

FOOD-OUT

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Abstract - Our project "Foodout" is a dining app made for food orders in a contactless manner using QR code mainly built for the pandemic situations which have left everyone to follow the guidelines of social distancing. So, from this application, we tried to present an application that perfectly fits into the precautionary steps of a pandemic. A number of efforts have been made for the smooth running of the App. In the corresponding project, we've used HTML, CSS, Javascript, React, Redux, JWT. Node.js, Express, and MongoDB as the back end. For the successful deployment of the backend, Netlify platform is used that lets developers automate modern web projects.

Key Words: Food-dining-app, Contactless, QR code

1. INTRODUCTION

"FOODOUT" is a dining web application that we introduce for ordering food in a contactless manner. It allows the user to order food in any of the restaurants around the area. The user does not have to stand in a queue to take or book their order. The booking of the order is contactless, and also the bill will be digital and will be sent to the user in a contactless manner as well.

2. Requirement

This chapter illustrates the approaches taken to design the system for restaurants. The chapter first addresses different types of requirements of the system. Then it discusses the system design and gives an overview of the systems processes. Then, the database schema of the system is illustrated. Lastly, the user interface design has been developed.

2.1. Hardware Requirements

- Operating System: Windows
- XP/Vista/7/8/8.1/10/Android 9.0 onwards
- RAM: 4 GB
- Hard Disk: 1 GB
- Processor: Intel Dual Core or higher processor

2-1. Software Requirements

- QR code scanner
- Proper Internet Connectivity
- Cellular Connectivity

3. Design.

3.1. Use Case Diagram

A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams to model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. In this context, a "system" is something being developed or operated, such as a website. The "actors" are people or entities operating under defined roles within the system.

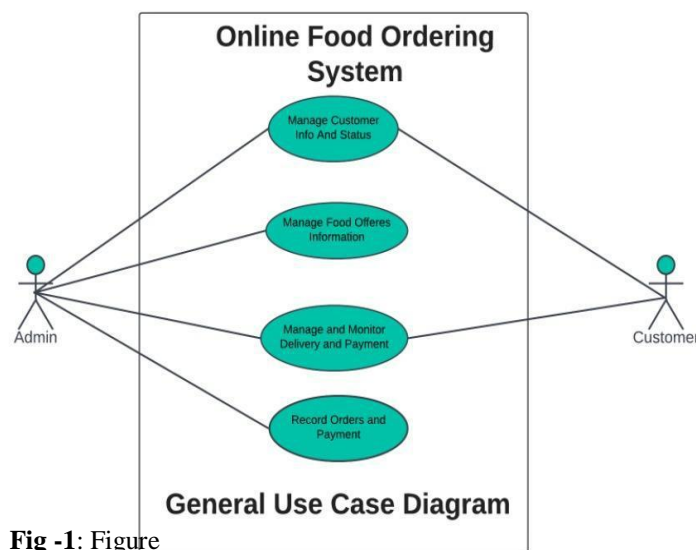


Fig -1: Figure

4. Work Flow

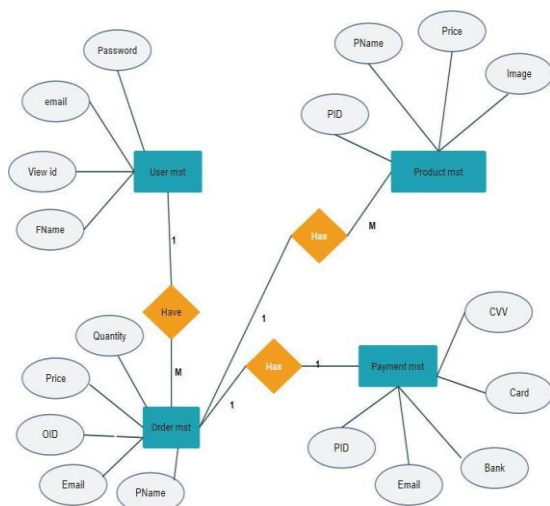
- Scan QR Code at an affiliated restaurant to bring up the entire menu
- Search and sort items through the menu
- Add items to your cart
- Review your order and apply coupons
- Collect your order when ready!

5. ER Diagram:

An Entity-Relationship (ER) Diagram is a type of flowchart that illustrates how "entities" such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information

systems, education, and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships and their attributes.

ER Diagram



6. Literature review

The perspectives of organizational, marketing, and strategic management theories provide a reliable theoretical groundwork to understand the important managerial aspects of the menu. For instance, organization theory explicitly emphasizes the influence of the external environment both on the decisions of firm managers and the survival of firms in the long run. More specifically, the external environment is one of the central themes of organization theory and the relevant studies (Duncan, 1972, Jurkovich, 1974, Dess and Beard, 1984, Ashill and Jobber, 1999) primarily propose that managers essentially consider the influential external factors that create uncertainty, diversity, and volatility while making their decisions. Planning and operating menus in a restaurant context involve considering external factors such as customers, rivals, and vendors that have a great potential in creating uncertainty, diversity, and volatility in the restaurant's immediate business environment. Complementing this view, marketing theory recognizes the importance of identifying the needs and expectations of customers and developing and improving products and services that perfectly fit those needs and expectations. Additionally, pricing, promoting, and distributing the products and services should also be consistent with the customers' needs and expectations on the one hand, and with the firm's objectives on the other hand. Thus, in the restaurant context, it is imperative that the menu as the food and beverage combinations offered by a restaurant

reflects the expectations and needs of customers. Moreover, managing menus involves planning, pricing, designing, distributing, and promotional decisions which are also the main issues of marketing.

6.1 Menu management issues.

Menu management is a relatively new concept that is not widely recognized by researchers or practitioners. Indeed, in the relevant literature, very few studies have used the concept without providing a certain definition of it. Thus, the major aim of the literature review in this section is to trace the variables investigated by menu researchers. The review purposely restricted to the journal articles which were subjected to a rigorous academic judgment process before publishing.

7. Future Scope

The platform will introduce QR codes which will enable users to just scan and log in to start browsing through restaurant menus. In the future, every order will be contactless, every bill will be contactless, which will ensure proper hygiene and reduce the risk of any other pandemic or even risks of poor health.

It will always keep following all government rules. FoodOut QR will be the ultimate QR that even smaller restaurants can use so that FoodOut is available to every customer at every restaurant. Just like BHIM UPI, FoodOut will be the ultimate Dine-in solution.

The food industry is a combination of many diverse businesses and it is responsible for feeding the world population. This group excludes hunter-gatherers and those who do subsistence farming.

Parts of the food industry include agriculture, online food service, and much more. Since the growth of the food industry is assured, anxious promoters can invest their money in the food industry and will reap benefits. Under food service, there are many places where these promoters can invest money in. Before, people used to buy food either directly from the restaurants or order over the phone. However, this has changed and people have started ordering online.

8. Reference

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