



PIZZA DELIVERY SYSTEM

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ABSTRACT—

The purpose of Pizza 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.

The Online Pizza Ordering System's main purpose is to maintain track of information such as Item Category, Pizza, 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, Pizza, Customer, and Delivery Address. It saves the Delivery Address, Order, and Shopping Cart information.

1. INTRODUCTION

Pizza ordering is the process of ordering pizza from a website. The product can either be pizza that has been specially prepared for direct consumption (such as vegetables straight from a farm or garden, frozen meats, etc.) or pizza that has not been (such as direct from a certified home-kitchen, restaurant). The effort to create an online pizza 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 pizza ordering system is enormous. Any restaurant or fast pizza chain can use this PHP 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 pizza ordering system, eliminating the risk of data loss and ensuring data security. Customers have the option of either having the pizza 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 pizza, 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 pizza's quality, how long it takes to prepare, and when it will be ready for pick-up or delivery.

1.3 Objectives

The management of the information regarding item category, pizza, delivery address, order, and shopping cart is the system's primary goal. It oversees the management of all customer, shopping cart, and item category information. Since the project was entirely developed on the administrative end, only the administrator is assured access. The goal is to develop an application program to simplify managing the pizza consumer item category. It keeps note of every delivery address requested.

1.4 Needs of Online Pizza Order

Helping customers in placing meal orders whenever they want. Customers will be able to order their preferred pizzas at any time, but as we've already mentioned, this is only a limited option. As a result, restaurants need to have a specific system in place that will allow them to serve a large number of customers while streamlining operations. One of the best platforms is ordering, which offers all of these services in addition to a host of cutting-edge features that have helped countless small and large enterprises establish themselves as market leaders.

1.5 Functionalities

- Provides search options based on a variety of criteria. like Pizza Item, Customer,
- UGC CARE Group-1,

Order, and Order Confirmation.

- Online pizza ordering systems also manage payment information for order details, order confirmation details, and pizza items online.
- It keeps track of all the data regarding Categories, Payments, Orders, etc.
- Manage the category's details.
- Displays the pizza item's information and description for the customer. Easy to manage the Pizza Item, Category more effectively.
- It focuses on keeping track of order's data and transactions.
- Manage the pizza item's information.
- Improvements in editing, adding, and updating records lead to proper resource management of pizza item data.
- Manage the order's information by combining all Confirm Order data.

1.6 Features

- Based on products and components.
- Easily creating and altering issues.
- Issue List can be queried in any detail.
- Reporting & Charting in a more thorough manner.
- User accounts are used to manage access and uphold security.
- Straightforward status & resolutions.
- Priorities and severity levels at various levels as well as targets and milestones for the programmers to follow.
- Attachments & Additional Comments for more information.
- A solid database back end.
- Various levels of reports are provided with many filtering options.
- It has more storage space.
- Accuracy in the work.
- Information retrieval is simple and quick. nicely crafted reports.
- Reduce the workload of the person using the current manual system.
- Individual access to any information.
- Work progresses quickly. Simple information updates.

