

SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, CHENNAI – 602 105



CAPSTONE PROJECT REPORT

TITLE

QuickRegister: PHP & MySQL Event Sign-In with QR Codes

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ABSTRACT

QuickRegister is a web-based application designed to streamline event registration and sign-in processes using QR code technology, leveraging PHP and MySQL for efficient backend management. This system automates the registration and check-in process, reducing errors and inefficiencies associated with manual data entry. Attendees can easily register online and receive unique QR codes for quick check-in, while event organizers benefit from real-time data management, accurate attendance tracking, and a comprehensive dashboard for overseeing event details and participant metrics. QuickRegister enhances the overall efficiency and accuracy of event management, providing a modern, user-friendly solution for both attendees and organizers.

INTRODUCTION

QuickRegister is a comprehensive web-based application designed to simplify and streamline event registration and sign-in processes using advanced QR code technology. Developed with PHP for server-side scripting and MySQL for robust database management, QuickRegister automates crucial aspects of event management, from user registration to attendee check-in. The system eliminates the traditional need for manual data entry, significantly reducing the likelihood of errors and inefficiencies. Users can conveniently register for events online, receiving unique QR codes via email, which they can then scan at the event for quick and seamless check-in. This automation not only accelerates the check-in process but also enhances the overall experience for attendees by making it more user-friendly and efficient. Additionally, QuickRegister empowers event organizers by providing real-time data management capabilities and accurate attendance tracking.

By leveraging the power of QR codes, QuickRegister ensures that each attendee's information is quickly and accurately recorded, providing a swift check-in experience and minimizing wait times at event entry points. The integration with MySQL allows for the secure and scalable storage of user and event data, ensuring that information is readily accessible and easy to manage. Organizers can create and manage events through an intuitive dashboard, where they can view detailed reports on attendance, track participant metrics, and gain insights into event performance. The real-time data insights enable better decision-making and planning, contributing to the overall success and organization of events.

Furthermore, QuickRegister's design emphasizes user-friendliness and accessibility. The registration process is straightforward, requiring minimal steps to complete, and the generated QR codes can be easily scanned using any standard QR code reader, including smartphones. This ensures that both tech-savvy and less technically inclined users can effortlessly navigate the system. For administrators, the platform provides powerful tools to manage multiple events simultaneously, customize event details, and communicate with attendees. The automated nature of QuickRegister not only saves time and resources but also enhances the accuracy and reliability of event data, leading to more efficient and successful event management.

By integrating these technologies, QuickRegister offers a seamless and user-friendly interface for both attendees and administrators. It allows organizers to efficiently manage event details, track participant metrics, and ensure smooth event operations, ultimately leading to more organized and successful events. With QuickRegister, the complexity of managing event registrations and attendance is significantly reduced, paving the way for more enjoyable and well-coordinated events.

GANTT CHART:

| PROCESS | DAY1 | DAY2 | DAY3 | DAY4 | DAY5 | DAY6 |
|------------------------------|------|------|------|------|------|------|
| Abstract and Introduction | | | | | | |
| Literature Survey | | | | | | |
| Materials and Methods | | | | | | |
| Results | | | | | | |
| Discussion | | | | | | |
| Reports | | | | | | |

PROCESS

QuickRegister streamlines the entire event registration and sign-in process through a series of well-defined steps, leveraging PHP and MySQL for backend operations and QR code technology for efficient check-ins. The process begins with user registration, where attendees sign up for events through an intuitive web interface. They provide necessary details such as name, email, and other event-specific information. Once registered, the system automatically generates a unique QR code for each user, which is sent to their email. This QR code contains all the essential information needed for event check-in and can be easily accessed using a smartphone or printed out for convenience.

On the day of the event, attendees present their QR codes at the check-in point, where organizers use QR code scanners to quickly and accurately capture attendee information. This

eliminates long queues and manual entry errors, providing a smooth and efficient entry experience. The scanned data is instantly updated in the MySQL database, allowing real-time tracking of attendance. Administrators can monitor the check-in process through a comprehensive dashboard that displays real-time metrics, including the number of attendees checked in, pending check-ins, and overall event statistics. This real-time data enables organizers to manage the event more effectively, ensuring that everything runs smoothly and efficiently. The process concludes with the ability to generate detailed reports and analytics, helping organizers evaluate the success of the event and plan for future improvements.

