**A PROPOSED ORDER MANAGEMENT SYSTEM**

**FOR KAPE KALINAW CAFÉ  
IN DATAMEX COLLEGE OF SAINT ADELINE VALENZUELA**

A Project Proposal Presented to the

Faculty of Datamex College of Saint Adeline, Inc.

In Partial Fulfillment of the Requirements for the

Degree of Bachelor of Science in Information Technology

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# Project Proposal

**ORDER MANAGEMENT SYSTEM**

The proposed project focuses on the development and implementation of an Order Management System designed for Kape Kalinaw Café located at Datamex College of Saint Adeline, Valenzuela. The system aims to streamline order-taking, and sales monitoring, providing efficiency and accuracy both for the café cashier and the admin.

This system will automate the manual process of recording orders, computing sales, it minimizes human errors, reduces waiting time for customers, and ensures accurate and updated records for the café.

Efficient order management is essential in café operations as it directly affects customer satisfaction and overall business performance. The system will allow the staff to manage customer orders, generate receipts, and monitor daily sales automatically. Furthermore, the administrator will have access to update product details, adjust prices, and review sales reports conveniently.

**MANAGEMENT AND STRATEGY**

The Order Management System will be designed with user-friendly features and simple interface, making it easier for both cashier and admin to operate. It will provide real-time access to data, ensuring transparency and smooth café operations.

A structured implementation plan will be followed, including system design, development, testing, and deployment. Strategies will focus on improving customer service, ensuring data accuracy, and supporting the café’s operational needs.

**IMPLEMENTATION AND DEVELOPMENT**

The project will go through several stages, including requirement analysis, creating the database, designing the user interface, and testing the system. The system will be built using VB.NET 2010 with Windows Forms for the interface and SQL Server for managing the database. Clear methods will be used to make sure the system works correctly and consistently. Proper instructions and training will also be provided so that the café cashier and admin can use the system easily.

**CONCLUSION**

In conclusion, this project proposal aims to provide an efficient and reliable Order Management System for Kape Kalinaw Café. With this system, customer orders will be handled quickly and accurately, sales will be tracked easily, and order processing will be more organized. This system is expected to improve how orders are managed, increase productivity, and help the café grow.

**INTRODUCTION**

The Kape Kalinaw Order Management System (OMS) is a desktop-based application developed using VB.NET 2010. Its main purpose is to make order handling faster, minimize errors from manual recording, and provide real-time updates on sales. By automating these processes, the café can serve customers more efficiently while maintaining accurate and reliable business records.

Many small shops encounter challenges such as misplaced orders, difficulties in tracking revenue, errors in manual calculations, and the absence of clear sales reports. The Kape Kalinaw OMS addresses these problems by offering a centralized and automated solution. Every order is recorded securely, payments are calculated instantly, and all transactions are stored in a database. This not only saves time for cashier but also helps management maintain accurate financial records.

The system supports two types of users: Admin and Cashier. Admin users have full control, such as adding, updating, or deleting products, adjusting prices, and monitoring the dashboard with real-time sales data. They can also review order history for accuracy and make corrections when needed. Cashier, on the other hand, handle customer transactions. They can select products, specify size and type, add items to an order, process payments, and automatically compute change. This role separation ensures smooth operations, protects sensitive business data, and prevents unauthorized actions.

Another key feature of the OMS is its dashboard and reporting tools. The dashboard provides real-time insights, including total orders, revenue, available products, and user activity. It also maintains a detailed transaction history containing order dates, times, product details, and payment information. Additionally, the system generates charts showing revenue trends for the past seven days, allowing management to monitor business performance at a glance.

**BRIEF OVERVIEW**

This project aims to develop an Ordering Management System (OMS) for Kape Kalinaw Café, designed to make the customer ordering process faster and more organized. Instead of writing down orders manually, the system allows staff to select items with just a few clicks, assign order statuses such as serve customers more efficiently. By using this system, the café can minimize order errors, speed up transactions, and improve overall customer service. **BACKGROUND**

Currently, Kape Kalinaw relies on manual methods (pen and paper or verbal orders),which become inefficient during peak hours. Errors in orders, slow processing, and miscommunication between cashier and barista are common. The proposed system eliminates these issues through digital order input and real-time status tracking.

