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Food Order Management System

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Summary: The main purpose of **online food management** is **to** use **it** in the food industry. This feature helps hotels and restaurants expand their online food ordering **process.** Customers can choose from a variety of **food** items within minutes.
In today's **fast** food business, it **makes delivery fast and easy for customers. A project that** is **said** to **be an easy online food management system** to **order.** The solution introduces the user interface and **makes it easier for customers by changing** the menu to include all available **options.** It allows customers to order **the food** they **want** and adjust the amount of food. The order confirmation is displayed to the customer on the home page of the website.
Orders are queued, updated **and available** in the database and admin panel in real time. **The** system helps **employees** check orders in real time and **makes orders efficient** and **easy** with few errors.
Keywords: Food, Online, Management, DBMS (Database Management System), Use Case **Chart,** Entity Relationship **Chart, Flow Chart.**

I. INTRODUCTION

The food industry is **very dynamic** and the biggest **cost** in the food industry is the cost of **hiring good staff. Labor costs are increasing every year and it** is difficult to **find workers.**
One way to reduce these costs is to use modern **technology to** replace some of the work done by **humans** and **have** machines do **it.** Here we propose an **"online food management system"** designed for fast food restaurants, **restaurants** or school **cafeterias. This method** can be **used effectively** in any **establishment** that distributes food. **As** the entire **ordering** process is automated, the food ordering experience is **streamlined** for both the **customer** and the restaurant. The online ordering system **has created an online** menu and customers can easily order as they **wish.**
In addition, online customers can easily track the status of their **orders through the menu.** Management **maintains** customer **database** and improves **meal** delivery **service. Restaurant** management **inspired** us to **improve** the system. **Users** of the system **can use various sites** to use the **service** effectively. The system also takes into account restaurants and **cafes** for customers.
The system is designed to avoid **serious mistakes for users,** users can change their **profiles,** users can give **advice** and recommendations and **provide measures,** give **the necessary advice** to **the** restaurant / catering **service. This process is needed because there is no complete** application that can **meet** the **demand of the customer** by **supplying their meals** from restaurants and **restaurants.** This **app** will be used by people who are constantly moving from **one city** to **another. Similarly,** it **is** useful for students studying in different cities. The proposed system will provide **convenience** to customers/users when ordering from restaurants or **cafes.**
There is no limit **to** the **number of orders** the customer **wants in the planning process.** The same app can also be used as a **starting point** for developers. It will provide **customers with restaurant/restaurant reviews as well as** real-
time feedback and **ratings.** It provides feedback to the **user,** so **when a problem** occurs, feedback is **shown to** the **user.** The proposed system is designed to **protect** users from fatal **errors** and **misbehaviors.**
As many people move to different cities, the scale of the **planning process** is **required,** so the **application process** can be used by **many.** The system/interface **accepts** input from the user. The main **features** that provide input to the **data** are: name, address, email **id,** mobile **phone** number, other personal **data,** etc. The output will include **user/customer orders, invoices,** feedback and payment options. The reason I chose this project is to solve the problems people face when ordering food.
The system is **suitable** not only for users, but also for **suppliers providing** catering services. This system **is used** for effective communication between **consumers and manufacturers of food products leading to** the **best quality** and **good value.**

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II. PROBLEM EXPLANATION

Online ordering system sets the menu online and customers can easily **order according to** their **preferences.** Online customers can also easily check the status of their **orders.**
Customer database **management** and food delivery **service development. The** system also provides a **work order** where users can **create** a **work order if there is a problem** with the **order.** The **planning process for hotels** can **be suggested, food and hotel staff informed of quality improvements** based on the **evaluation provided** by **users.** Payment can be made online or **in** cash or cash on **delivery.** For **added security,** separate accounts **by assigning** each user ID and password.