2. LITERATURE SURVEY

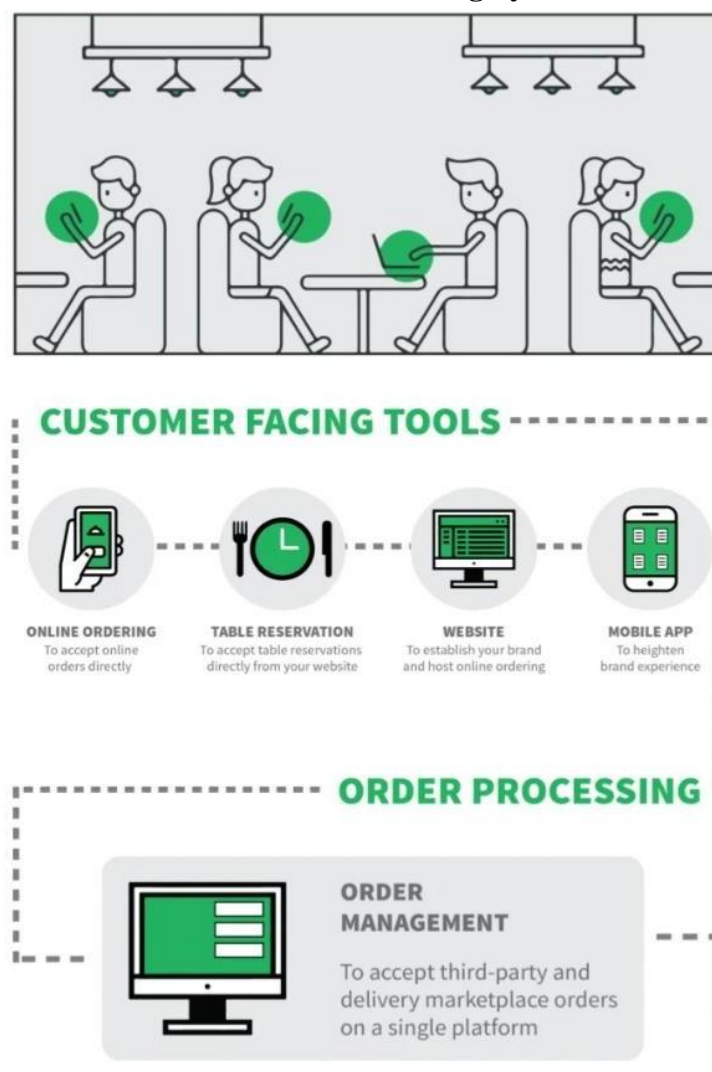
- The research papers we considered while doing our analysis are listed below. In a wireless meal ordering system was designed and implemented together with consumer feedback for a restaurant. It makes it simple for restaurant operators to change menu presentations and set up the system in a WiFi setting. The configurable wireless meal ordering system has linked a smart phone with real-time customer feedback implementation to enable real-time contact between patrons of restaurants and business owners.[1].
- The goal was investigating the variables that affect internet users' perceptions of online pizza ordering among university students in Turkey. Davis' Technology Acceptance Model (TAM), which he created in 1986, was used to analyze how the Web environment for ordering pizza 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 pizza 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 order specifics. 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 pricey multi-touch screens—to improve the dining experience. In order to address some of the drawbacks of the traditional paper-based and PDA-based pizza 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 was to determine whether the application is user-centered and based on user requirements. This system 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 Mess service will be resolved by this system. The implementation of an online pizza 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 Pizza system. [5]

3. METHODOLOGY

3.1 Complete Visualization of Online Pizza 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.



3.2 Tools and Techniques

- Php
- XAMPP
- MySQL
- HTML
- CSS
- Bootstrap
- Sublime Text
- Github
- Javascript

4. RESULT & DISCUSSION

The final output is a complete web based Restaurant Management System, which can be used in any kind of restaurant. This Restaurant Management System can help to manage the Restaurant more effectively, efficiently and smoothly. This is more secured and there will be speedy and wellordered authentication procedure for the maintenance of records. At present time, in this technology based world, people likes and wants everything to be smooth and efficient through the use of data and information. In this perspective, our Restaurant Management System can be an ideal platform for the

users. Its user friendly interface can help the customers to find his/her desired menu item and place order with a few click. Customers can easily place an online order by browsing the menu options, pick what they want sitting at home. And can also receive their pizza in a short period of time.

