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ONLINE FOOD ORDERING SYSTEM

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Abstract—The purpose of Online Food Ordering System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. Our food delivery project aims to revolutionize the dining experience by providing a comprehensive and user-centric platform that connects consumers with a diverse range of restaurants and food vendors. Through the development of a robust web and mobile application, users can conveniently browse menus, place orders, and track deliveries from the comfort of their homes or workplaces. Leveraging advanced algorithms and tools, the platform streamlines ordering and delivery processes, ensuring efficient transactions for both users and restaurants. The Online Food Ordering System's main purpose is to maintain track of information such as Item Category, Food,
Delivery Address, Order, and Shopping Cart. It keeps track of information about the Item Category, the Customer, the Shopping Cart, and the Item Category. Only the administrator gets access to the project because it is totally built at the administrative level. The project's purpose is to develop software that will cut down on the time spent manually managing Item Category, Food, Customer, and Delivery Address. It saves the Delivery Address, Order, and Shopping Cart information.
Keywords: HTML, CSS, JavaScript

I. INTRODUCTION

ONLINE FOOD ORDERING IS THE PROCESS OF ORDERING FOOD FROM A WEBSITE. THE PRODUCT CAN EITHER BE FOOD THAT HAS BEEN SPECIALLY PREPARED FOR DIRECT CONSUMPTION (SUCH AS VEGETABLES STRAIGHT FROM A FARM OR GARDEN, FROZEN MEATS, ETC.) OR FOOD THAT HAS NOT BEEN (SUCH AS DIRECT FROM A CERTIFIED HOME-KITCHEN, RESTAURANT). THE EFFORT TO CREATE AN ONLINE FOOD ORDERING SYSTEM AIMS TO REPLACE THE MANUAL METHOD OF TAKING ORDERS WITH A DIGITAL ONE. THE ABILITY TO RAPIDLY AND CORRECTLY CREATE ORDER SUMMARY REPORTS WHENEVER NECESSARY IS A KEY FACTOR IN THE DEVELOPMENT OF THIS PROJECT. THE POTENTIAL OF AN ONLINE FOOD ORDERING SYSTEM IS ENORMOUS. ANY RESTAURANT OR FASTFOOD CHAIN CAN USE THIS PROJECT TO KEEP TRACK OF CUSTOMER ORDERS. THIS PROJECT IS SIMPLE, QUICK, AND PRECISE. THERE IS LESS DISK SPACE NEEDED. MYSQL SERVER IS USED AS THE BACKBONE BY THE ONLINE FOOD ORDERING SYSTEM, ELIMINATING THE RISK OF DATA LOSS AND ENSURING DATA SECURITY. CUSTOMERS HAVE THE OPTION OF EITHER HAVING THE FOOD DELIVERED OR PICKED UP. A CUSTOMER STARTS BY SELECTING THE RESTAURANT OF THEIR CHOICE, THEN SCANS THE MENU, PICKS AN ITEM, AND THEN DECIDES WHETHER THEY WANT IT DELIVERED OR PICKED UP. THEN, WHEN PICKING UP THE FOOD, YOU CAN PAY WITH CASH AT THE RESTAURANT OR WITH A CREDIT CARD OR DEBIT CARD USING THE APP OR WEBSITE. THE CUSTOMER IS INFORMED BY THE WEBSITE AND APP ABOUT THE FOOD'S QUALITY, HOW LONG IT TAKES TO PREPARE, AND WHEN IT WILL BE READY FOR PICK-UP OR DELIVERY.TECHNOLOGY HAS CHANGED HOW WE DO BUSINESS, AND THIS MEANS WE MUST GET CREATIVE ABOUT NOT BEING ABLE TO INTERACT WITH PEOPLE FACE-TO-FACE. SCREEN RECORDING SOFTWARE CAN BRIDGE THAT GAP IN MORE WAYS THAN YOU THINK. ALSO IF YOU ARE CONCERNED ABOUT YOUR SECURITY, THIS APP ALSO PROVIDES THE ENCRYPTION OF PASSWORDS THROUGH WHICH YOUR

CONCERN OF SECURITY WILL BE AT BAY. PASSWORD ENCRYPTION IS ESSENTIAL TO STORE USER CREDENTIALS STORED IN A DATABASE SECURELY.

