

DEVELOPMENT OF DIGITAL TICKET RESERVATION SYSTEM FOR RECREATIONAL PARK IN PERLIS USING WEB BASED APPLICATION

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ABSTRACT – This project aims to develop a web-based digital ticket reservation system for a recreational park in Perlis which is in Gua Kelam. The current manual ticketing process in Gua Kelam presents challenges such as long queues and limited accessibility. The system is developed to create a user-friendly interface where users are able to book their tickets online without the hassle of manually buying it at the counter. Following the System Development Life Cycle phases, the requirements, design, development, testing, and deployment of the system is analyzed to produce a well-functioning website, ready to be used by the general public. A survey was carried out during the testing phase of the system and the findings resulted to a majority of people opting for a digital ticket reservation system rather than a manual system. Through user feedback and evaluation, this project is intended to enhance ticketing operations, reduce waiting times, and improve the visitor experience. Successful implementation will support Gua Kelam in terms of management and provide a seamless journey for visitors.

Keywords: ticket reservation, digital ticket, booking system, Perlis recreational park

1. INTRODUCTION

Tourism has been one of Malaysia's source incomes for decades due to many beautiful places here that are worth the visit. However, ever since COVID-19 started, a lot of the tourist attraction places face challenges and had to shut down. Organizers and managers of tourism places have tried to boost their business back by promoting their places after the COVID-19 cases had decreased. The depreciation of the Malaysian ringgit has attracted more tourists, opening a new chance for the tourism sector to shine again. One of Malaysia's attraction places which is Gua Kelam in Perlis, is not excluded from this opportunity. Although people have started to visit Gua Kelam, a new problem arises. Gua Kelam only has a manual buying system to buy their ticket. Visitors have to pay at the counter on the day that they arrived, so this leads to a long queue and a time-consuming process. Due to this issue, the idea of a digital ticket reservation system comes into light as it can solve the problem. The website is developed using a web-based application and is accessible by the public, without the need to login every single time. Customers who want to book their tickets can simply fill in the form on the website and all the details will then be sent back to the customer for them to check on their booking details. After filling in the form and booking their ticket, a Quick-Response (QR) code will be displayed so that the customers can make their payment. QR codes are widely utilized in marketing and advertising campaigns as they are way easier to be spread around with information they want to lay out. (Kaspersky, 2020). Not only does this system is fast, but it also solves the long queue issue where people do not have to wait boringly in line. This system also helps the management of Gua Kelam to track the tickets bought online. It is a win-win situation for the both the visitors and staff of Gua Kelam.

2. METHODOLOGY

The methodology used to develop this project is the Software Development Methodology, also referred to as System Development Methodology, a framework used for organizing, scheduling, and managing the process of creating an information system no matter if it is web-based or mobile application. The phases in Software Development Methodology are requirement, design, development, testing, and deployment. The hardware requirement used for this project is a Dell laptop and the software requirements are Visual Studio Code as the software to write source codes, XAMPP as the local web server, PHP, CSS, MySQL database, and mail services for customers to check their booking details.

3. RESULTS AND DISCUSSION

According to the usability and functionality test, majority of the users have agreed that the digital ticket reservation system is an easy system to use, without any difficulties of trying to understand the flow of the system. The results showed that the website is pleasing to navigate around because of the user-friendly features, with intuitive navigation and clear instructions. Users were able to easily navigate through the system, select desired dates and time slots, and complete the reservation process without hassle. It also received positive feedback because it is a desired system where users do not have to manually buy tickets by queuing for a long time. Users reported quick response times and minimal delays throughout the reservation process, contributing to a smooth and efficient user experience. This aspect significantly improved the overall efficiency of ticket reservations system. Feedback from users indicated a high level of satisfaction with the digital ticket reservation system. The system's usability, efficiency, error handling, and customization features collectively contributed to an enhanced user experience. Users expressed their preference for using the digital reservation system over traditional manual ticketing processes, emphasizing the convenience, time-saving benefits, and seamless booking experience.

4. NOVELTY OF RESEARCH / PRODUCT

The novelty of this research lies in the development of the first-ever digital ticket reservation system specifically designed for purchasing Gua Kelam tickets. While digital ticket reservation systems are not entirely new to the tourism industry, this particular system caters to the unique needs and requirements of Gua Kelam, offering visitors a seamless and convenient way to reserve their tickets online. By implementing this innovative system, the administrative processes of ticket management can be streamlined, reducing manual efforts, and improving overall operational efficiency. Furthermore, the introduction of this digital solution to Gua Kelam opens new possibilities for future advancements in ticketing systems, setting a precedent for other attractions to adopt similar digital reservation technologies to enhance visitor experiences and optimize ticketing operations.

5. CONCLUSION

In conclusion, the digital ticket reservation system for Gua Kelam has been proven to be beneficial, not only to the visitors of Gua Kelam, but also to the management team of Gua Kelam. For future works, one of the main potential areas for improvement is creating a mobile application that further upgrades convenience and accessibility where users can make reservations directly from their smartphones.

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