

SYNOPSIS
on
PIZZA ORDERING SYSTEM

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Session:2022-2023 (4th Semester)
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KIET GROUP OF INSTITUTIONS, DELHI-NCR,
GHAZIABAD-201206
(MARCH- 2023)**

ABSTRACT

The abstract for a Pizza Ordering Website describes the key features and benefits of the platform. It highlights its user-friendly interface, customizable menu options, and online ordering system. The platform provides customers with seamless ordering experience, allowing them to easily track and customize their orders, track their orders in real-time, and receive updates and notifications via email or text message.

This website provides an efficient and reliable system.

The objective and scope of my Project Pizza Ordering System is to record the details various activities of user. It will simplify the task and reduce the paper work.

The Pizza Ordering System is an Online platform that allows customers to order pizza from their preferred pizza restaurant. This system enables users to choose from a variety of pizza types, the size of the pizza, toppings and extra items. The customers can pay online.

This project consists of a total of 7 modules which are User Module, Sign Up/Login, Add to Cart, Build your Pizza, Admin Module, Payment Module, Activity Tracking Module.

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1. INTRODUCTION

The pizza ordering system has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by the existing system. Moreover, this system is designed for the particular need of the company to carry out operations in smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, it proves to be user-friendly. Pizza ordering system can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their activities rather than the record keeping. Thus, it will help the organization in better utilization of resources.

Every organization, whether big or small, has challenges to overcome and managing the information of online order, pizza, payment, coupons. Every pizza ordering system has different pizza needs therefore we design exclusive employee management systems that are adapted to your managerial requirements.

This system will ultimately allow you to better manage resources.

2. LITERATURE REVIEW

2.1. Introduction

The literature review comprises of a selective and critical survey of the written works of this particular subject area. It includes personal communication, articles, books, published and unpublished papers, and unpublished works to be limited. All the authors have been acknowledged. It is as follows:

2.2. Theoretical Review

In today's age of fast food and take-out, many restaurants have chosen to focus on quick preparation and speedy delivery of orders rather than offering a rich dining experience. Until very recently, all of these delivery orders were placed over the phone, but there are many disadvantages to this system, including the inconvenience of the customer needing to have a physical copy of the menu, lack of a visual confirmation that the order was placed correctly, and the necessity for the restaurant to have an employee answering the phone and taking orders. According to (US9760958 B2, 2017) Techniques for restaurant transaction processing are provided. A handheld device of a waiter is used to automatically associate a check with a table at a restaurant and to recall and modify that check. In an embodiment, two waiters use one or more handheld devices to automatically transfer a customer's check to one another. According to(US20140330671 A1, 2014) a system and method for automatically submitting an online order from a customer to a restaurant will be more efficient. Input data and customer data is used by an order engine to select a deployment platform, such as social media networks, search engines, mobile applications, and related websites, for a user interface. The user interface automatically populates the restaurant's menu options and business data, allowing the customer to build an order. The order engine submits the order to the restaurant via a non-verbal communication platform. An automated confirmation call is generated to the restaurant confirming receipt of the order. From the confirmation call the restaurant may choose to repeat the message, accept the order, connect to the customer, connect to the service provider, decline the order, or opt-out. The order engine allows the restaurant to monitor online orders and to enroll in the above services for subsequent online orders. This invention is a system and method for managing restaurant customer data elements according to (US8799083 B1, 2014). According to (US6415555 B1,2002) a kiosk system and method is provided for accepting

and processing customer orders and payments in a retail environment. The kiosk system and method is particularly applicable to the restaurant business and may include a consumer display screen for visually displaying product information of products that can be ordered at the kiosk, structure that is operable by the consumer for placing a consumer order composed of at least one product selected from products for which information is displayed on the consumer display screen and structure for accepting payment for the order from the consumer, which typically will include a cash payment by the consumer. Also according to (US5907275 A, 1999) An order communication system is provided which allows audio visual interactive communication between a customer at a remote order station and an attendant receiving orders in a restaurant. The order communication system allows flexible display programming by restaurant employees and in particular allows the customer to view both a textual description and a graphical depiction of ordered items. The order communication system also allows the customer to view live video of the attendant, while allowing the attendant to view live video of the customer as well as the video image the customer is seeing. A method and system for providing an automated, extremely efficient, restaurant experience for the customers of a sit-down style restaurant. The system and method of the present invention presents options to the customer which include, but are not limited to: a virtual server as part of the user interface allowing a customer to have a more human-like interaction with the restaurant communication system; a datamining analysis tool for analyzing transactions performed by the restaurant communication system; functionality to allow the restaurant diner to pay for the food and drinks with cash, a check, credit card, or a gift certificate; Internet access to the restaurant diner for receiving information on movies; the option to purchase movie theatre tickets or gift certificates; a module to place an order from a remote location via the Internet; an incentive program to encourage the restaurant diner to order the food and the drinks; human resource capability for a restaurant; options to send Internet e-mail messages or messages to other diners; or voice recognition and voice synthesis to allow the restaurant diner to operate the restaurant communication system even with a vision impairment. The extreme versatility of the various embodiments of the present invention facilitate providing a highly customized system for any given restaurant business according to (US20030078793 A1, 2003)