II. **LITERATURE REVIEW**

THE RESEARCH PAPERS WE CONSIDERED WHILE DOING OUR ANALYSIS ARE LISTED BELOW. IN A WIRELESS MEAL ORDERING SYSTEM WAS DESIGNED AND IMPLEMENTED TOGETHER WITH CONSUMER FEEDBACK FOR A RESTAURANT. IT MAKES IT SIMPLE FOR RESTAURANT OPERATORS TO CHANGE MENU PRESENTATIONS AND SET UP THE SYSTEM IN AWIFI SETTING. THE CONFIGURABLE WIRELESS MEAL ORDERING SYSTEM HAS LINKED A SMART PHONE WITH REAL TIME CUSTOMER FEEDBACK IMPLEMENTATION TO ENABLE REAL-TIME CONTACT BETWEEN PATRONS OFRESTAURANTS AND BUSINESS OWNERS [1]. THE GOAL WAS INVESTIGATING THE VARIABLES THAT AFFECT INTERNET USERS' PERCEPTIONS OF ONLINE FOOD ORDERING AMONG UNIVERSITY STUDENTS IN TURKEY. DAVIS' TECHNOLOGY ACCEPTANCE MODEL (TAM), WHICH HE CREATED IN 1986, WAS USED TO ANALYSE HOW THE WEB ENVIRONMENT FOR ORDERING FOOD WAS ADOPTED. ALONG WITH TAM, THREE ADDITIONAL PRIMARY FACTORS— TRUST, INNOVATION, AND EXTERNAL INFLUENCES—ARE INCLUDED TO THE PARADIGM [2]. THE RESEARCH PROJECT INTENDS TO AUTOMATE THE RESTAURANT MEAL ORDERING PROCEDURE AND ENHANCE THE PATRONS' DINING EXPERIENCE. IN THIS STUDY, THE DESIGN AND IMPLEMENTATION OF A RESTAURANT FOOD ORDERING SYSTEM WERE COVERED. THE WIRELESS DATA ACCESS TO SERVERS IS IMPLEMENTED BY THIS SYSTEM. ALL THE MENU INFORMATION WILL BE AVAILABLE ON THE USER'S MOBILE ANDROID APPLICATION. WIRELESSLY, THE KITCHEN AND CASHIER RECEIVE THE ORDER INFORMATION FROM THE CUSTOMER'S MOBILE DEVICE. THE CENTRAL DATABASE IS UPDATED WITH THESE ORDERSPECIFICS. THE PROPRIETOR OF THE RESTAURANT CAN QUICKLY HANDLE MENU CHANGES [3]. THIS RESEARCH EXAMINES THE INITIATIVES MADE BY RESTAURANT OWNERS TO IMPLEMENT ICTS—SUCH AS PDAS, WIRELESS LANS, AND PRICEYMULTI-TOUCH SCREENS—TO IMPROVE THE DINING EXPERIENCE. IN ORDER TO ADDRESS SOME OF THE DRAWBACKS OF THE TRADITIONAL PAPER-BASED AND PDA-BASED FOOD ORDERING SYSTEMS, A LOW-COST TOUCH SCREEN-BASED RESTAURANT MANAGEMENT SYSTEM THAT USES AN ANDROID SMARTPHONE OR TABLET IS SUGGESTED IN THIS STUDY [4]. THE STUDY'S OBJECTIVE WASTO DETERMINE WHETHER THE APPLICATION IS USER-CENTERED AND BASED ON USER 7 REQUIREMENTS. THISSYSTEM DEVELOPED ALL PROBLEMS PERTAINING TO EVERY USER THAT IT INCLUDES. ALMOST ANYONE MAY USE THE PROGRAM IF THEY KNOW HOW TO USE AN ANDROID SMART PHONE. THE VARIOUS PROBLEMS WITH MESSSERVICE WILL BE RESOLVED BY THISSYSTEM. THE IMPLEMENTATION OF AN ONLINE FOOD ORDERING SYSTEM IS DONE TO ASSIST AND RESOLVE SIGNIFICANT ISSUES FOR CONSUMERS. BASED ON THE APPLICATION, IT CAN BE SAID THAT: THIS SYSTEM MAKES PLACING ORDERS SIMPLE; IT GIVES CUSTOMERS THE INFORMATION THEY NEED TO PLACE ORDERS. THROUGH THE PROGRAM, IT IS ABLE TO RECEIVE ORDERS AND CHANGE THEIR DATA, AND IT ALSO AIDS THE ADMINISTRATOR IN MANAGING ALL THE FOOD SYSTEM [5]

METHODOLOGY

Complete Visualization of Online Food Ordering System. An easy-to-use table management system will also be included in a good restaurant reservation setup. This enables restaurants to see their restaurant hour by hour and receive reservations through a variety of ways.