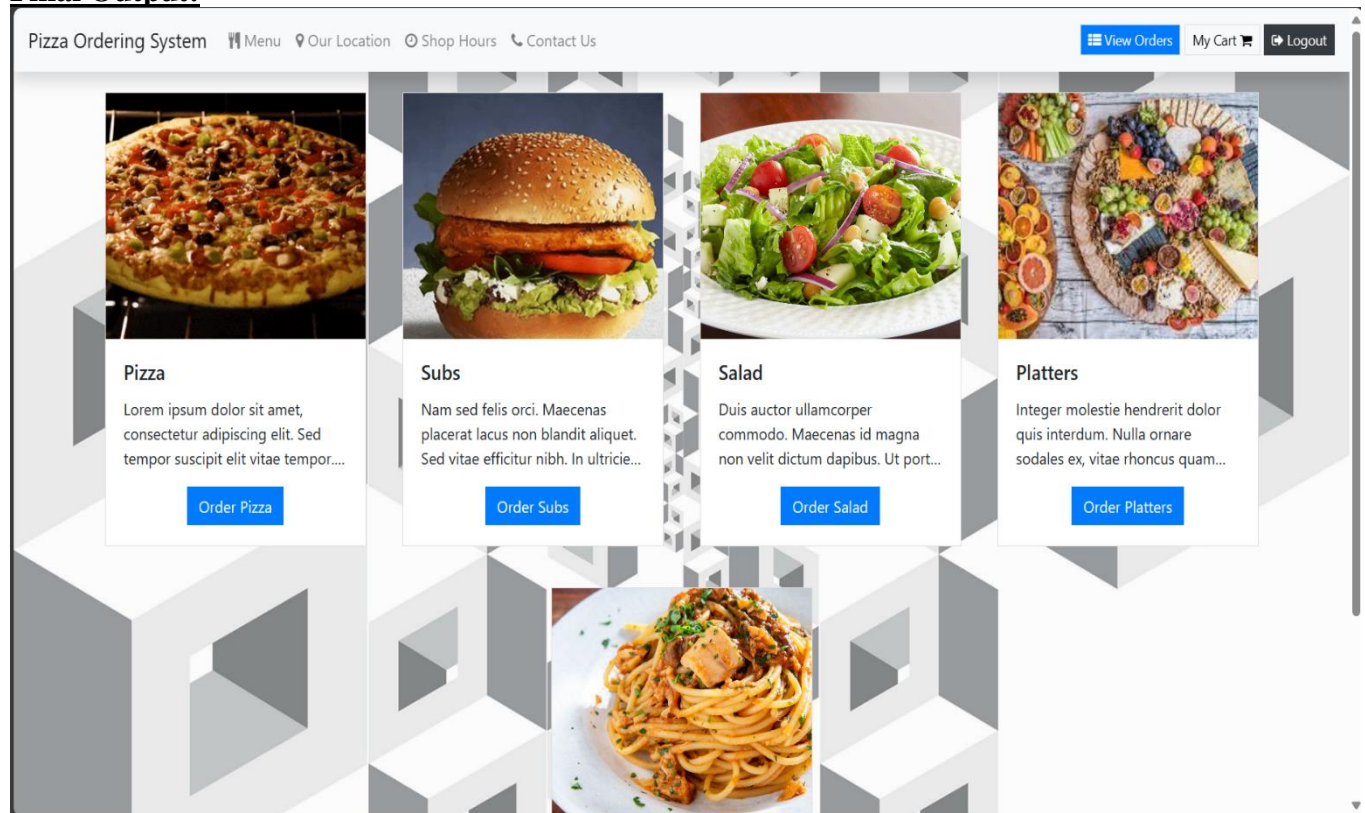
4.5 Application

❖ Restaurants, takeaways, and businesses that sell pizza to go profit from internet meal ordering software designed specifically for them. Customers like the ease of online meal ordering, which is why it is expanding quickly. Expand your sales channels by downloading our online pizza ordering application.

❖ Through this pizza ordering website, customers may place orders from their computers, tablets, and cellphones. They can look through your menu options, choose what they want, and submit an order online. Internet-based payment will also be accepted. Meals can be picked up in person or delivered to customers.

❖ There are many benefits to using an online pizza ordering app or a restaurant ordering app, including reduced labor expenses, fewer walk-away customers, and shorter wait times. This restaurant's online ordering system is intended for independent and multi-location chains that offer pizza to go, including eateries, fast pizza outlets, take-out, and other catering services. Putting your company online will enable you to generate a lot more revenue, which will enhance your marketability. Your online menu will give current clients a terrific new option to place orders, and new customers will easily find you thanks to well-known search engines. To complement the style and feel of your present website, the system is tailored. In the digital age, we help business owners grow their enterprises.

Final Output:



5. SYSTEM DEVELOPMENT

1) 5.1 Analysis

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. MVC is 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)

Project Planning

Here is an illustration of a software project plan: 1) How will the project be carried out within the company? What are the time, financial, and human resource limitations? What does having a market strategy entail? 2) Customer meetings: Weekly or as needed customer meetings that include a progress report presentation. Additionally taking into account customer input, adjustments and changes are made as necessary. The client is also shown project deliverables and milestones.