2.3. System Review

According to (US20090167553 A1, 2009),

The invention relates to a new "mobile and online based ordering and reservation system" by integrating, synchronizing and utilizing the capability of wireless devices, Internet servers, business web sites and service aggregation portals, to automate the mobile and online ordering and reservation processes in real time, and therefore offering a plural of new mobile and online services and applications. More specifically, the Internet server serves as the host to the service aggregation and as the intermediary device between customers and business. It automatically synchronizes all of the service requests and responses. Therefore, this invention takes full advantage of the flexibility, mobility, availability and convenience of the wireless devices, and the reliability, scalability, the huge processing power of the Internet servers, and the great broadband penetration of the computers into businesses and consumers. The unique and novel, mobile and online based ordering and reservation platform and system, for such time sensitive services, provides the mobile phone and Internet users and various types of business owners with comprehensive sets of options, including the mobile phones installed

with the open source "Android" software platform developed by the "Open Handheld Alliance(OHA), such as the "g Phone" released by "Google", to deliver the requests and responses automatically and instantly through means of synchronization between mobile and Internet communications. Based on the open source mobile phone platform and the Internet server infrastructure, an intuitive and easy-to-use mobile phone and online based ordering and reservation management system is uniquely defined in the architecture of the current invention to allow both the business owners and end consumers with real time communications for a plural of mobile and online ordering and reservation services.

2.4. Critique of the existing system.

The current mode of placing orders for a pizza for home delivery is via phone. The process seems easy to use but sometimes there is some miscommunication. Due to the fact that there is no visual menu shown during a phone call, the employees have to repeat a lot of things again and again to the customers.

It's a time-consuming process which at times irritates customers and also takes a lot of time of the pizzeria staff. It would be much more comfortable for the customers to have an online pizza ordering system. This is because it would be hassle free for users as they can select the pizzas they want and make payment upon delivery. Also, it will reduce the purchasing time for customers.

2.4.1. Weaknesses of the current system

Inconvenience of customer needing to have a physical copy of the menu

- Time consuming
- Lack of visual confirmation that the order was placed correctly
- Necessity for restaurant to have an employee answering the phone and taking orders
- Difficulty in tracking customers past history
- Manual work and consumes large volumes of data
- Lack of data security

2.5 . Summary

After the study of the existing system was done, the data collected was analysed and used to determine different requirements of the developed system. Data flow diagrams and ER diagrams were used in the analysis of the data collected for the proposed System.

3. PROJECT OBJECTIVE

The main objective of the pizza ordering system is to manage the details of payments, customers, pizza, order status. It manages all the information about payments, online order, order status etc. The Purpose of the project is to build an application program to reduce the manual work for managing the payments, customer, online order etc. Some of the applications are given below:

- **Build your own pizza** – This system will help customers in ordering custom pizzas. So, the customer will pick exactly the things which he/she wants in their pizza. This will surely enhance the image of the Mount Pizza and customer satisfaction will be more.
- **Online Payment**– This system will give the option to the customer for online payment. This will make the pizza buying experience cash-free.
- **Better Knowledge**– This system will provide the customer all the details of his order before making the order. This confirmation will help customers to check the items ordered with their prices.
- **Reduce Paper Work**– As most of the things will be performed online, it will reduce the usage of paper for the Mount Pizza.

4. MODULE DESCRIPTION

The Pizza Ordering System Consists of 7 Modules which are as Follows:

4.1 User Module: User module provide accessibility to user so they can manage their profile and use other modules.

4.2 Login/Sign-Up:

When a customer visits the online pizza ordering system of any shop, he will be asked to log in or sign up for them for a better experience. The customer has to create a unique username and a password. Then he /she need to enter details like Name, phone number, address. After these steps account of that customer will be created.