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III. **SYSTEM DESIGN** The design phase translates user requirements and system analysis findings into architectural blueprints, user interface designs, and data models. Architectural design focuses on defining the application's structure, components, and interactions to ensure scalability, flexibility, and maintainability. A microservices architecture deployed on cloud infrastructure is often favored for its agility, fault tolerance, and scalability.

User interface design emphasizes creating intuitive, visually appealing interfaces that enhance user engagement and ease of use. Wireframes, mockups, and prototypes are developed iteratively to solicit feedback from stakeholders and validate design decisions. Attention is paid to consistency, responsiveness, and accessibility across various devices and screen sizes.

IV. IMPLEMENTATION

A software design pattern called Model View Controller, or MVC as it is more formally known, is used to build online applications. There are three components to the Model View Controller pattern: • Model - The lowest level of the pattern, is in charge of maintaining the data. • View - This is in charge of showing the user all or part of the data. • Controller - The computer program that controls how the Model and View interact. MVCis well-liked because it provides for duty separation by separating the application logic and user interface layers. The Controller accepts all requests from the application and collaborates with the Model to prepare any necessary data for the View. The View then constructs a final presentable response using the data produced by the Controller. The following is a graphic representation of the MVC abstraction. Model of MVC (Model View Controller Flow).. Development teams collaborate closely to build frontend and backend components, integrating feedback from stakeholders and quality assurance teams.