**CLIENT INFORMATION**

**ClientName:**KapeKalinaCoffeeShop

**  
Owner:**Mr.R&R **PhoneNumber:**09530955039 **Email:** [kapekalinawmain@gmail.com](about:blank)

**Business Description:**

Kape Kalinaw is a small, independent café that serves brewed coffees and non-coffee to students, office workers, and walk-in customers. It operates on site and focuses on quick service with a small team including a cashier and baristas. Operating primarily on site, the business maintains a fast-paced but efficient workflow, ensuring quick service for dine in and take out customers. With a small but dedicated team composed of a cashier and trained baristas, the coffee shop emphasizes customer satisfaction and consistency in product quality. The café specializes in freshly brewed coffee, handcrafted frappes.Kape Kalinaw is known for its friendly service, affordable pricing, and commitment to using quality ingredients sourced from local suppliers whenever possible.

**PROJECT SCOPE**  
 The aim of this project is to develop a desktop based Café Management System using VB.NET in Visual Basic 2010 with a SQL Server database. The system is designed to improve café operations such as order processing, billing, and sales reporting. By integrating these tasks into a single application, the café can improve service speed, reduce human errors, and maintain accurate business records.

**Inclusions:**

* **Order Management** - allows cashier to record customer orders directly in the system for faster and more accurate service.
* **Billing and Checkout** - computes the total amount, and calculates change automatically, ensuring error free transactions.
* **Product Management** - supports adding, editing, and categorizing items such as non-coffee or coffee.
* **User Authentication** - login system with different roles (e.g., admin and cashier) to prevent unauthorized access.
* **Sales Reporting** - generates daily and weekly sales reports to assist management in analyzing business performance.
* **Database Integration** - uses SQL Server for secure, organized storage of product data, sales transactions, and user information.

**Exclusions:**

* The system does not support multi branch operations; it is designed for use in a single café location.

**Assumptions**

* Cashier have basic knowledge of using a computer and can learn the system with minimal training.
* All required product data (Products, prices and categories) will be provided by the café management.
* A stable desktop environment with Windows OS, Visual Studio, and SQL Server will be available for system installation.
* Users will enter accurate and timely data into the system to ensure reliable reports

**Constraints**

* The system is limited to a single branch setup and cannot handle multiple café locations.
* The project must be completed within the agreed timeline and budget.
* Features are limited to orders, sales, and reporting.

**PROJECT APPROACH**

In order to achieve the goals of the Order Management System, we aim to create simple and efficient solution in order taking. My goal is to replacing the manual processes with a digital system, we aim to reduce errors, save time, and improve customer service. The system will be built with a user-friendly interface to ensure ease of use for café staff, while maintaining accuracy, security, and scalability to support business growth.

Also, the system will include features for sales tracking, more organized and faster order input, and receipt generation to automate important café operations. This will allow the cashier to focus more on customer interaction rather than manual record-keeping. Reports and analytics will also be integrated to provide the admin with useful insights that can guide decision-making and improve business strategies.

The development approach will follow a clear and structured process. It will begin with gathering the requirements from the café, followed by system design, database development, coding, and user testing. Regular feedback from the cashier and admin will be collected to improve the system and make sure it meets the actual needs of Kape Kalinaw Café. Training sessions and proper documentation will also be provided to ensure that both staff and administrators can effectively use and maintain the system.

The project will focus on reliability and flexibility. The system will be designed to handle daily operations smoothly while being flexible enough to support future upgrades. Backup and recovery features will also be considered to protect the data and maintain business continuity in case of unexpected problems.

**DEVELOPMENT METHODOLOGIES**

The project will adopt the Agile Methodology, which emphasizes flexibility, collaboration, and iterative development. By using short development cycles (sprints), the team can gather feedback from potential end users, make quick adjustments, and continuously improve the system until it meets the café’s operational needs. This approach ensures that the system remains practical, user friendly, and aligned with real-world requirements.

