

In this assignment, you will design the architecture and the classes of the course project.

1. From the use cases, identify the major classes for user interface. For example, you might need a class for displaying the Main Screen, a class for displaying the Checkout Screen...

Login Screen

Main Screen

Checkout Screen

Pay Screen

Inventory Screen

Edit Employee Screen

2. From the database design, identify major class for loading/saving and storing data objects. For example, you might need a class for storing information of products, a class for orders...

Products

Orders

DataAccess

3. Identify classes for other functions. For example, you might need a class for validating if changes to a product are acceptable (e.g. price, quantity, tax rate... need to be non-negative).

Main Screen (handles logic for changing screen)

Checkout Screen (Handles logic to check products and display screen)

Pay Screen (Handles logic to check cash amount and display screen)

Inventory Screen (Handles logic to update products and display screen)

Edit Employee Screen (Handles logic to display employee information)

4. Group the identified classes into 3 layers: Data Access, Business Logic, and User Interface.

This is kind of self explanatory based on what the classes are, also a few classes go into more than one group mainly just because they will have features involved in the class themselves that will have elements of the different groups, For example, the products themselves will have checks to make sure that the price is more than zero as was explained in question 3.

Data Access

The IDataAccess class will access the database

Business Logic

This includes the Product class, Order class, part of the Main Screen, part of the Checkout Screen, part of the Pay Screen, part of the Inventory Screen.

User Interface.

This includes the Login screen, Main screen, Checkout screen, Payment screen, Edit Employee screen, Add Employee screen, Inventory screen, Edit Product screen