III. LITERATURE REVIEW

In[1], a food ordering system **that intelligently tracks user orders** is **proposed.** Basically, they **used the** food ordering system for restaurants to provide users **who** can easily order food with one click. **The system is used by** Android **apps** for **tablets.** The **front-end HTML, CSS, and JavaScript are built** using PHP, and **the back-end uses** a MySQL **database.**
In [2], **the user's smartphone is** considered **the main component** of the system. **As customers approach** the restaurant, **they can confirm** the **reserved** order by **tapping their** smartphone. The **selected** list of pre-ordered items is displayed on the kitchen screen, and after confirmation, **the** order **form for subsequent orders** is **printed.** The solution provides **a simple and** easy way to select **customers who book deals. In**
[3] an integrated hotel management **application was introduced** using **Web site tools.**
Kitchen Order Ticket (KOT), **billing, customer relationship management** (CRM) **brings together digital hotel management. The** solution **makes** it possible to add or expand hotel software **to** any size hotel chain environment. **Research study in**
[4] focusing on the design and **development of** a wireless ordering system **for restaurants.** In this system, **the operation of the Wireless Ordering System** (WOS) **is proposed,** including **the design, operation,** limitations and **instructions.** It **is** believed that with the use of handheld devices such as PDAs in restaurants, ubiquitous applications **will** become important **tools** for restaurants to **reduce human error,** improve management and **provide** better customer service.
In [5], **based on** customer feedback, a wireless ordering system was **developed** and implemented for a restaurant. It allows **restaurants** to set up **a** system in a wireless environment and update **the** menu **easily.** Smartphones **are** integrated into a customizable wireless ordering system **and** real-time **consultants are used** to facilitate **real** communication between **restaurants** and customers. **In** [6], the **aim** of this study **is** to investigate the factors **affecting the** online **food** ordering **behavior of Internet users** among **Indian university** students. The Technology Acceptance Model **(TAM),** developed by Davis in **1986,** was used to **examine** the acceptance of food ordering **websites.**
With TAM, trust, innovation and external **influence were** added to the model as **important factors. In**
paper [7], research work **has focused** on automation of the ordering process in restaurants. This **article discusses** the design **and** implementation of **a restaurant** ordering **system.** This system **recognizes the** wireless data **entry** to the Kitchen **server** and the cashier receives **the** order data **wirelessly to** the customer's mobile phone. This order information is updated in **the** central database.
Restaurant owners can easily manage **changes. In** [8], this **study is dedicated to** restaurant **owners using** information and communication **technology (PDA,** wireless **LAN,** expensive multi-touch screens, **etc.)** to improve food ordering. This **article** highlights some of the limitations of **text** and PDA-based food **ordering. 4 444 444 4 44 44 4 4 4 4**
Plan
In this research **article,** we **present a new** and **effective** online **meal** management system to **facilitate** ordering and delivery **of food.** The **process** aims to **solve** food **suppliers' problems** and improve the overall customer experience. The system includes **many important** features and functions that facilitate **management decisions,** effective communication and **timely** delivery.

User-Friendly Interface:
1. The proposed system will have a user-friendly interface **that allows** customers to easily browse **messages,** select **products,** add **value** and **pay.**
The interface will be intuitive, responsive and **usable** on a variety of devices, including smartphones, tablets and **desktop computers.**
Menu **Management:**
2. Food service providers **shall** have a menu management **system** to add, **modify** and **prepare** their menus. They can categorize **menus, share descriptions, and provide** menu prices **to** customers.
Order **Place** and Tracking:
3.
Customers will be able to **order** directly through the system. They can add **products** and **keep them s**

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afe online. The system will **enable** customers to m onitor the status of their orders and **predict** deliver y **times, ensuring on-time orders.** Integration with