**KEY ACTIVITIES AND MILESTONES**

1. **Requirements Gathering** - Identify user needs through observation and interviews with café cashier.
2. **System Design** - Develop data flow diagrams, system architecture, and database design.
3. **Development** - Code the system modules such as order taking, reports, and revenue tracking.
4. **Testing** - Conduct unit testing and user acceptance testing to ensure functionality and reliability.
5. **Implementation** - Deploy the system in a test environment for real-world application.
6. **Documentation and Finalization** - Prepare full system documentation and finalize the project for presentation.

**PROJECT TEAM**

A dedicated group working together on the Order Management System. Our team is composed of individuals with diverse skills and backgrounds, each contributing to the success of the project.

**Developer:  
Lorenzana Joshua** Has basic knowledge of coding, problem-solving skills, and the ability to create and manage databases.

**DataAnalyst:  
Joshua Lorenzana** - Skilled in gathering data from various sources and preparing it for analysis.

**DataGatherer:  
Lorenzana Joshua**- A sharp problemsolver and critical thinker who simplifies complexity, communicates with clarity, and listens with intent transforming challenges into innovative and practical solutions. **Joshua Lorenzana**- Has the ability to gather information from different sources and ensure accuracy in documentation.

**PROJECT TIMELINE**

The stages of the Software Development Life Cycle (SDLC) provide the structure for this   
project’s execution. The schedule highlights the essential milestones and deliverables that need to be achieved within the designated timeframe.

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| --- | --- | --- | --- | --- |
| **Phase** | **Title** | **Start Date** | **End Date** | **Key Activities/**  **Deliverables** |
| **Phase 1** | **Brainstorming** | September 2, 2025 | September 2, 2025 | Gathering ideas, defining the scope, and setting clear goals for the project. |
| **Phase 2** | **Project Planning** | September 3, 2025 | September 4, 2025 | Creating a task plan, setting a timeline, and organizing the steps to follow. |
| **Phase 3** | **Requirement Gathering** | September 4, 2025 | September 4, 2025 | Identifying user needs, listing system features, and defining requirements. |
| **Phase 4** | **System Design** | September 5, 2025 | September 5, 2025 | Designing the system layout, database, and overall architecture. |
| **Phase 5** | **Front End** | September 6, 2025 | September 7, 2025 | Building the user interface and navigation. |
| **Phase 6** | **Back End** | September 8, 2025 | September 9, 2025 | Developing the system logic and database functions. |
| **Phase 7** | **Testing** | September 12, 2025 | September 13, 2025 | Testing the system, checking for errors, and applying fixes. |
| **Phase 8** | **Deployment** | September 14, 2025 | September 15, 2025 | Launch system and deliver final output. |

**PROJECT RESOURCES**

To successfully develop and implement the Order Management System, the following resources will be required:

**Hardware**

* **Laptop or Desktop Computer** - to serve as the main device for running the system and storing the database.
* **Receipt Printer (optional)** - for printing customer receipts at the cashier.
* **Cash Drawer (optional)** - can be integrated for handling payments.
* **Stable Internet Connection** - for software updates and cloud backup (if needed).

**Software**

* **Microsoft Visual Basic 2010 (VB.NET)** - main development environment for building the Ordering Management System.
* **SQL Server** - used as the database management system to store sales transactions, product information, inventory levels, and user accounts.
* **Windows Operating System (Windows 7-11)** - to run the application reliably.

**Database Management System (DBMS)**

* SQL Server will manage all system data including product lists, sales records, user accounts, and inventory logs.
* Provides data integrity, security, and fast retrieval for daily operations.

**Human Resources**

* **System Developers** - responsible for coding the system, designing the interface, and
* **System Analyst** - gathers requirements, prepares documentation, and ensures the system aligns with business needs.
* **End Users (Staff/Cashier)** - will use the Guest UI to process sales and manage orders.
* **Admin/Owner** - will manage products, and reports through the Admin UI.
* **IT Support Staff** - assists with installation, troubleshooting, and maintenance after deployment.

