Assignment 2

1. Abstract-Occurrence:

Classes Used: Order, OrderLine

UML Diagram: Graphical user interface

Description automatically generated with medium confidence

Design Rationale: Order and orderline work together to create what’s needed to get the tax, cost, and other customer info and produce a line with the important information a customer would want to see on the receipt.

2. Adapter:

Classes Used: RemoteDataAdapter, SQLiteDataAdapter, ProductController, CheckoutController, LoginController, ClientHandler

UML Diagram: Diagram

Description automatically generated

Design Rationale: These classes work together to save and use all of the data that is in the background of the operation so the adapter design pattern was the best choice.

3. Singleton:

Classes Used: MainApp, StoreManager

UML Diagram: Diagram

Description automatically generated with medium confidence

Design Rationale: The main application was the main access to the application components so this was the best design pattern to choose

4. General Hierarchy:

Classes Used: ProductView, LoginScreen, CheckoutScreen

UML Diagram: Diagram

Description automatically generated

Design Rationale: These classes worked together to alter the GUI components so therefore this design pattern was the correct choice.

5. Player-Role:

Classes Used: User

UML Diagram: Table

Description automatically generated

Design Rationale: The usermodel split the buyer and seller into different logins and this is why this design pattern was the right one.