4.3 Add To Cart:

This feature is useful in a situation where you have to order more than one pizza or other non-pizza items. Suppose you have selected a Margherita pizza and now you want to select another pizza as well. Then you just have to add that pizza to the cart using the Add to cart option. Items added to the cart will be saved so that you can choose other pizzas as well.

Finally, when you are ready to order you can check out from the cart to make payment. Payment There will be basically 2 payment options i.e. online payment using Credit/Debit cards and Internet banking or Cash on delivery. Before making payment, your order details are shown and confirmed. This system makes transactions easier as the need to pay with cash is not there.

4.4 Build Your Pizza:

One of the most amazing features of an online pizza ordering system is that you can build your pizzas from the scratch. This system provides the options to create your custom pizzas with everything of your choice. Let me tell you more about making custom pizzas.

- The customer will get an option to select the pizza's crust size which can be small, medium, or large.

- Then the customer has to choose the sauce to be used on his pizza crust. These can be marinara, cheese, ranch, and others.
- Then the system asks the customer whether to add cheese or not. He also has an option to select extra cheese.
- At last, the system shows the customers different types of toppings. Firstly, the customer has to choose between veg. and non-veg. toppings. Suppose you selected veg., then different options like pineapple, mushrooms, olives, etc. are shown.

One important point to be noticed here is after each step, the updated price of your custom-built pizza is shown to the customers. Each item's price is also reflected below its image.

4.5. Administration:

The administration module is equally important in the functioning of this system.

The user of this module is known as Admin or superuser.

He is the master of this online system. Admin has all the rights and power to use this system.

The tasks which can be performed by the admin are:

1. He can add/edit/delete different ingredients into the system. He can add/edit/delete new pizzas, their images, prices, and other details. The same functions can be performed for non-pizza items.
2. He can add/edit/delete users in this system. It's the admin who adds new employees' accounts to the system.
3. Admin has rights to add/edit/delete orders for customers.

4.6. Payment Module: Payment module provide an interactive interface and integration to website so user can pay online and all the access of the transaction control by admin.