**Security Resources**

* **User Authentication System** - login with Admin and Guest roles to protect sensitive data.
* **Data Backup Tools** - regular backups of the SQL Server database to prevent data loss.
* **Firewall/Antivirus Software** - to secure the system and devices against malware and   
  unauthorized access.

**RISK MANAGEMENT**

**Identification of Potential Risks that may impact project success**

1. Data Loss or Corruption - Order details, and transaction records may be lost or corrupted due to system failure, power interruptions, or human error.

2. Unauthorized Access or Data Breach - Hackers or unauthorized users may gain access to sensitive customer and order data, which can result in privacy violations or manipulation of records.

3. System Downtime or Technical Glitches - If the order management system becomes unavailable due to bugs, crashes, or server downtime, it could prevent customers from placing orders and affect overall business operations.

4. Incorrect Order Processing - Mistakes in entering or confirming orders (e.g., wrong product,   
quantity, or Wrong size) may cause customer dissatisfaction, delays, or revenue loss.  
5. Payment Processing Issues Errors or downtime in online payment gateways may lead to failed  
transactions, double charges, or loss of customer trust.

**Mitigation Strategies for Addressing Identified Risks**

1. Regular Data Backup - Implement automatic and scheduled backups (daily/weekly) to ensure   
all order and customer data can be restored in case of system failure.

2. User Authentication and Access Control - Require secure login credentials, apply role-based access (e.g., admin, cashier), and use encryption for sensitive information.

3. System Testing and Regular Maintenance - Conduct system testing before deployment, fix bugs promptly, and schedule routine maintenance to minimize downtime.

4. Order Verification Procedures - Require confirmation steps before finalizing orders (e.g., order summary review, double-checking by cashier) to reduce processing errors.

5. Secure and Reliable Payment Integration - Use trusted payment gateways, implement error handling mechanisms for failed payments, and provide customers with transaction confirmations.

**COMMUNICATION PLAN**

**Overview**  
 Communication within the group will be clear and consistent to keep every member updated and aligned with the project goals. By sharing information regularly, we can prevent confusion, solve problems quickly, and ensure that tasks are completed on time. Our communication will always be guided by teamwork, accountability, and cooperation to maintain a smooth workflow from start to finish.

**Frequency and Format of Project Meetings**

* **Weekly Group Meetings** - Conducted every Saturday, either face-to-face or through   
  online platforms, to review progress, assign tasks, and discuss any concerns.
* **Quick Updates and Reminders** - Shared through group chat to make sure everyone stays on track and informed of small changes.
* **Urgent Matters** - Addressed immediately using calls or instant messages to allow faster decisions when needed.

**Key Stakeholders and Preferences**

* **Group Members** - As the main stakeholders of the project, the team prefers to use a group chat for daily communication, reminders, and quick updates.
* **The Team as a Whole** - For detailed discussions and progress tracking, the group prefers   
  to hold weekly meetings, either in person or online.
* **For Urgent Concerns** - Direct calls or instant messages are preferred to address issues quickly and avoid delays.

**PROJECT GOVERNANCE**

The Order Management System of Kape Kalinaw in Caloocan City establishes a clear framework for decision-making, accountability, and oversight. It outlines the roles of the project manager, developers, and end users to ensure that responsibilities are well-distributed and properly managed. This structure provides direction, promotes transparency, and supports effective coordination among all stakeholders.Through this governance approach, the project team will be able to monitor progress, address risks, and ensure that resources are used efficiently. Regular communication, review meetings, and reporting will guide the project toward achieving its objectives. Ultimately, this governance framework will help deliver a reliable and user-friendly system that improves order management and supports the community’s operational needs.

**ROLES AND RESPONSIBILITY OF PROJECT STAKEHOLDERS**

* **Project Manager** - Oversees the entire project, manages the schedule, assigns tasks, monitors risks, and ensures that objectives are met on time and within scope.
* **Developers** - Responsible for designing, building, and testing the system. They ensure that technical requirements are met and that the platform runs smoothly and securely.
* **End Users** - Provide input on system requirements, participate in testing, and use the system in daily operations. Their feedback is crucial in improving usability and functionality.