Payment Gateways:
4. The system **plans to integrate** with popular pay ment **gateways, enabling** customers to **stay** online **securely with** various methods such as credit **card,** digital **wallet** or **child benefit.**
Integration with **reliable** payment **systems made t he payment process smooth** and **secure.**
Order **Management Dashboard:**
5. **The food supplier** will have a centralized order management dashboard **for efficient** and **successfu l delivery.** The dashboard displays order details, cu stomer **information,** and **shipping** instructions. It a lso **allows suppliers** to accept, reject or modify ord ers as needed.
Communication and **Notification:**
6. The **planning process** will **ensure** effective com munication between customers, **caterers** and **vend ors.** Customers will receive order confirmation noti fications and status updates. **Service providers** and delivery partners will **be able** to communicate with customers and resolve issues.
Integration with **Cargo:**
7.
To ensure **on-**
time delivery, the system **can work** with local deliv ery services or **provide** internal delivery **managem ent.** This integration will **lead to the integration of** food **suppliers** and delivery partners and **enable** ef ficient **delivery** and **tracking.**

Get a ticket to **fix** the **problem:**
8. The system will provide **an option to purchase a ticket** for customers to **report** their **problems** an d provide feedback on **the quality of** food and **serv ice.** This feedback will help food **suppliers** improv e their **products** and increase customer satisfaction.
The simulation starts with the administrator enterin g **the** login details (ID and password). Once verifie d, **administrators can** access the main panel where they can **update products** and order **quantities an d** view **orders.** Now we will see a window **showin g** the order number, customer name, **product** name, price and quantity. **After** the customer **completes t he** order, **he will be** asked to enter **his** name, addres s and other contact **information,** the total price will be displayed **here,** and the customer can click the **"Order Now"** button to **get the** order **confirmatio n.** Once you **are in** the admin portal, you will **have** the option to add food, remove food or **change** foo d.
After **selecting** the **order,** the final result will **appe ar, such as adding** food or **updating the menu,** if you **remove the** food, **the specific** food will disapp ear from the **list from the** main menu **of** the websit e that the **user** will see. **.As admins** can edit **meal** i tems and **prices, customers** can add **meals** using th eir interface, place **an order,** and if there is **a** proble m with the **order,** they can **get** a ticket **to** be **publis hed anywhere in** the admin **portal. The administr ator** can **fix** the problem and update its status.

In [3], the application of integration of hotel management systems using web services technology is presented. The Kitchen Order Ticket (KOT), Billing System, and Customer Relationship Management System (CRM) hold Digital Hotel Management together. This solution made it possible to add or expand a hotel software system in any size hotel chain environment.

In [4], the research work aims to design and develop a wireless food ordering system in a restaurant. In this system, wireless ordering system (WOS) technical operations including system architecture, function, limitations, and recommendations were presented. It was believed that with the increasing use of handheld devices such as PDAs in restaurants, ubiquitous applications would become an important tool for restaurants to improve the management aspect by minimizing human error and providing better customer service.
In [5], along with customer feedback, a wireless food ordering system was designed and implemented for a restaurant. It allows restaurant owners to set up the system in a wireless environment and easily update menu presentations. Smartphones have been integrated into a customizable wireless food ordering system with the implementation of real-time customer feedback to facilitate real-time communication between restaurant owners and customers.

In [6], the purpose of this study was to investigate the factors that influence internet users' attitudes toward online grocery ordering in India among college students. The Technology Acceptance Model (TAM) developed by Davis in 1986 was used to study the acceptance of web-based food ordering environments. Trust, innovation, and external influences are added to the model as the main factors along with TAM.
In the article [7], the research work focuses on the automation of the food ordering process in restaurants. This paper discussed the design implementation of ordering systems for restaurants. This system implements wireless data access to the Kitchen servers, and the cashier wirelessly receives order data from the customer's mobile phone. This order information is updated in a central database.

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A restaurant owner can easily manage menu modifications.

In [8], this research works on restaurant owners' efforts to adopt information and communication technologies such as PDAs, wireless LANs, expensive multi-touch screens, etc. to improve food ordering. This paper highlights some of the limitations of the conventional paper-based and PDA-based food ordering systems.

