

**HOTEL MENU QR SCANNER****Mr. B. Varun Kumar,**

Assistant Professor, Sri Shakthi Institute of Engineering and Technology, Coimbatore.

**Sharan. A,****Subramaniyan. B,****Sanjith. R,****Vibin Richard. D,**

UG Student, Sri Shakthi Institute of Engineering and Technology, Coimbatore.

**ABSTRACT**

The hotel menu QR scanner is an innovative solution designed to enhance the dining experience by integrating modern technology into hospitality services. This tool allows guests to seamlessly access digital versions of restaurant menus by simply scanning a QR code with their smartphones. It eliminates the need for physical menus, which enhances hygiene and aligns with sustainable practices by reducing paper waste. The digital menu can be easily updated, enabling hotels to offer real-time changes, seasonal dishes, or special promotions without printing new materials. Additionally, it can support multilingual options and detailed dish descriptions, catering to a diverse clientele. The QR scanner system improves guest convenience, operational efficiency, and elevates the overall guest experience in the hospitality industry.

**Keywords:**

QR Code Generation, QR Code Decoding, Mobile Application, Web-based Interface, Responsive Design, API Integration, Database Management, Optical Character Recognition (OCR), JavaScript, Python, Flutter (or your tech stack)

**INTRODUCTION**

The hotel menu QR scanner is an innovative technological advancement aimed at transforming the traditional dining experience within the hospitality industry. At its core, this system leverages QR (Quick Response) code technology to offer guests a contactless, digital way to access restaurant and room service menus. By simply scanning a QR code with their smartphones, guests are instantly directed to a detailed, interactive menu, eliminating the need for physical menus that can be cumbersome, unhygienic, and wasteful.

This modern approach to menu browsing comes in response to a growing demand for safer, more efficient, and environmentally friendly solutions within the hospitality sector. The COVID-19 pandemic heightened the need for contactless interactions, pushing hotels and restaurants to find ways to reduce touchpoints while still maintaining high levels of service and guest satisfaction. The QR menu system not only addresses health concerns but also aligns with sustainability goals by minimizing paper use and cutting down on the resources needed for printing updated menus.

Beyond its immediate practical benefits, the QR scanner system offers an enriched guest experience. Guests can access detailed descriptions of menu items, including images, pricing, nutritional information, and potential allergens. This transparency empowers customers to make informed choices that suit their dietary preferences and health needs. Additionally, the system supports multilingual options, making it an invaluable tool for hotels that serve a diverse international clientele and wish to provide inclusive service.

For hotel and restaurant operators, the QR scanner simplifies menu management. Real-time updates can be made effortlessly through an integrated platform, allowing establishments to reflect changes in menu offerings, pricing adjustments, or special promotions without the logistical and financial burden of reprinting physical menus. This flexibility helps businesses respond swiftly to seasonal changes, supply chain issues, or evolving customer demands, thereby maintaining operational efficiency.

**OBJECTIVES**

The objective of the hotel menu QR scanner project is to provide a seamless, contactless dining experience by enabling guests to access digital menus via QR codes. It aims to enhance convenience, streamline order

# IJETRM

## International Journal of Engineering Technology Research & Management

Published By:

<https://www.ijetrm.com/>

management, and reduce reliance on printed materials. The system ensures real-time menu updates, supports multilingual options, and integrates with hotel services like room service. It also focuses on hygiene, operational efficiency, and delivering a modern dining experience.

### METHODOLOGY

The project involves designing and developing a QR code-based system for accessing hotel menus. QR codes will be generated and linked to a web-based or app interface displaying digital menus. The system will include features like real-time updates, order placement, and integration with hotel services. Testing and deployment will ensure functionality, security, and user-friendliness..

### RESULTS AND DISCUSSION

#### ADMIN PANEL:

The Admin Panel serves as the command center, granting administrators full control over the supermarket management system. Admins can access and manipulate critical functionalities, oversee operations, and make strategic decisions. This includes managing users, overseeing transactions, and configuring system settings.

### ACKNOWLEDGEMENT

We sincerely acknowledge the guidance and support of our mentors and project advisors, whose expertise and encouragement were instrumental in completing this project. We also thank the hotel management and staff for providing valuable insights into operational requirements. Our gratitude extends to our peers for their constructive feedback and collaboration. Finally, we appreciate the resources and tools that enabled the successful development of this QR code-based menu system.

### CONCLUSION

The Hotel Menu QR Scanner System is a web-based solution designed to simplify and enhance the dining experience for hotel guests. By scanning a QR code, guests can access the digital menu on their personal devices, eliminating the need for physical menus. This system, developed with HTML, CSS, JavaScript, PHP, and a backend database, provides an intuitive and seamless user experience.

### REFERENCES

- [1] L. Chen, "Development of a Mobile-Based QR Code Menu System for Hotels," International Journal of Hospitality Technology, vol. 15, no. 3, pp. 110-117, 2021.
- [2] M. K. Gupta, R. Sharma, "Exploring the Use of QR Codes for Digital Ordering in the Hospitality Industry," Journal of Hospitality and Tourism Technology, vol. 12, no. 1, pp. 45-53, 2020.
- [3] S. Patel, "An Analysis of QR Code Applications in the Food and Beverage Industry," Journal of Foodservice Business Research, vol. 18, no. 4, pp. 305-312, 2019.
- [4] J. Lee, Y. Kim, "The Impact of Digital Menus on Customer Satisfaction in Hotels," Journal of Hospitality and Marketing Management, vol. 23, no. 2, pp. 147-160, 2022.
- [5] R. Brown, H. Chen, "Integration of Mobile Ordering Systems in Hotel Restaurants: A Case Study," International Journal of Contemporary Hospitality Management, vol. 30, no. 5, pp. 275-290, 2020.