The steps listed below can be used to create successful software projects: Select a project. The aims and objectives of project are as follows:

- Understanding specifications and requirements.
- Using analysis, design, and implementation methods.
- Using testing procedures.
- Documenting.
- Budget allocation or exceeding limits under control.
- Understanding project milestones and deliverables
- Project estimates.
- Cost and Time.

Facing Problem During Development of Project

During the construction of the web application "Online Pizza Order," the developer ran into a few issues. Here are a few issues in brief:

I. Requirement Gathering Phase: It is a crucial step. The project will fail if the requirements are poor. At that time, developer became disappointed when Developer was collecting information and data then what information and data will be helpful or appropriate for this project.

II. During Design Phase: At this moment, the developer struggled to decide which flowchart would be best for this project when creating it.

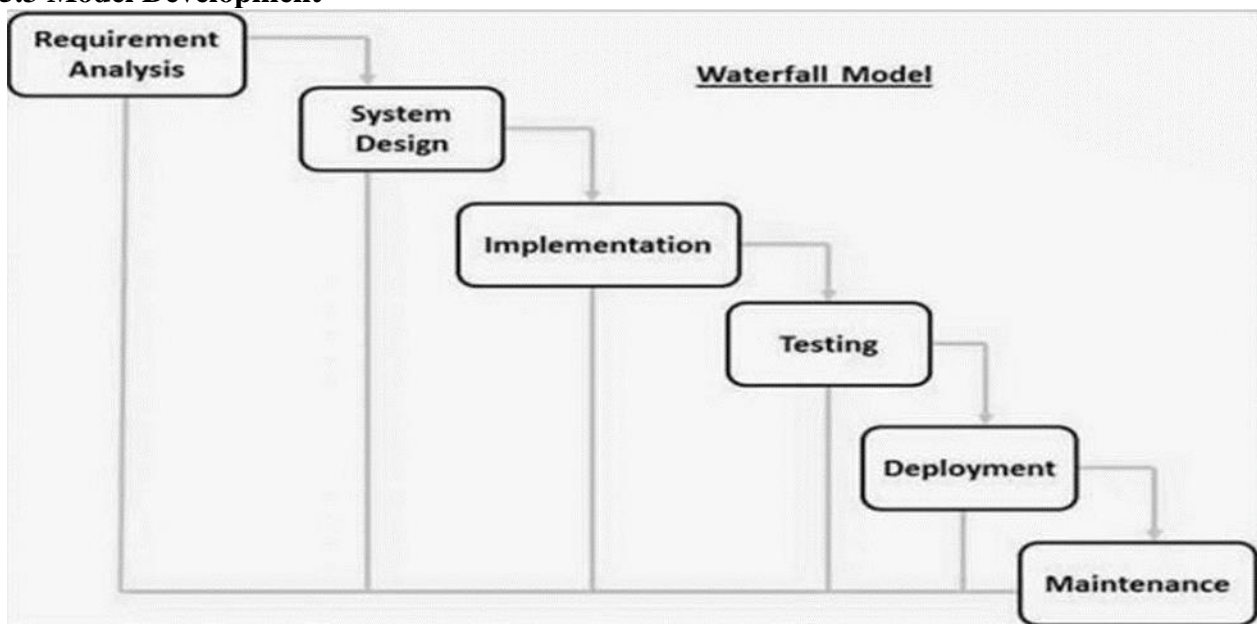
III. Development Phase: It is a very major component of the undertaking. Frequently, the developer misplaced the semicolon (;) at the conclusion of the statement.

Testing Phase: It is an essential component of the project. This section will aid with project testing overall. During testing, developer has faced some bugs of the project.

