**OCAKE: KELLY’S CAKE ZONE CUSTOMIZABLE PASTRIES**

A

Capstone 1 Project

Presented to the Faculty of

**Mindoro State University Calapan Campus**

Masipit, Calapan City

Oriental Mindoro

In Partial Fulfillment

of the Requirements for the Degree

Bachelor of Science in Information Technology

by:

**Arevalo, Cristin C.**

**Bueno, Khristine A.**

**Ramirez, Jechel C.**

*February 2023*

**Chapter I**

**Project Context**

The digital economy, which focuses on information technology and data as its main components, is booming and significantly helping various countries' economic growth. Rapid technological development has brought changes in commerce, business strategies advance as well to cope with the growing competition in the industry (Collison, J., 2020), and has become a critical factor in success nowadays (Ivanova, N.V., 2020).

Moreover, with 40% of internet usage made for online purchases (Komal, S., 2020), e-commerce became so popular, particularly when the COVID-19 pandemic began, and more people purchase their groceries and other food items online (Hua & Shaw, 2020; Zhang & Ma, 2020). One of the emerging e-commerce at present is online food ordering (Hua & Shaw, 2020; Zhang Ma, 2020), which enables consumers to make an order from a restaurant or a fast-food restaurant and have the food delivered to their doorstep through the use of their own mobile devices or computers from anywhere that has internet access.

There is no denying that online ordering has brought many benefits to consumers (Judit O. et al., 2019). Many more people are turning to online food ordering because it provides convenience and saves many resources, such as time and energy while enabling them to purchase food without stepping out of their homes. Aside from online food ordering systems for restaurants, various existing online ordering systems already allow customers to purchase any products online. One of these systems is the online cake ordering system. which made purchasing and selling cakes more convenient for the customers and the employees of the bakeshop (Jayawardena W.L.S.P., 2020).

The online cake ordering system is a website or an application for ordering, delivering, or picking up the cake. The system can easily and efficiently manage products and orders, allowing customers to purchase cakes online. Any report can be checked anytime, with a sales tracking feature and the ability to generate reports and receipts. The primary purpose of the online cake ordering system is to lessen the staff's workload in the bakeshop by having a database to keep track of sales, purchases, and products. However, some businesses maintain daily transactions manually, specifically Kelly's Cake Zone Bakeshop. They still record transactions manually, sometimes leading to data entry inconsistency and displacement of details. Their existing approach is time-consuming and costly for producing reports; most importantly, it needs more security. The customers also find it a hassle to go to the bakeshop personally to buy a cake because it is a waste of energy and time-consuming.

As a result, the researchers proposed an online cake-ordering system for Kelly's Cake Zone, with features such as menu selection, order placement, and product and order management. This system will reduce manual work and help the bakeshop's administrator to manage the transaction records more effectively and efficiently. It will help the bakeshop to keep computerized records updated without making duplicate inputs and secure all their records. Also, the system will provide a platform for consumers that will enable them to make an order and monitor transactions easily. The aforementioned online cake ordering system will replace the current manual system that is used by Kelly's Cake Zone, which will improve its service and operations.

**Objectives of the Study**

This study aims to develop an “Ocake: Kelly’s Cake Zone Customizable Pastries”.

Specifically, the study aims to:

1. Develop and design a website with all available cake product categories from which the customer can choose and select.
2. Create a system that will enable customers to customize the cake based on the cake's layer/s, color, flavor, and addons.
3. Design a website that allows customers to track the status of their orders.
4. Integrate SMS to notify users when their orders have been accepted
5. Develop a module that allows customers to post feedback and rate delivered products.
6. Create a system that can generate and track reports on a regular basis.
7. Integrate RTC to allow users to communicate with each in real time through text.
8. Evaluate the performance of the system according to ISO 25010; and
9. Implement the system in Kelly's Cake Zone bakeshop.

**Scope and Limitation of the Study**

The study covers the “Ocake: Kelly’s Cake Zone Customizable Pastries”. People are now busy to visit the stores and shop for their party needs like cake to complete their party bash. The business will offer services that enable clients to shop conveniently at anytime, anywhere. The customers can choose from the wide variety of product for the party. The product details, availability of the product is posted in the web page of Ocake: Kelly’s Cake Zone Customizable Pastries. The customers can purchase right away by online banking debit or money transfer to secure their orders and the customers can also check the status of their orders and delivery by log in on their account and visiting the website.

The system is exclusively for the Cake Ordering and Delivery Service. The administrator is the only authorized person to manipulate the content of this website. If the user is not registered on the system, no possible transaction can be done other than viewing the whole website. The cake ordering and delivery service only accepts cake orders and pickups. The system has only 2D design available for cake customization. The website will limit ordering internationally and outside the Municipality of Naujan. With regards to payment, the system accepts cash on delivery and online payment through G-Cash. A bank transfer or any other type of payment is not included. The system also does not have a mobile application and it can only be accessed by desktop, tablet and mobile browsers with internet connection.

**Significance of the Study**

The system will be considered beneficial to the following:

**Bakeshop Owner.** The results of this research would lead to more promotion and exposure to the business online and will benefit recognition as a reputable community in the online business sector.

**Staff.** This study will help the employees to ease their work in managing their client's orders.

**Customers.** The system will benefit the customer by facilitating simple order processing and product delivery through an online website. Customers will be able to place online orders because the site will be accessible 24/7.

**Researchers.** The project’s outcome benefits the developers in gaining additional knowledge and analyzing how the system works through identifying solutions to the system’s problem. It will improve their ability to interact with others. They'll be capable of determining their level of competence in various fields Information technology, particularly in web development.

**Future Researchers.** This project will benefit future researchers to understand how a system develops and work. They may use this project as a basis for their future project. Researchers will make use of this source. Moreover, it will serve as a guide in creating website that can assist them in their work and the work of others.

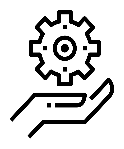
**Conceptual Framework**

P

O

I

* User’s personal information
* Requirement Gathering
* User’s account access and password user’s order/pickup for delivery
* Post feedback and rating



* Analysis
* Prototyping development
* Client evaluation
* Suggested improve
* Design
* Coding
* Integration and testing
* Maintenance
* Ocake: Kelly’s Cake Zone Customizable Pastries

**Figure 1.**

**Conceptual Framework of the Study**

The concept of this study is to create an e-commerce website for Mrs. Kelly Tabernero's Cake Shop. The input consists of the various information that website users can access, as well as their own accounts and passwords. In order to ensure the quality of the website's performance, the process emphasizes the website's development, evaluation, and structured, detailed process. The researchers should be able to develop the Ocake: Kelly’s Cake Zone Customizable Pastries in accordance with the methodology and analyze the project to improve it before its implementation.

**Definition of Terms**

For clarification, the important terms used in the study have been defined. The following definition of terms are:

* **Admin** - Someone who has the authority to manage and control the system.
* **Cancelled**- It is the status of order when the user cancelled their order.
* **Confirmed** - It is the status of order which is already accepted by the admin.
* **Completed**- It is the status of order when the users already gave their ratings and feedback for their ordered cake.
* **Customized Cake -** In this study, a customized cake is a cake designed directly by the customer himself through using the application system.
* **Delivered** - It is the status of order when the cake has been delivered.
* **Online Ordering -** An action where customers purchase online using smart phone or PC. Customers were able to browse online products and make an order.
* **Pending** - It is the status of order which is still not accepted or confirmed by the admin.
* **Processing** - It is the status of order where the cake is in process.
* **Shipped** - It is the status of order where the cake is on the way for delivery.
* **User** - Anyone who uses and interacts with the application system.