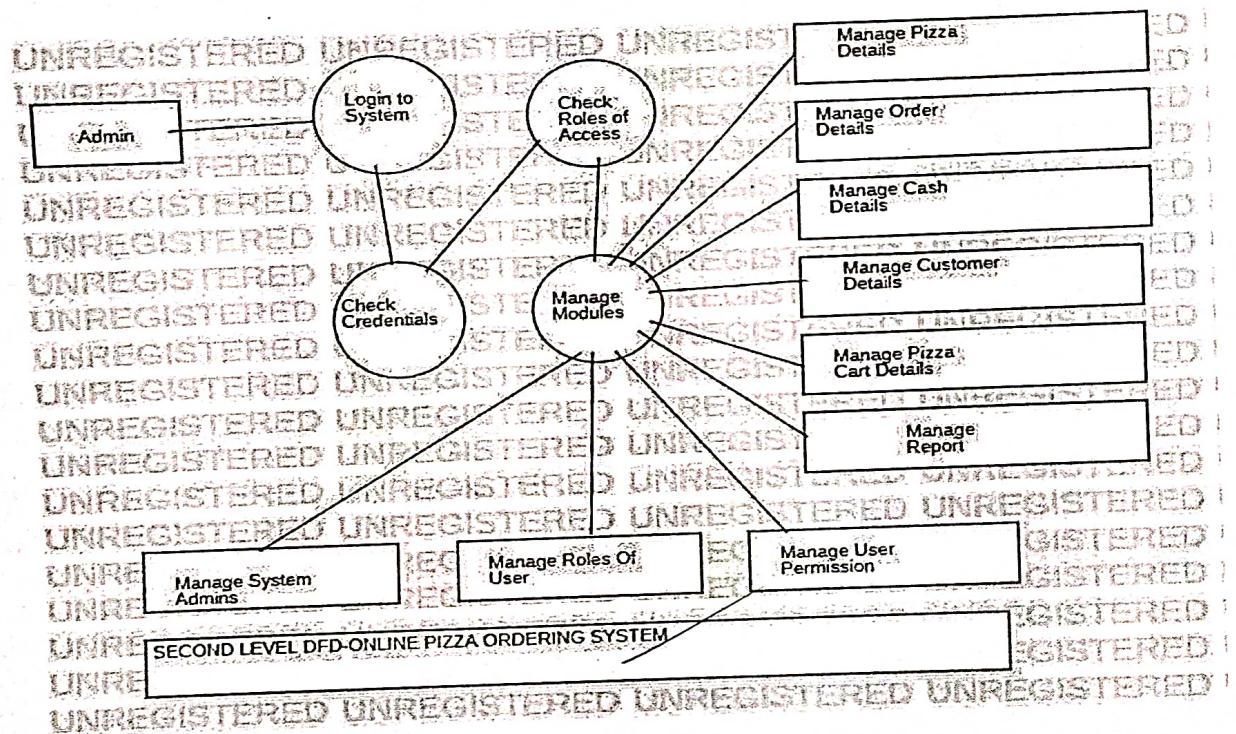
- **Technologies to be used :**

Front end – ReactJS, HTML, Tailwind CSS.

Back end – NodeJS , MongoDB.

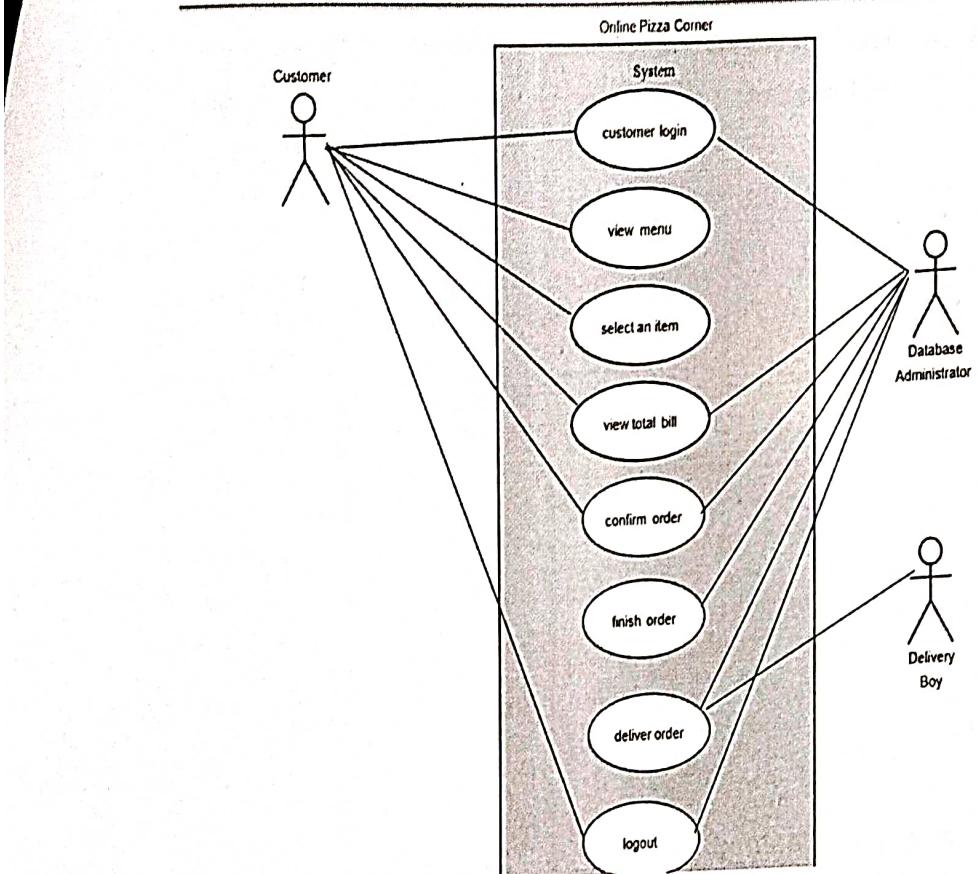
Hosting – Netlify.

4.7 .Data flow diagram : A data flow diagram (DFD) is a graphical or visual representation using a standardized set of symbols and notations to describe a business's operations through data movement. They are often elements of a formal methodology such as Structured Systems Analysis and Design Method (SSADM). Superficially, DFDs can resemble flow charts or Unified Modeling Language (UML), but they are not meant to represent details of software logic.



4.7.1.Working : Here Admin has the access to login the system and check the credentials of users. He can control all modules directly for example he can manage report ,order, cash details and also decide whom to make admin. In DFD of proposed system user can manage permissions.

4.8.Usecase Diagram: A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses.