5.2 System Design

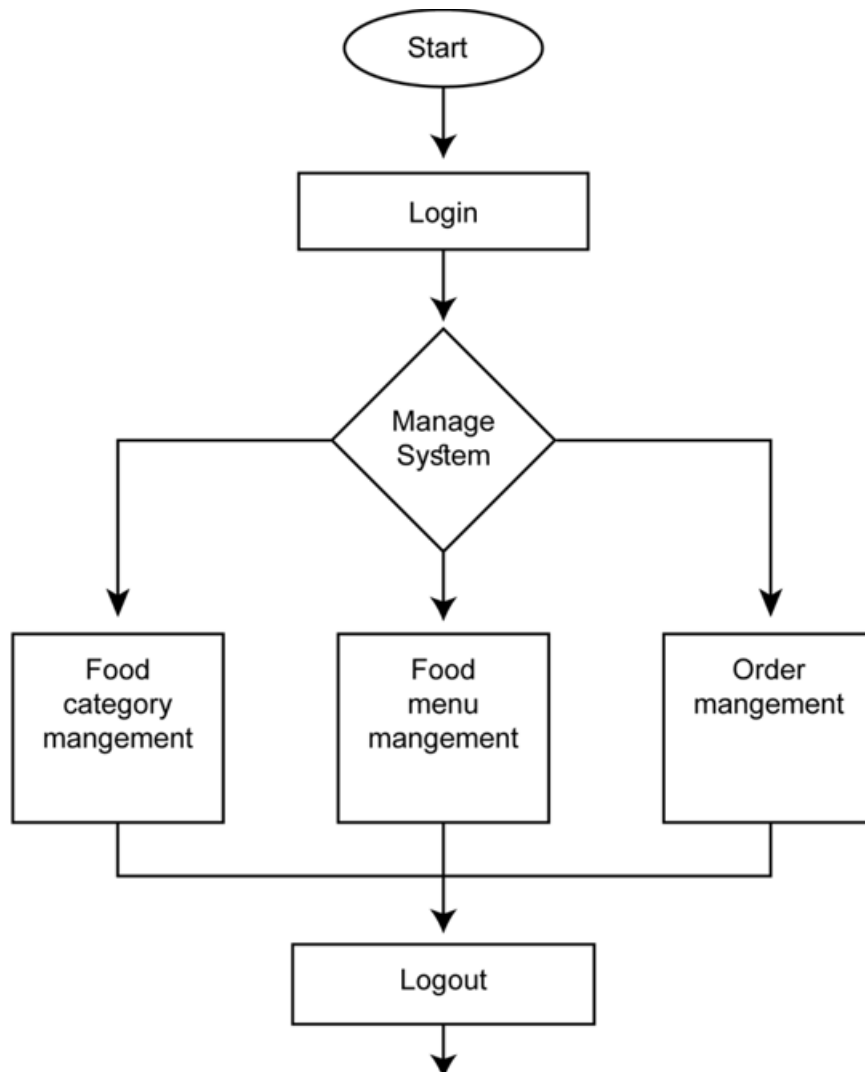


5.3 Model Development

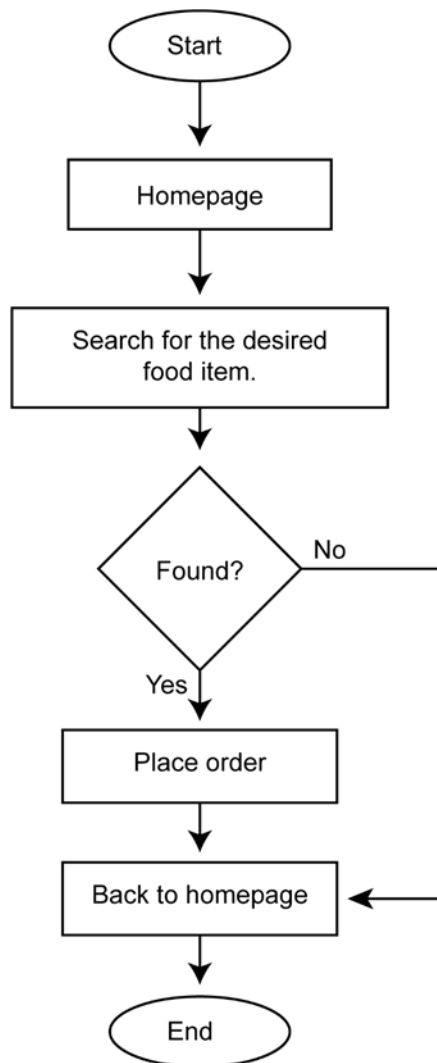


Admin Workflow Process

User goes to home page of the domain. If he/she has an account then he/she can login in restaurant management system otherwise he/she need to register an account after successful registration, they can login in home page.

