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**Final Project Proposal**

Elevating Online Presence: Crafting a Dynamic

Website for Chorizo de Oro

Submitted by:

**Stalin Joseph Baguio - 200610076**

**Joshua Jayms Estante - 20190016752**

**Ken Dale Flores - 20210023680**

Submitted to:

**Sir Fren Marlon Peralta**

1. INTRODUCTION

This Introduction will present an outline of a web development project focused on crafting an online platform for a frozen goods business - Chorizo de Oro. The project overview and statement, and objectives will provide a comprehensive understanding of the project’s significance. Chorizo de Oro is a local business based in Cagayan de Oro City delivering food products to the doors of the citizens in the city. As a delivery business it has grown to be accepting gigs, such as Xavier Days, private events and other cooking events with live cooking of frozen products and a showcase of new products such as new items on the menu during the holidays. Social media is what the business has been using to sell the products during the start of COVID and until now it is still what they use. Social media has its benefits, but it also has its own limitations. In this proposal we will offer a solution through a website with usable functions both at the front end and back end. Together with features that social media cannot alone do by itself. This includes feedback, rating and reviews tabs, a content management system for the admins, a how to cook the products tab and a brand-new user experience for the customer.

* 1. Project Overview

The project will center on the development of a web-based platform for the business. It aims to create an additional platform, such as a website, to improve the organization’s online presence and the user experience for the customers.

* 1. Problem Statement

The project will center on the development of a web-based platform for the business. It aims to create an additional platform, such as a website, to improve the organization’s online presence and the user experience for the customers.

**Customer engagement:** Limited customer engagement leaves no room for reviews and feedback, which is crucial for a business.

**Cooking Instructions:** A feature that the client wants is the presence of cooking instructions since customers often ask for instructions on how to cook the different products.

* 1. Objectives

Stated below are the objectives that the group aims to achieve:

**Enhance Online Presence:** Develop a dynamic and user-friendly website to establish an additional online platform for Chorizo de Oro, improving its visibility and accessibility to customers beyond social media.

**Improve Customer Experience:** Create a seamless and intuitive user experience for customers, allowing them to easily browse products, access cooking guidelines, place orders, and provide feedback.

**Empower Business Management:** Provide a content management system for administrators, enabling them to update website content, manage products and promotions.

**Enhance Customer Engagement:** Incorporate features such as feedback, rating, and reviews sections to encourage customer interaction and loyalty, addressing the limitations of social media platforms in showcasing customer testimonials and reviews.

**Promote Product Awareness:** Offer recipe suggestions for Chorizo de Oro's products, providing customers with additional value and promoting product awareness and usage.

1. DOMAIN SELECTION

This section provides information about the chosen domain, target audience, and key features of the project.

* 1. Chosen Domain

The chosen domain for this project is an online fully functional website both for the customers and clients use.

A responsive website for the client is useful as they will have a content management system. This will be beneficial as the management of the products, promos, and client information can easily be managed.

For the customers, a website to access means a better experience. Products that can be searched for, updates of the latest promos. Access to cooking instructions and the ability to leave reviews and feedback.

* 1. Target Audience

The website is designed to cater to local customers of Chorizo de Oro residing in Cagayan de Oro City, as well as potential customers in the surrounding regions.

* 1. Key Features

**Admin Account for Clients:** The website will have an admin account for the clients to use. This allows them to edit the website such as, adding products, promo sales.

**Feedback and Reviews Section:** Another feature is the feedback and reviews on social media, it is hard to find the reviews if it is not pinned. On the website we will include a feedback and reviews tab at the bottom of the list.

**Cooking Instructions:** The website will provide detailed and user-friendly cooking instructions for every frozen goods product offered by the client. This feature aims to enhance both the customer and client experience by addressing frequently asked questions.

1. PRELIMINARY REQUIREMENTS

In this section it contains the functional and non-functional requirements for the website.

* 1. Functional Requirements

The application should provide the following features and capabilities:

* **Product Management**
  + The website will have a product catalog to showcase the client’s products.
  + The website will allow users to search and filter products.
  + The website will have a CMS (Content Management System) where the client can use CRUD operations (Create, Read, Update, Delete) for products.
* **Cooking Instructions for Frozen Goods**
  + The website shall have cooking instructions for each of the frozen-goods products of the client.
* **Access Control and Permissions**
  + The website will have a login system to regulate access to the Content Management System.
* **User Interaction**
  + The website will be responsive and functional on different platforms.
  + There will be a section for user reviews and ratings for customer engagement and feedback.
  1. Non-Functional Requirements

In this section it contains the functional and nonfunctional requirements for the website.