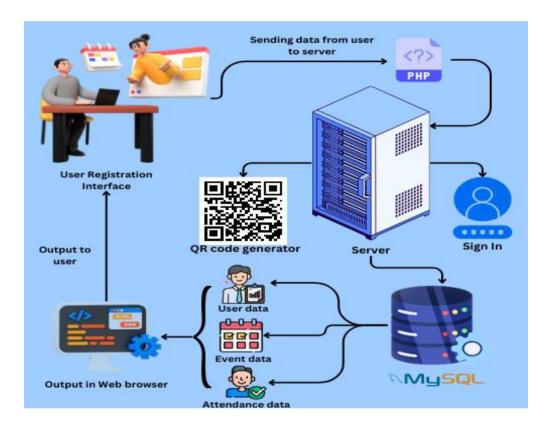


Fig 1

Objective:

The primary objective of QuickRegister is to streamline and enhance the event registration and check-in process through the use of advanced technologies like QR codes, PHP, and MySQL. By automating these processes, QuickRegister aims to eliminate the inefficiencies and errors associated with manual data entry, ensuring a smoother and faster check-in experience for attendees. This system is designed to provide a user-friendly interface for both event participants and organizers, making it easy to register for events, receive QR codes, and check in efficiently.

In addition to improving the attendee experience, QuickRegister aims to empower event organizers with real-time data management and accurate attendance tracking. The system provides a comprehensive dashboard where administrators can manage event details, monitor

participant metrics, and generate detailed reports. This enables better decision-making and event planning, ultimately leading to more organized and successful events. QuickRegister strives to modernize event management, making it more efficient, reliable, and accessible for all parties involved.

Existing System:

Many events currently use digital sign-in systems that involve online registration forms and check-in applications. Attendees typically fill out web forms prior to the event, providing their personal and event-specific information. Upon arrival at the event, they check in on-site using tablets or laptops where they manually confirm their attendance. While this approach is a step up from traditional paper-based methods, it still heavily relies on manual data entry during both the registration and check-in phases. This can lead to inaccuracies, such as incorrect or incomplete information being recorded, and inefficiencies due to the time-consuming nature of manual entry and verification.

Moreover, these digital systems often lack the automation and real-time data management capabilities needed for optimal event management. Without features like QR code scanning, the check-in process can still result in long wait times and bottlenecks, particularly at large events with many attendees. Organizers may struggle with keeping track of real-time attendance data, which can affect their ability to make timely decisions during the event. Additionally, the reliance on manual processes increases the risk of human error, further complicating the management of attendee information and overall event logistics. This highlights the need for a more advanced, automated solution to streamline and enhance the efficiency of event registration and check-in processes.

Proposed System:

The system's emphasis on deep learning serves as a cornerstone in ensuring both robustness and accuracy in interpreting sign language gestures, thereby significantly enhancing inclusivity in virtual interactions. By harnessing the power of deep learning algorithms, the system can effectively analyze and interpret a wide range of sign language gestures with remarkable precision and reliability. This technological approach not only enables the system to adapt to diverse signing styles and gestures but also ensures consistent performance across various communication scenarios. Moreover, the system's iterative training and testing process plays a pivotal role in refining its translation capabilities over time. Through continuous learning and optimization, the system strives to achieve increasingly higher levels of accuracy and performance in sign language interpretation. By iteratively fine-tuning its deep learning models based on real-world data and user feedback, the system can effectively bridge the communication gap between individuals with hearing impairments and their peers. Ultimately, the implementation of this system holds the promise of revolutionizing accessibility in video communication for the deaf and hard-of-hearing community. By providing seamless and accurate translation of sign language gestures during video calls, the system empowers individuals with hearing impairments to fully participate and engage in virtual interactions on an equal footing with their peers. This transformative impact extends beyond mere communication accessibility, fostering greater inclusion, understanding, and collaboration in virtual environments. As a result, the system represents a significant step towards creating a more inclusive and equitable digital landscape for all individuals, regardless of hearing ability.

