Pratibodh
A Journal for Engineering
A free and Open Access Journal
Homepage: https://pratibodh.org
RATNA & BM RANVEER Foundation

FOOD DELIVERY WEBSITE USING WEB DEVELOPMENT

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Abstract

Online food ordering system is mainly designed to function for use in the food delivery industry primarily. This system will allow hotels and restaurants to increase online food ordering for such types of businesses. The customers can be selected food menu items in just a few minutes. I utilized the Front end and JavaScript to create a Streamlined restaurant website. This system allows restaurants to manage online menus and customers quickly and easily can navigate and place orders quickly. Restaurant staff also quickly view orders and prepare orders without previous miscommunication. Graphical interfaces are efficient and effective for both customers and restaurant staff.The website fosters user engagement through features such as reviews, ratings, and promotional offers.Ultimately, the online food ordering website creates an efficient and enjoyable interface, enabling users to savor culinary delights with convenience and confidence..

Keywords: *React Js, Mongo DB, Node Js, Html, CSS, JavaScript*

Article Status

Available online :

1. Introduction

In the modern generation, Online food ordering is a mobility of food delivery or takeout from a local restaurant or food cooperative. Nowadays the rapid growth in the use of the internet and the technologies

Fig.1 Development Cycle

associated with it, several opportunities are coming up on the web or mobile application. The system/interface will take input from the user.it can also provide efficiency for the restaurant by reducing time consumption, minimizing human errors or delivery, and providing good quality and service to customers. The major attributes that will give input to the dataset are name, address, email ID, mobile no, number of people, time, etc.

2. Literature Review

Online food delivery platforms have revolutionized the food industry, offering convenience and variety. Studies by Smith et al. (2017) emphasize the growth in online food ordering.

This system implements wireless data access to servers. The web application on the user's device will have all the menu details. The kitchen and cashier receive the order details from the customer's device wirelessly. The restaurant owner can manage the menu modifications easily. The purpose of this study was to investigate the factors that influence the attitude of internet users toward online food ordering in Turkey among university students.

A Technology Acceptance Model (TAM) developed by Davis in 1986 was used to study the adoption of a Web environment for food ordering.

Here are some guidelines for designing an E-commerce website related to the homepage, navigation and shopping cart which is shown in table 1.

TABLE 1
GUIDELINES FOR DESIGNIN RESTAURANT WEBSITE

Component	Rules	Ref.
1) Homepage	1. Web page should be clean and not cluttered with text and graphics. 2. The width of a page should be less than the width of the browser window to avoid horizontal scrolling. 3. Make use of fewer colours.	[4],[5]
2) Navigation	1. Text or the links or buttons should be self-explained and descriptive. 2. Good pages contain more interactive link than poor pages. 3. Put navigation controls in the same location on each page.	[4],[5] ,[6]
3) Shopping Cart	1. Best location, at the right top area. 2. Show visual indication where the shopping cart contain products. 3. In the shopping cart page, provide a link that directs the customer back to the page he/she left for continuing shopping.	[3],[4]

3. System Architecture

To overcome the limitations of the traditional system, an Online Food Ordering System based on the Internet of Things is proposed. It is a wireless food ordering system using web browser. It consists of main components:
User Interfaces:

3.1 User Interface (UI): This is what the user interacts with and includes HTML for structure, CSS for styling, and JavaScript for interactivity.

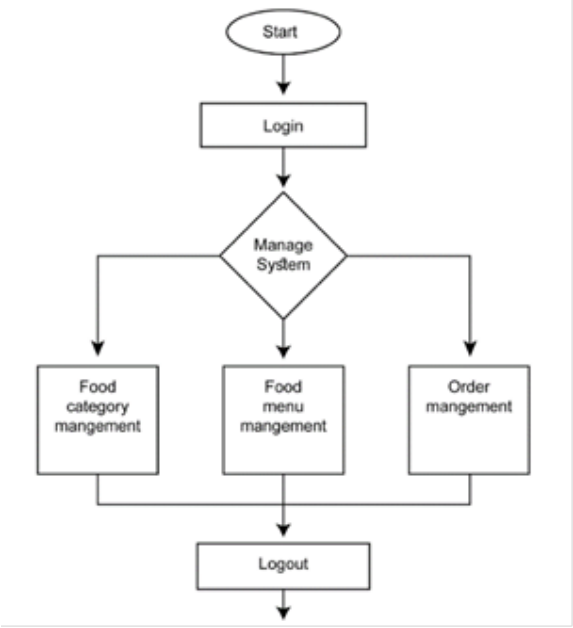
3.2 Web Browser: The client-side code runs in the user's web browser, rendering the website and handling user interactions.

3.3 Responsive Design: Ensure that the website is responsive, adapting to different screen sizes and devices (e.g., desktop, tablet, mobile) using CSS media queries.

3.4 Menu Presentation: we designed an interactive and easily navigable menu section that allows visitors to explore our culinary offerings including dietary preferences and pricing.

3.5 Reservations System: Implement a reservation system to manage table bookings.

Workflow:
The workflow of a restaurant food ordering website involves a user-friendly interface for customers. Users start by accessing the website and can immediately view the restaurant's menu, categorized into sections like appetizers, mains, desserts, and more. They select items by adding them to a virtual cart, where they can adjust quantities and provide special instructions or dietary preferences. A form or booking widget for making reservations. Visual cues and responsive design ensure an optimal user experience across various devices. customers may provide feedback. The website also offers customer support for inquiries.



4. System Development

In making this e-commerce website, three languages are used, which are given below with their introduction and latest versions:-

1. HTML:-HTML is used to structure the blueprint of our website with its latest version HTML5.
2. CSS:- CSS is used to add some styling to our website and this is done by its latest version CSS3.
3. JavaScript:-JavaScript is used to make interaction with the user by adding some clickable buttons with its latest version ES14 (named ECMAScript2023).
All these language codes are performed on visual studio code (vs code), which contains the support for debugging, syntax highlighting, intelligent code completion, snippets. VS Code can run any language just by adding its extensions.