* **Performance**
  + **Response Time:** The system must respond to user actions within a maximum acceptable time frame to ensure smooth user experience and efficiency.
  + **Scalability:** The system should seamlessly accommodate increased workload by efficiently utilizing added resources, ensuring optimal performance as demand grows.
  + **Load Handling:** The system must demonstrate robust performance under varying levels of concurrent users or transactions, maintaining stability and responsiveness regardless of usage peaks.
* **Security**
  + **Authentication:** Users must undergo verification processes to gain access, ensuring only authorized individuals can interact with the system, thus safeguarding sensitive information.
  + **Access Control:** The system should meticulously define user permissions and roles, restricting actions based on authenticated credentials to prevent unauthorized activities and maintain data integrity.
  + **Data Protection:** Comprehensive measures must be implemented to uphold the confidentiality, integrity, and availability of data, safeguarding against unauthorized access, alteration, or loss.
* **Usability**
  + **User Interface:** The system's interface must prioritize ease of use and intuitiveness, facilitating seamless navigation and interaction to enhance user satisfaction and productivity.
  + **Responsiveness:** The website must exhibit responsiveness across diverse platforms, including mobile devices and browsers, ensuring consistent usability and accessibility regardless of the user's device.
  + **Accessibility:** The system should be designed to accommodate users with disabilities, adhering to accessibility standards and providing necessary accommodations to ensure inclusivity and usability for all individuals.

1. PROPOSED TECHNOLOGIES

This section outlines the key technologies and tools that the team intends to use for the project's development. This section outlines the group’s choice of the MERN (MongoDB, Express.js, React, Node.js) stack, a full-stack JavaScript framework, for the project. Ideal for our client's small business frozen goods website, MERN ensures rapid development, dynamic user interfaces, and cost-effectiveness.

* 1. Programming Languages

**Frontend:** CSS (Cascading Style Sheets), HTML (Hypertext Markup Language), and JavaScript will be employed to create the user interface (UI) of the website. These languages are ideal because they can be used to separate concerns, guarantee accessibility, offer cross-browser compatibility, create rich user experiences, optimize performance, provide scalability, have robust community support, and integrate well with other technologies. With the help of this trio, developers may efficiently and successfully design a wide range of web-based applications.

**Backend:** JavaScript. The choice of JavaScript for both frontend and backend development allow for a unified language throughout the entire application.

* 1. Frameworks

**Node.js:** Used as the runtime for executing JavaScript on the server side. Ensuring robust security practices during development is essential to safeguard against potential threats and protect sensitive information related to the business.

**Express.js:** A web application framework built on Node.js streamlines the creation of the website. Its minimalist yet powerful features enable rapid development of robust web applications, allowing us to focus on showcasing the product range and enhancing the user experience.

**React:** A JavaScript library used for building user interfaces, excels in crafting dynamic and efficient frontends. Its component-based structure promotes modularity, making it easier to showcase various frozen products in an organized manner. The library's responsiveness and interactive capabilities contribute to an engaging user interface, enhancing the overall online experience for potential customers.

* 1. Database

**MongoDB:** A document-oriented NoSQL database that stores data in flexible, JSON-like documents. It is designed to scale horizontally and is known for its flexibility in handling unstructured data. Its adaptable nature allows for easy modification of product information, including nutritional data, storage conditions, and packaging details, even with unstructured data and the evolving nature of information. MongoDB can efficiently manage increasing data loads, offering scalability as the business expands and more products are introduced. It is particularly beneficial within the MERN framework, given that most of it is based on JavaScript or JSON-like documents, providing a cohesive development environment.

1. PROJECT PLAN

This section presents an overview of the project schedule, along with the roles and duties assigned to team members.

* 1. Timeline

The estimated timeline for this project is as follows:

Proposal & Requirements Analysis: Feb 23 - Mar 1

Design: Mar 1 - Mar 15

Development & Testing: Mar 19 - Apr 19

System and UAT: Apr 23 - May 3

Deployment: May 4 - 10

Project Presentation: May 14 - May 20

* 1. Team Roles

The following are the roles of each member of the team:

Ken Dale Flores - Frontend Developer: Designs intuitive user interfaces to enhance the overall user experience.

Joshua Jayms Estante - Backend Developer: Constructs and manages server-side logic and databases to ensure the functionality and reliability of the application.

Stalin Joseph Baguio - Backend Developer: Focuses on the server-side development, contributing to the robustness and efficiency of the application's backend systems.

1. CONCLUSIONS

The conclusion summarizes the expected outcomes and challenges and solutions.

* 1. Expected Outcomes

Anticipated outcomes include the delivery of a fully functional website, enhancing customer experience and operational efficiency for Chorizo de Oro, where the clients' products are showcased, and customers are given instructions on how to cook different frozen goods.

* 1. Challenges and Solutions

Challenge: Responsive Design for Mobile Users

Solution: Ensure the website has a responsive design that adapts seamlessly to different screen sizes, especially for mobile users.

Challenge: Showcasing Product Variety and Quality

Solution: Implement high-quality visuals, including images, to showcase the variety and quality of frozen goods.

Challenge: Answering Common Questions

Solution: To better handle the common question about cooking instructions on messenger, the plan is to make things smoother. Users will be directed to specific web pages using links that the client can easily share. This smart approach is designed to improve how the client handles frequently asked questions, creating a more seamless and professional experience overall.

Challenge: Learning Curve

Solution: To overcome the learning curve, we are dedicated to self-improvement through independent study and practical experience in programming languages and frameworks. This commitment ensures our capability to deliver the right product.