**Customer Workflow Process**

Initially to visit the pizza categories or pizza menu, users don't need to login/register an account. After checking out the categories and menu items, if the user finds his/her desired menu and if they want to order that particular item they can go to order page. During placing any order the customer needs to provide his/her required information mentioned the order section.



6. CONCLUSION

Restaurant Management System is a web-based technology that aids the restaurant industry 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 and employee schedules by using this system. The full complement is a restaurant management 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 Pizza Ordering Project," we made every effort to meet all the demands of the restaurant. 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 our software. By automating meal ordering, billing, and inventory control, the restaurant management system assists the restaurant manager in managing the restaurant more successfully and efficiently. The system handles the transaction and stores the data produced. These data will be used to create reports that assist the restaurant manager in 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 replacing the 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.

7. REFERENCES

- [1] Kirti Bhandge, Tejas Shinde, Dheeraj Ingale, Neeraj Solanki, Reshma Totare, "A Proposed System for Touchpad Based Pizza Ordering System Using Android Application", International Journal of Advanced Research in Computer Science Technology (IJARCST 2015).
- [2] Varsha Chavan, Priya Jadhav, Snehal Korade, Priyanka Teli, "Implementing Customizable Online Pizza Ordering System Using Web Based Application", International Journal of Innovative Science, Engineering Technology (IJSET) 2015.
- [3] Resham Shinde, Priyanka Thakare, Neha Dhorme, Sushmita Sarkar, "Design and Implementation of Digital dining in Restaurants using Android", International Journal of Advance Research in Computer Science and Management Studies 2014.
- [4] Ashutosh Bhargave, Niranjana Jadhav, Apurva Joshi, Prachi Oke, S. R. Lahane, "Digital Ordering System for Restaurant Using Android", International Journal of Scientific and Research Publications 2013.
- [5] Khairunnisa K., Ayob J., Mohd. Helmy A. Wahab, M. Erdi Ayob, M. Izwan Ayob, M. Afif Ayob, "The Application of Wireless Pizza Ordering System" MASAUM Journal of Computing 2009.
- [6] Noor Azah Samsudin, Shamsul Kamal Ahmad Khalid, Mohd Fikry Akmal Mohd Kohar, Zulkifli Senin, Mohd Nor Ikhlas, "A customizable wireless pizza ordering system with real time customer feedback", IEEE Symposium on Wireless Technology and Applications (ISWTA) 2011.
- [7] Serhat Murat Alagoza, Haluk Hekimoglu, "A study on tam: analysis of customer attitudes in online pizza ordering system", Elsevier Ltd. 2012.
- [8] Patel Krishna, Patel Palak, Raj Nirali, Patel Lalit, "Automated Pizza Ordering System", International Journal of Engineering Research and Development (IJERD) 2015.
- [9] Mayur D. Jakhete, Piyush C. Mankar, "Implementation of Smart Restaurant with e-menu Card", International Journal of Computer Applications 2015 of Smart Restaurant with e-menu Card, International Journal of Computer Applications.
- [10] Abhishek Singh, Adithya R, Vaishnav Kanade, Prof. Salma Pathan "ONLINE PIZZA ORDERING SYSTEM" International Research Journal of Engineering and Technology (IRJET) 2018.
- [11] Gleditsch, N. P., Pinker, S., Thayer, B. A., Levy, J. S., & Thompson, W. R. (2013). *The forum:*
- [12] *Data Analysis. International Data Analysis Review, 15(3), 396-419.*
- [13] *Google for problem solving.*
- [14] <https://www.slideshare.net/>
- [15] *Database Programming with JDBC and Java by O'Reilly*
- [16] *Head First Java 2nd Edition*
- [17] <http://www.jdbc-tutorial.com/>
- [18] *Java and Software Design Concepts by Apress*
- [19] <https://www.tutorialspoint.com/java/>
- [20] <http://www.javatpoint.com/java-tutorial>
- [21] <https://docs.oracle.com/javase/tutorial/>
- [22] <http://www.wampserver.com/en/>
- [23] <http://www.JSP.net/>
- [24] <http://www.tutorialspoint.com/mysql/>
- [25] <http://d.apache.org/docs/2.0/misc/tutorials.html>