5. Features and Functionality

5.1 User Management: Secure registration and authentication for customers.
5.2 Menu Access and Ordering: Customers can easily browse restaurant menus, customize orders, and place requests.
5.3 Featured Promotions: Highlight special promotions, events, or seasonal offers, such as happy hours or holiday menus.
5.4 Reservation Form: Include a user-friendly reservation form with fields for name, phone number, email, party size, date, and time.
5.5 Navigation: Include a user-friendly navigation menu that makes it easy for visitors to switch between pages.
5.6 Responsive Design: Ensure that the website is responsive, adapting to different screen sizes and devices (e.g., desktop, tablet, mobile)

6.Code Snippets

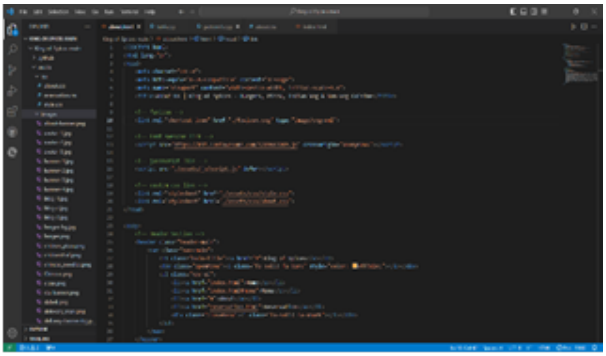


Fig.1 HTML Code (shows the structure for the home page and the products which are in trend in the market)

Fig.2 CSS Code (this code shows the styling of the nav and header part of the website)

Fig.3 CSS Code (Here are the styling of the buttons used and products which are shown at their proper position is done in CSS)

Fig.4 CSS Code (This is the styling part of the banner section with the hover effects and different colors)

7.Project Snippets

Fig.5 Home page of the website(here you can see many more sections on this home page like home, menu, about and reservation.)

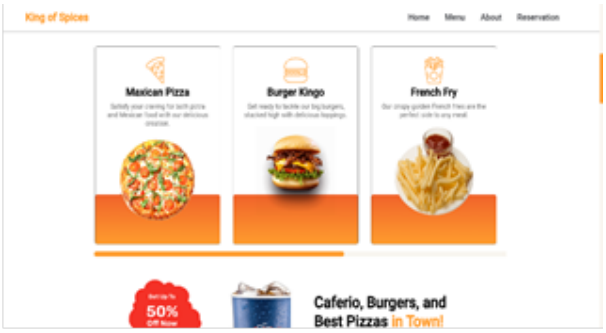


Fig.6Menu Section(here you can see various types of dishes)

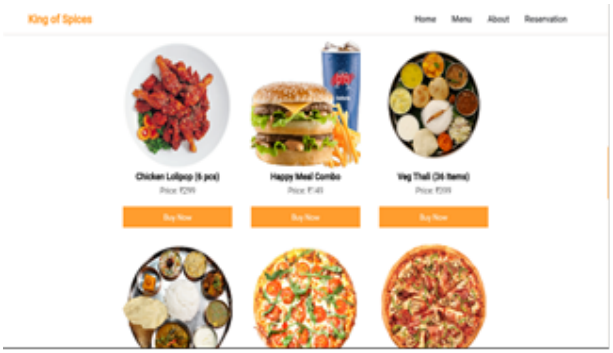


Fig.7Menu Section(here you can see various types of dishes with their prices)

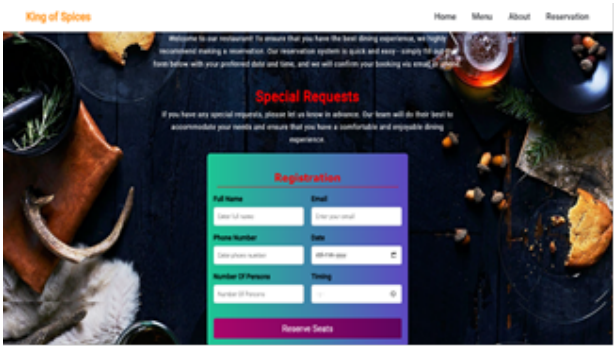


Fig.8Reservation Section(here you can reserve your seats)

8. Future Enhancement

To maintain a restaurant food ordering website that remains competitive and relevant in the future, several key considerations must be considered. Firstly, the ongoing integration of emerging technologies such as AI and machine learning can enhance user experiences by providing personalized menu recommendations and predictive order customization based on past choices. Mobile app development and cross-platform compatibility are vital for accommodating changing user preferences and the widespread use of mobile devices. Furthermore, prioritizing cybersecurity and data protection will be paramount to safeguard user information and foster trust. Sustainable practices, like eco-friendly packaging options and reducing the website's carbon footprint, can align with growing environmental concerns. Lastly, continuous adaptation to evolving food trends and dietary preferences, along with fostering community engagement through social media and reviews, will be essential to staying ahead in the highly competitive online food industry. In essence, the future success of a restaurant food ordering website hinges on a combination of advanced technology, user-centric features, sustainability, security, and staying attuned to changing market dynamics.

9.Conclusion

In summary, the aim of this thesis was to develop a website for customers to make a more user-friendly menu in which the customer can look through and tab the menu on a tablet. And, to collect more accurate data on the ordered foods in a more efficient and effective way. The application is implemented on tablet devices, so the text size and design are adjustable to devices with a large screen to make it easier to read and look through the menu items. The Restaurant Management System helps to manage restaurant inventory information quickly & easily.

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