the use of QR codes for event registration has any effect on attendance rates or other event metrics.

One potential research gap for event registration with QR codes could be theeffectiveness and efficiency of using QR codes as a registration method for different types of events. While there has been some research on QR code usage in marketing and advertising, there may be limited research on its use for event registration.

Additionally, research could explore the user experience of using QR codes forevent registration, including ease of use, perceived security and privacy, and user satisfaction. This could include investigating how different factors such as the location of the QR code, the type of device used to scan the code, and the size and complexity of the event affect the registration process.

Finally, research could examine the potential for QR codes to improve event management and organization, such as tracking attendance, managing waitlists, and facilitating communication with attendees. This could involve exploring the integration of QR code technology with event management software, as well as the potential benefits and drawbacks of such integration.
Overall, there is a need for more research on the use of QR codes for eventregistration, including both its effectiveness and user experience.

Renew your effort. The privacy and security issues surrounding QR code registration provide another potential research void. The possible dangers and weaknesses of QR codes, such as the possibility of fake QR codes, data breaches, or identity theft, must be investigated.

Investigating the effects of QR code registration on event attendance and engagement might also be beneficial. For instance, would the ease and quickness of using a QR code for event registration encourage more people tocome, or does it deter participation owing to worries about privacy and secure.

Problem Definition and objective

Problem :

Event registration system with QR code was developed to overcome the usual way Traditional event management takes a lot of time if there are manyparticipants. Therefore, this system will make the event more efficient in its time. Furthermore, when a lot of people attend to an event, participants need to queue long to register and signs the attendance. Participants also find it difficult to find their name to record attendance in the form of regular prints used today. The reliability of the participants in terms ofentry and exit time for the event is also a problem for an event. Participants that exit before the time set by the organizer will make the event become useless

Both event organisers and participants may find the registration procedure to be time-consuming and annoying. Attendees may be discouraged from participation in events by long lines and wait periods, and manual registrationprocedures may be prone to mistakes and inaccuracies.

The typical registration procedure for events may take a lot of time and be inefficient, with participants having to wait in line. Paper-based registration procedures can also be expensive and hostile to the environment. There is a need for a more efficient and long-lasting registration process for events in theage of technology.

Event registration, which involves gathering participant data and giving them event access credentials, is a crucial step in the event management process. Traditional registration procedures like human check-in, paper forms, or barcode scanning can be laborious, prone to mistakes, and expensive in terms of manpower. To further limit the danger of transmission, touchless technologies are now required due to the current COVID-19 epidemic. As a result, a quick, easy, and contactless way of event registration is required.

1. **Problem**: During registration, Event organizers tendto still use paper as a media for participant registration so that potential participants must come or even queue to register for the event. In addition, the use of paper has the potential to be damaged or lost.

Solution offered: The application of a website-based online event registration system so that prospective participants can register wherever and whenever they
are without having to queue. Prospective participants who have registered online through the web will receive e-tickets and QR codes via email. The event committee also does not need to archive registration paper or form again because all participant registrationdata has been stored in the system database.

2. **Problem**: During Re-registration, Event organizers tend to still use paper as a participant registration media, causing participants to come or even queue to enter the location of the event. Again, the use of paper has the potential to be damaged or lost.

Solution Offered: The application of the online event registration system also provides a QRCode Reader feature for event organizers to replace conventionalverification methods such as participant presence form using paper. QR codes obtained by participants after registering will be shown to the event committee during the registration process to verify their attendance. With the transition of the registration process from the paper media presence method to attendance verification by scanning the QRcode participant using the QR Code Reader, it is expected that the participants' queuing time and the user of attendance attendance paper can be reduced.

Definition :

QR code technology can be used to streamline the event registration process by allowing attendees to quickly and easily register for events using their smartphones. QR codes are scannable codes that can be displayed on tickets, flyers, or other promotional materials. Attendees can scan these codes using their smartphones to access registration forms or pre-populate registration information, reducing wait times and

improving the overall registration experience.
permits visitors to sign up for an event by using their mobile device to scan a QR code. The QR code, which can be quickly and simply scanned at the event door, provides all the information required for registration. This strategy can save wait times for participants by doing away with the requirement for paper registration forms.

Attendees may register for events and get access by scanning QR codes thanks to a touchless and paperless method called QR codes. On their ticket or event invitation, attendees may use their cellphones to scan the QR code, which sends them to a web-based registration page where they can finish the process. The data collecting procedure is automated by the technology used
in QR code registration, which does away with the necessity for human dataentering.
Event registration with QR code is a digital process that enables attendees to register and gain access to events by scanning a Quick Response (QR) code. QR codes are two-dimensional barcodes that can be scanned using a smartphone camera, which redirects the user to a web-based registration page. Attendees can scan the QR code displayed on their ticket or event invitation, and complete the registration process through a web-based form, without the need for manual data entry. The technology behind QR code registration automates the data collection process, eliminates paper-based registration forms, and reduces wait times, resulting in a faster and more efficient registration process. Event organizers can use QR code registration to collect attendee data, track attendance, and analyze event metrics to improve event planning and marketing efforts. Additionally, QR code registration enables touchless solutions that comply with the health and safety requirements of the COVID-19 pandemic.

Objectives :

The objectives of event registration with QR code are as follows:

Enhance Attendee Experience: The registration procedure using a QR code is quick, easy, and touchless, which improves the experience for attendees. It makes registration easier and more effective by doing away with manual data entry and lengthy wait periods.

Streamline Event Management: The automated data gathering method and reduced personnel needs provided by QR code registration increase data accuracy and free up event organisers to concentrate on other important responsibilities. Additionally, it does away with the requirement for paper registration forms, expediting the whole event administration procedure.

Gather Attendee Data: Using a QR code to register attendees gives eventplanners access to a wide range of demographic, contact, and preference data. This information may be examined to find trends and trends that can help with marketing and event planning.

Track Attendance: QR code registration enables event organizers to track attendance in real-time, ensuring accurate headcounts, and allowing for better event logistics planning. It also enables organizers to monitor which sessions or activities are most popular and adjust accordingly.

Improve Marketing Efforts: The data collected through QR code registration can be used to improve event marketing efforts by providing organizers with in QR code registration, which does away with the necessity for human dataentering.

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Improve Marketing Efforts: The data collected through QR code registration can be used to improve event marketing efforts by providing organizers with insights into attendees' preferences and interests. This data can be used to tailor marketing campaigns to specific demographics or to promote specific activities based on attendees' interests.

Ensure Health and Safety: QR code registration enables touchless solutionsthat comply with the health and safety requirements of the COVID-19 pandemic. It eliminates the need for physical contact during registration, reducing the risk of transmission, and ensuring the safety and health of attendees.

IV. RESULTS AND DISCUSSION

In conclusion, event registration systems with QR code have become increasingly popular in recent years due to their convenience and efficiency in managing events. These systems provide a range of features such as event registration, ticketing,
on-site check-in, and marketing tools that simplify the event planning process for organizers and enhance the experience of attendees.

The systems listed in the bibliography above offer various features and integrations, making it possible to customize the event registration process to fit the needs of different events. For instance, some systems offer lead retrieval and session tracking features for conferences, while others offer customizable event pages and email marketing tools for smaller events.

One of the main benefits of using event registration systems with QR code is the speed and accuracy of check-ins, which can significantly reduce wait times and improve the overall attendee experience. Additionally, these systems offer real-time data tracking and reporting, making it easy for organizers to monitor attendance and make data-driven decisions.

Overall, event registration systems with QR code are an excellent solution for event planners and organizers seeking to streamline their event management processes while enhancing attendee experiences.

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