V. RESULTS

A. Figures

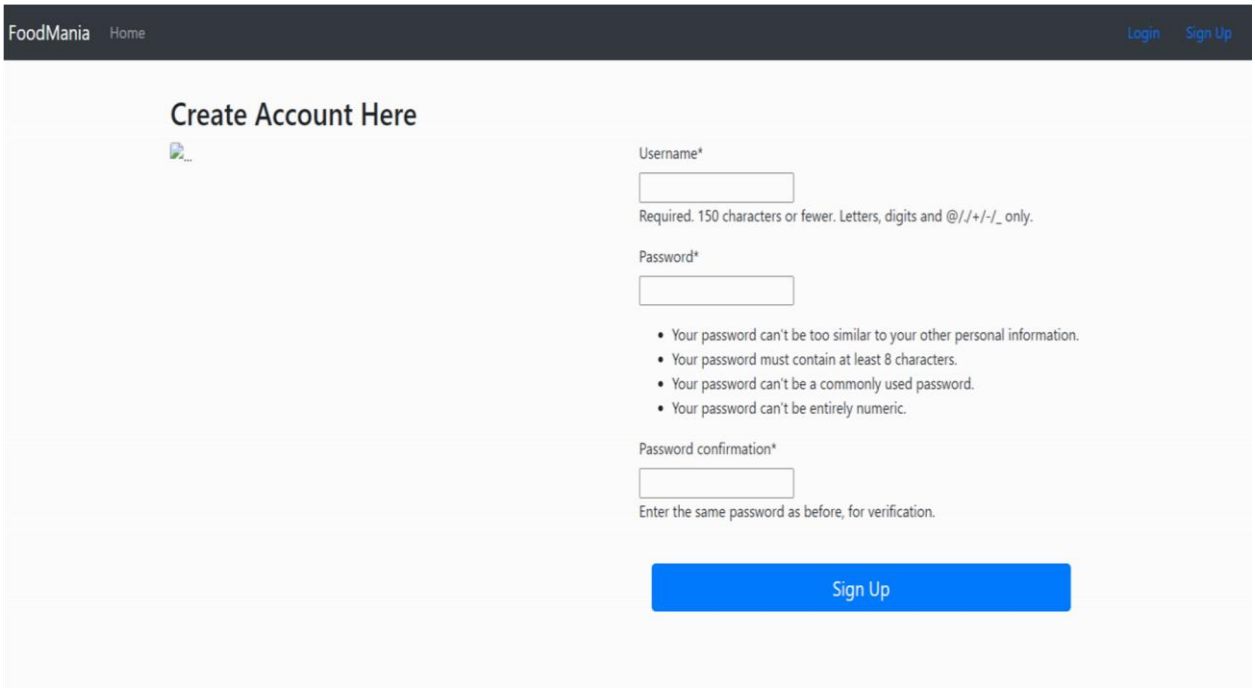

Fig. 1 User Interface to select visualization period

VI. CONCLUSION

ONLINE FOOD ORDERING SYSTEM IS A WEB-BASED TECHNOLOGY THAT AIDS THE GROCERY SHOPS IN CARRYING OUT TASKS EFFECTIVELY AND EFFICIENTLY. IT AIDS IN MANAGING CASH FLOW FOR MANAGERS. MANAGERS CAN VIEW ANALYTICS DATA

TO ASSESS COMPANY GROWTH. THE MANAGER CAN CONTROL ORDERS ANDEMPLOYEE SCHEDULES BY USING THIS SYSTEM. THE FULL COMPLEMENT IS A ONLINE FOOD ORDERING SYSTEM.IT PROVIDES ACCESS TO THE ONLINE ORDER PLATFORM, THIRD-PARTY CONNECTORS SOFTWARE, AND COMPREHENSIVE CRM SOLUTION, WHICH TOGETHER COVER A SIZABLE PORTION OF YOUR RESTAURANT'S REQUIREMENTS. THEY ARE NOT THE OUTDATED HARDWARE AND SOFTWARE SETS FOR RESTAURANTS THAT WERE PREVIOUSLY OFFERED. THEY ARE THE HOTTEST THINGS AROUND, SMOOTH, MANAGEABLE, INEXPENSIVE, AND QUICK. IN THE "ONLINE FOOD ORDERING PROJECT," WE MADE EVERY EFFORT TO MEET ALL THE DEMANDS OF THE RESTAURANT/SHOPS. BECAUSE IT IS STRAIGHTFORWARD AND ADAPTABLE, THE PROJECT IS SUCCESSFUL. THE BIGGEST BENEFIT OF MY PROJECT IS THAT IT DRAWS PLENTY OF USERS BECAUSE OF ITS SIMPLICITY. A NOVICE USER MAY OPERATE IT WITH EASE. ANY TYPE OF RESTAURANT CAN UTILIZE OURSOFTWARE. THE SYSTEM HANDLES THE TRANSACTION ANDSTORESTHE DATA PRODUCED. THESE DATA WILL BE USED TO CREATE REPORTSTHAT ASSIST THE RESTAURANT MANAGERIN MAKING WISE BUSINESS DECISIONS. FOR EXAMPLE, THE MANAGER CAN DECIDE WHETHER MORE WAITERS, DELIVERY MEN, DELIVERY CARTS, AND COOKS ARE NEEDED BASED ON HOW MANY CLIENTS WILL BE PRESENT DURING A SPECIFIC TIME PERIOD. WHEN THIS PROJECT IS FINISHED, ALL SECURITY CONCERNS WILL BE RESOLVED.ADDITIONALLY, A QUICK AND SECURE AUTHENTICATION PROCESS WILL BE USED FOR RECORD MAINTENANCE. BECAUSE IT AUTOMATICALLY PULLS INFORMATION ABOUT A CONSUMER FROM THE DATABASE ON SUBSEQUENT VISITS, DATA ENTRY IS QUICK AND EASY. AS A RESULT, OUR PROGRAM WILL UNDOUBTEDLY SUCCEED IN REPLACINGTHE ANTIQUATED MANUAL WAY OF STORING SECURE INFORMATION. THE WORK PLAN ALSO SPECIFIES THE SPECIFIC FRONT END AND BACKEND CHARACTERISTICS OF THE TECHNOLOGY BEING USED IN THE PROJECT. FUTURE PROJECT GOALS AND ITS SCOPE HAVE BEEN ELABORATED.

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