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***Project Proposal***

**Object Oriented Design**

**Course Code: SE 221**

**Project Name : Modern Retail Management System**

**Submitted to:**

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Date of submission: / /

**Modern Retail Management** **System**

## Project Overview

The Retail System project aims to provide a simple yet effective solution for managing retail operations. This project involves the creation of a console-based retail system in Java, offering functionality for product management, customer interaction, order processing, and payment handling.

### Objectives

The primary objectives of the Retail System project are as follows:

1. **Code Development:** Create a robust and functional Java application for managing retail operations.
2. **User Interaction:** Develop a console-based interface that allows users to interact with the system seamlessly.
3. **Retail Operations:** Implement core retail operations, including product management, order processing, and payment handling.

### Project Scope

#### 1. Features and Functionality

The Retail System project will include the following key features:

* **Product Management:** Adding, updating, and managing products with details such as name, price, and quantity.
* **Customer Management:** Account creation, authentication, and basic customer information.
* **Order Processing:** Allowing users to place orders for products with quantity and calculating total prices.
* **Inventory Management:** Real-time tracking of product stock levels and updates during order processing.
* **Discounts and Payments:** Applying discounts based on total purchases and providing payment options.

#### 2. Target Audience

The target audience for the Retail System project includes retailers and business owners looking for a simplified solution to manage their product inventory, orders, and customer interactions.

### Technology Stack

#### 1. Core Technology

* **Java:** Core programming language for the development of the retail system.

#### 2. Additional Tools and Libraries

* **IDE:** Any Java-compatible IDE (Integrated Development Environment) for code development.

#### 3. Database

* **Not Applicable:** The project will utilize hardcoded data for simplicity.

### Project Timeline

#### 1. Milestones

1. **Project Initialization and Planning**
2. **Code Development**
3. **Testing and Quality Assurance**
4. **Documentation**

#### 2. Deliverables

* **Fully Functional Retail System Code**
* **Documentation for Code Usage**

### Budget

#### 1. Estimated Costs

The Retail System project is estimated to have minimal costs, primarily associated with the development environment.

#### 2. Funding

As the project does not require significant external resources, funding will not be actively sought. The focus is on delivering a valuable, functional retail system code to the community.

### Financial Projections

Given the simplicity of the project, financial projections will not be applicable. The primary goal is to provide a useful tool without generating revenue.

### Risk Analysis

#### 1. Identified Risks

* **Technical Challenges:** Addressed through continuous monitoring and debugging during development.
* **User Error:** Users may input incorrect data, requiring clear instructions and validation.

#### 2. Risk Mitigation Strategies

* **Thorough Testing:** Implement extensive testing to catch and correct errors.
* **User Guidance:** Provide clear instructions within the console interface to minimize user error.

### Conclusion

The Retail System project is designed to meet the needs of small retailers seeking a straightforward solution for managing their retail operations. By developing a functional Java application with core retail features, the project aims to deliver a practical tool for businesses.

For any inquiries or further discussions, please contact:

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This project proposal outlines the key aspects of the Retail System project, emphasizing simplicity and functionality. Feel free to modify and expand upon this proposal to suit the specific requirements and audience of the project.