

**PROJECT REPORT**

**ON**

**SMART RESTAURANT MENU**

*Submitted in the partial fulfillment of requirement for the award of the degree of*

**Bachelor of Technology (B.Tech.)**  
**in**  
**Computer Science and Engineering**



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# **BONAFIDE CERTIFICATE**

Certified that this project report “**SMART RESTAURANT MENU**” is the bonafide work of “**PARTH GOYAL, SHANYA SHARMA, TIGMANSHU MEHTA, VISHAL SHARMA**” who carried out the project work under my/our supervision.

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## **INTRODUCTION-**

The Smart Restaurant Menu project represents a collaborative effort between culinary experts, technology specialists, and hospitality professionals, united by a common vision to create a truly immersive and memorable dining experience.

Drawing upon expertise from chefs, designers etc.. we envisioned a digital menu experience that would not only enhance guest satisfaction but also streamline restaurant operation and promote sustainability.

At its core, this project is more than just a digital upgrade, it is a reimagining of the entire dining experience- symphony of flavors, textures, and emotions orchestrated by the seamless integration of digital tools and culinary artistry.

## **KEY FEATURES-**

- From the bustling kitchens to the serene dining rooms, every facet of the smart restaurant menu experience has been scrutinized, analyzed, and optimized to perfection.
- Interactive digital menu with high- resolution images and detailed description.
- Feedback loop integration to notify chefs and staff of guest comments or requests.
- Our famous chefs were mentioned on our website.
- Online menu access via restaurant website, social media.

## **BENEFITS-**

- Enhanced guest experience through interactive and engaging menu browsing.
- Reduced reliance on printed menus, leading to cost savings.
- Real time menu updates and promotions, keeping guest informed of specials.

## **PROBLEM STATEMENT-**

- **Health and Safety Concern-** In light of COVID-19 pandemic and heightened awareness of hygiene and safety measures, the use of physical menus presents a potential risk of transmission of pathogens through contact with shared surfaces.
- **Limited Access to Information-** Paper menu provide limited space for detailed description, allergen warnings.
- **Limited Guest Engagement-** Traditional paper menus offer limited opportunities for guest engagement and interaction. With static text and images, they fail to capture the attention of guests and provide immersive experience expected in today's digital age.

## **TECHNOLOGY USED-**

- **HTML and CSS-** HTML and CSS provide the structure and style of website, allowing for a clean, responsive and consistent user interface. The use of CSS libraries and frameworks enhances the design and layout of the application.
- **JavaScript-** JavaScript adds interactivity and dynamic behavior to the website. It enables real time updates, form validation and responsive designs. It enhances the overall user experience.
- **MongoDB-** MongoDB is the database used to share and manage data such as user login, reviews etc. The database MongoDB is used for storing user's data.
- **Node.js-** It is used to build the backend server, providing a scalable and efficient environment.
- **Express.js-** It is a Node.js framework used to create a robust and efficient server-side application. It simplifies routing, middleware and request handling, making the development process manageable.
- **Hbs-** Handlebars.js is a popular templating language that allows you to dynamically generate HTML content by combining static HTML with data from JavaScript objects or other sources.

## **FUTURE SCOPE-**

The future scope of Smart Restaurant Menu is vast and promising, with opportunities for innovation and growth in several key areas.

- **Continuous improvement and feedback loop-** By gathering feedback from guests, restaurant and operators, and industry experts, the smart restaurant menu can undergo continuous improvement and optimization.
- **Sustainability initiatives-** Future iterations of the smart restaurant menu could incorporate sustainability initiatives, such as promoting locally sourced ingredients, reducing food waste through dynamic pricing.
- **Collaborations and partnerships-** Collaboration with technology companies, food delivery platforms, and hospitality industry stakeholders can unlock new opportunities for innovation and growth.

## **RESULTS**

The implementation of a smart restaurant menu is expected to yield several positive results for both guests and restaurants operators. Here are some anticipated outcomes.

- **Enhanced Convenience-** Guests benefit from the convenience of accessing the menu from their smartphones or tablets, eliminating the need to wait for a physical menu.
- **Increased Transparency-** Smart menu provide guest with transparent and detailed information about menu items.
- **Enhanced Safety-** In light of health and safety concerns, smart menus minimize physical contact between guests and restaurant staff, reducing the risk of transmission of pathogens and promoting a safer and more hygienic dining environment.
- **Enhanced Brand Image-** Embracing technology and innovation through smart menu can enhance a restaurant's brand image and reputation as a forward-thinking and guest-centric establishment.

## CONCLUSIONS

The **Smart Restaurant Menu** Project successfully combines modern frontend and backend technologies to create a comprehensive Smart Restaurant Menu platform. The platform used a range of technologies, including **HTML, CSS, JavaScript, MongoDB, Node.js, Express.js and hbs** to deliver a seamless user experience and efficient backend functionality.

The project demonstrates the successful integration of frontend and backend technologies to create a robust, user-friendly Smart Restaurant Menu platform. The project paves the way for future enhancements and expansions, which could further enhance the platform and improve user experience.



## **GitHub Link**

- Smart Restaurant GitHub Repository
- [https://github.com/shanyasharma/Smart\\_Restaurant\\_Menu.git](https://github.com/shanyasharma/Smart_Restaurant_Menu.git)





