

WEB AND MOBILE APPLICATION DEVELOPMENT
GROUP PROJECT
WEB & MOBILE APPLICATION DEV'T FOR EVERYONE CAPSTONE
BSDS & BSIT, ADVENT 2023

Instructions:

- a) Work on this project in the **groups** assigned to you.
- b) It should be ready within **14 days**.
- c) A working **prototype**, **presentation**, and **documentation** are expected as a deliverable for this project.

Background:

In recent years, the restaurant industry has witnessed a significant transformation, largely driven by advancements in technology. Restaurants have increasingly embraced technological solutions to enhance their operations and provide a more seamless and enjoyable experience for customers. These technological innovations have touched every aspect of the industry, from the way orders are taken to the methods of payment and customer engagement.

One of the most prominent shifts in the restaurant industry is the adoption of Point of Sale (POS) systems. These systems have replaced traditional cash registers with electronic terminals that not only process payments but also handle order entry and inventory management. Moreover, mobile and tablet-based POS solutions have become commonplace, allowing for greater flexibility in order-taking and payment processing.

Online ordering and food delivery have surged in popularity, with partnerships with third-party delivery platforms like Jumia Food, Glovo, UberEats, DoorDash, and Grubhub becoming standard practice. Many restaurants have also developed their delivery apps and websites, allowing them to maintain more control over the delivery process and customer data.

Reservations and waitlist management systems have been streamlined with the adoption of digital tools. Reservation platforms like OpenTable have made it easier

for customers to secure a table, and waitlist management software sends notifications to customers via text messages or mobile apps when their table is ready, reducing the hassle of waiting.

Digital menus have replaced traditional printed menus in many restaurants. Customers can now simply scan a QR code with their smartphones to access the menu, which may include interactive features such as images, descriptions, and videos of dishes.

Project Assignment: Restaurant Management Web Application

Project Description:

In light of the technological advancements and their widespread use in the restaurant industry, this group project aims to give you hands-on experience in building a **Restaurant Management Web Application** using **ReactJS**. The project centers around creating a versatile and functional application for a chosen restaurant in the community. You will have the opportunity to apply your web development skills to develop features such as online ordering, reservation management, and more.

Key Features:

1. **User Authentication:** Implement a secure user authentication system for both customers and restaurant staff to access different features of the application.
2. **Menu Display:** Develop a user-friendly interface to display the restaurant's menu with details like descriptions, prices, and images of menu items.
3. **Order Placement:** Enable customers to add items to their cart, customize their orders, and place orders.
4. **Reservations:** Allow customers to make reservations by choosing a specific date and time slot. Implement a reservation calendar to manage availability.

5. **Admin Dashboard:** Create an admin dashboard for restaurant staff to manage orders, view reservations, update menu items, and change availability status.
6. **Order Tracking:** Implement order tracking for customers to check the status of their orders, enhancing transparency and communication.
7. **Payment Integration:** Incorporate payment processing to allow customers to pay for their orders online, providing a convenient and secure payment experience.
8. **Reviews and Ratings:** Allow customers to leave reviews and ratings for dishes and the restaurant, fostering customer engagement and feedback.
9. **Notifications:** Implement order and reservation confirmation notifications through email or push notifications.
10. **Responsive Design:** Ensure the application is responsive and accessible on various devices, catering to a wide range of users.

THE END

HAPPY HACKING!