Grocery Management System

A Java-based application to manage a grocery store's inventory, orders, and customer interactions. This system provides functionalities for handling products, customers, orders, payments, and staff, with support for both online and offline payment processing.

Features

1. Inventory Management

 Track and manage grocery items with classes for products, categories, and inventory.

2. Order Processing

 Create and manage orders, with support for both online and offline payments.

3. Customer Management

Handle customer information and order history.

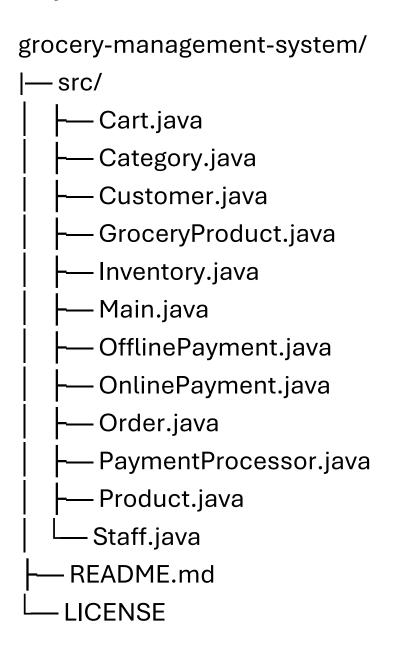
4. Staff Management

Manage staff members who interact with the system.

5. Payment Processing

 Integrated payment processing with support for multiple payment methods.

Project Structure



- src/: Contains all Java source files for the project.
- README.md: Project documentation.
- LICENSE: Licensing information for the project.

Class Structure

Main Classes

- **Main**: The entry point of the application, handling initialization and program flow.
- **Customer**: Manages customer details, including order history and profile information.
- Order: Represents customer orders, tracking products and payment status.

Inventory and Product Management

- **Product**: Basic properties of a product (e.g., name, price).
- GroceryProduct: A subclass of Product specific to grocery items.
- Category: Organizes products into categories for easier management.
- **Inventory**: Tracks available stock and manages product availability.

Payment System

- PaymentProcessor: Core class for managing payment processing.
- OnlinePayment: Handles online transactions.
- OfflinePayment: Manages offline or in-store payments.

Cart and Additional Functionality

- **Cart**: Allows customers to add or remove products before placing an order.
- **Staff**: Manages staff information and roles within the system.

Getting Started

Prerequisites

- Java Development Kit (JDK) 8 or above
- **IDE**: Any Java-compatible IDE (e.g., IntelliJ, Eclipse)

Installation

1. Clone the repository:

bash

Copy code

git clone https://github.com/tajbid-panthom/cseku_apl_24_230235/tree/main/Project%2
https://github.com/tajbid-panthom/cseku_apl_24_230235/tree/main/Project%2
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- 2. Open the project in your preferred Java IDE.
- 3. Compile and run the Main.java file.

Usage

- 1. Run the Main class to start the application.
- 2. Follow on-screen prompts to add customers, manage inventory, place orders, and process payments.