IV. PROPOSED SYSTEM

In this research paper, we propose an innovative and efficient online food order management system designed to simplify the food ordering and delivery process. The proposed system aims to address the challenges faced by food service providers and improve the overall customer experience. The system includes several key features and functions that facilitate seamless order management, effective communication, and on-time delivery.

User-friendly interface:

1. The proposed system will have a user-friendly interface for customers to easily browse offers, select items, add quantities, and make payments. The interface will be intuitive, responsive, and accessible on a variety of devices, including smartphones, tablets, and desktops.

Menu management:

2. Food service providers will have a comprehensive menu management module to add, update and organize their menus. They can categorize menu items, and specify descriptions, and prices for an informative menu for customers.

Order Location and Tracking:

3. Customers will be able to place orders directly through the system. They can add items and make secure online payments. The system will provide real-time order tracking, allowing customers to monitor the status of their orders and estimated delivery times.

Integration with payment gateways:

4. The proposed system will be integrated with popular payment gateways and allow customers to make secure online payments using various methods such as credit cards, digital wallets, or cash on delivery. Integration with trusted payment gateways ensures a seamless and secure payment process.

Order management panel:

5. Food service providers will have a centralized order management dashboard to efficiently receive and process incoming orders. The dashboard displays order details, customer information, and delivery instructions. It will also allow providers to accept, reject or modify orders as needed.

Communications and Notices:

6. The proposed system will facilitate effective communication between customers, catering service providers, and suppliers. Customers will receive order confirmation notifications and status updates. Providers and delivery partners will have a messaging system to communicate with customers and resolve any questions or issues.

Integration with delivery services:

7. To ensure timely delivery, the system will integrate with local delivery services or offer an internal delivery management module. This integration will enable seamless coordination between food service providers and delivery partners and ensure efficient routing and tracking of deliveries.

To pick up tickets to resolve the issue:

8. The system will provide ticketing options for customers to share their issues and provide feedback on food and service quality. This feedback will help food service providers improve their offerings and increase customer satisfaction.

The simulation first starts with the administrator entering his login details (ID and password). Once verified, the admin has access to the main admin panel where they can edit the food items and order quantity as well as view the orders placed. Now we will see a window that shows the order number, customer name, food name, price, and quantity. Once the customer has completed their order, they are asked to enter their name, address, and other contact details where the total price will be displayed and the customer can click on the 'order now' button to receive an order confirmation message. Once you enter the admin portal, you will get the option to add food, remove food or update food. After performing the selected operation, the final result will be displayed, i.e. added food or updated food list, and if you have deleted any food, that particular food will disappear from the main menu on the website that the customer will see. As the admin can edit the food items and the price of the item, the customer can add the food items using their interface, place the order, and also if there is any problem with the order they can collect a ticket which will be displayed to the admin portal where the admin can solve the problem and also update its status.

By implementing the proposed system, food service providers can improve their online presence, improve order management efficiency

and elevate the overall customer experience. The system's user-friendly interface, seamless order entry and tracking, integration with payment gateways and delivery services, and data analytics capabilities will contribute to the success and growth of online grocery ordering.

V. CONCLUSION

Therefore, the conclusion of the proposed system is based on the user's need and is user-centered. The system is developed keeping in mind all the issues related to all the users who are part of this system. A wide range of people can use it if they know how to operate an Android smartphone. So the implementation of an Online Food Ordering system is done to help and solve one of the important problems of people. Based on the result of this survey, it can be concluded: It helps customers to make orders easily; Provides customers with the information needed to create orders. The Food web application built for restaurants and canteen can help the restaurant and mess to take orders and edit its data, and it is also built for administrators to help administrators control the entire Food system. With an online food ordering system, the restaurant and menu can be set up online and customers can easily place orders. With an online menu, it is also easy to track orders, maintain a customer database and improve the food delivery service. With the restaurant's menu on the Internet, potential customers can easily access it and order at their convenience. The proposed system would attract customers and add to the efficiency of restaurant maintenance and food ordering and invoicing sections.

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