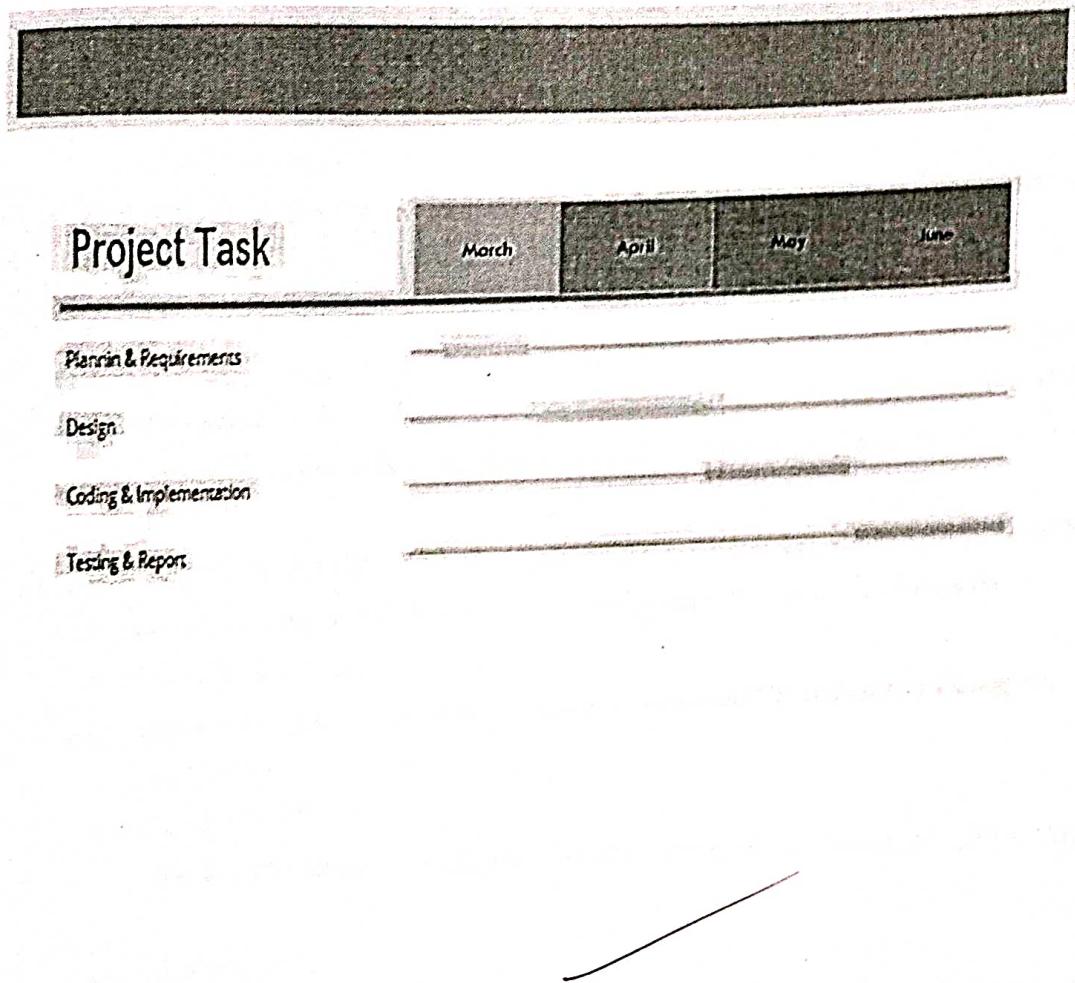


5.PROJECT OUTCOME

User can order his/her their desirable type of pizza on mobile phone or computer. User can customized his/her pizza and add topping according to his/her need from the available materials.

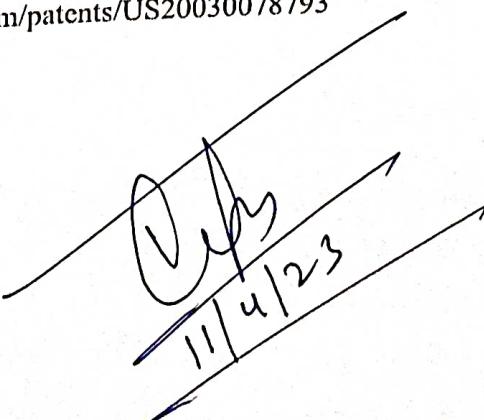
Admin can also customize pizzas of specific type and create new pizzas. User can pay for order in deferent payment modes which are cash on delivery , debit card ,UPI.

6.PROPOSED TIME DURATION



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