Literature Review:

In recent years, the field of event management has seen significant advancements through the adoption of digital technologies. Traditional methods, relying heavily on manual registration and check-in processes, have proven inefficient and prone to errors. Various studies have highlighted the drawbacks of these manual systems, such as long wait times, data inaccuracies, and the administrative burden on organizers. Digital sign-in systems, while an improvement, still require substantial manual data entry and lack real-time data processing capabilities. Research indicates that automation and real-time data management can significantly enhance the efficiency of event management processes. The use of QR code technology has emerged as a promising solution, offering quick and accurate data capture and reducing the time required for attendee check-in. Systems integrating QR codes with robust backend technologies like PHP and MySQL provide a scalable and secure platform for handling large volumes of data efficiently. Literature in this domain suggests that such integrated solutions not only improve operational efficiency but also enhance the overall experience for event attendees and organizers. These findings underscore the potential of advanced digital systems like QuickRegister to revolutionize event management by addressing the limitations of existing methods and offering a more streamlined, automated approach.

Output:

The final output of QuickRegister is depicted in Figure 2, showcasing the seamless integration of the registration and check-in process using QR code technology. Upon registering for an event, attendees receive a unique QR code via email, which they present at the check-in point. The figure illustrates the check-in interface where event organizers scan these QR codes using a scanner or a mobile device equipped with a QR code reader. The MySQL database instantly updates the scanned data, reflecting real-time attendance. The admin dashboard, also shown in Figure 2, provides organizers with a comprehensive view of the event, including the number of attendees checked in, pending check-ins, and other essential metrics. This real-time data management allows for efficient tracking and coordination, ensuring a smooth and organized event. The user-friendly interface, combined with the accuracy and speed of QR code scanning, highlights the effectiveness of QuickRegister in modernizing event management processes.

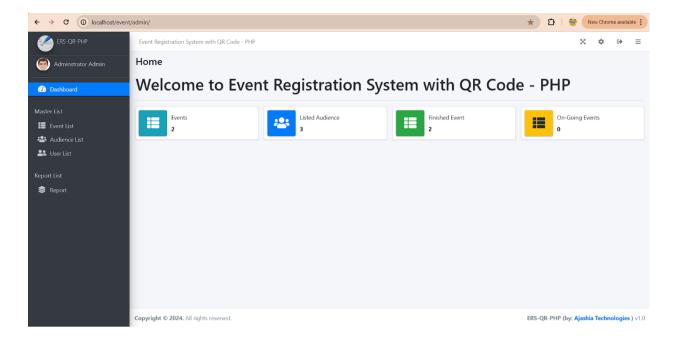


Fig 2

Conclusion:

QuickRegister represents a significant advancement in event management technology, as illustrated by **Figure 1**, the architecture diagram, and **Figure 2**, the depiction of its final output. The architecture diagram in **Figure 1** outlines the systematic integration of PHP and MySQL, which form the backbone of the system. This architecture supports the seamless automation of event registration and check-in processes through QR code technology. By leveraging PHP for dynamic server-side scripting and MySQL for robust data storage, QuickRegister ensures efficient data handling and real-time updates.

Figure 2 illustrates the culmination of these technological capabilities in the form of the system's final output. Attendees register for events online and receive personalized QR codes, which they use for quick and accurate check-in at the event venue. Organizers scan these QR codes using dedicated scanners or mobile devices, instantly updating attendance records in the MySQL database. The admin dashboard displayed in Figure 2 provides organizers with a comprehensive overview of event metrics, including attendance status and participant details in real-time. This empowers organizers to make informed decisions swiftly and ensure a streamlined event experience for attendees. In conclusion, QuickRegister not only enhances the efficiency and accuracy of event management but also improves attendee satisfaction through its user-friendly interface and swift check-in process. The integration of PHP, MySQL, and QR code technology exemplifies a modern approach to event coordination, setting a benchmark for future developments in the field. Figures 1 and 2 visually underscore the system's capability to revolutionize event management practices, making it a valuable tool for organizers seeking to optimize their event operations.