

Project Report

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2. Class: Platinum

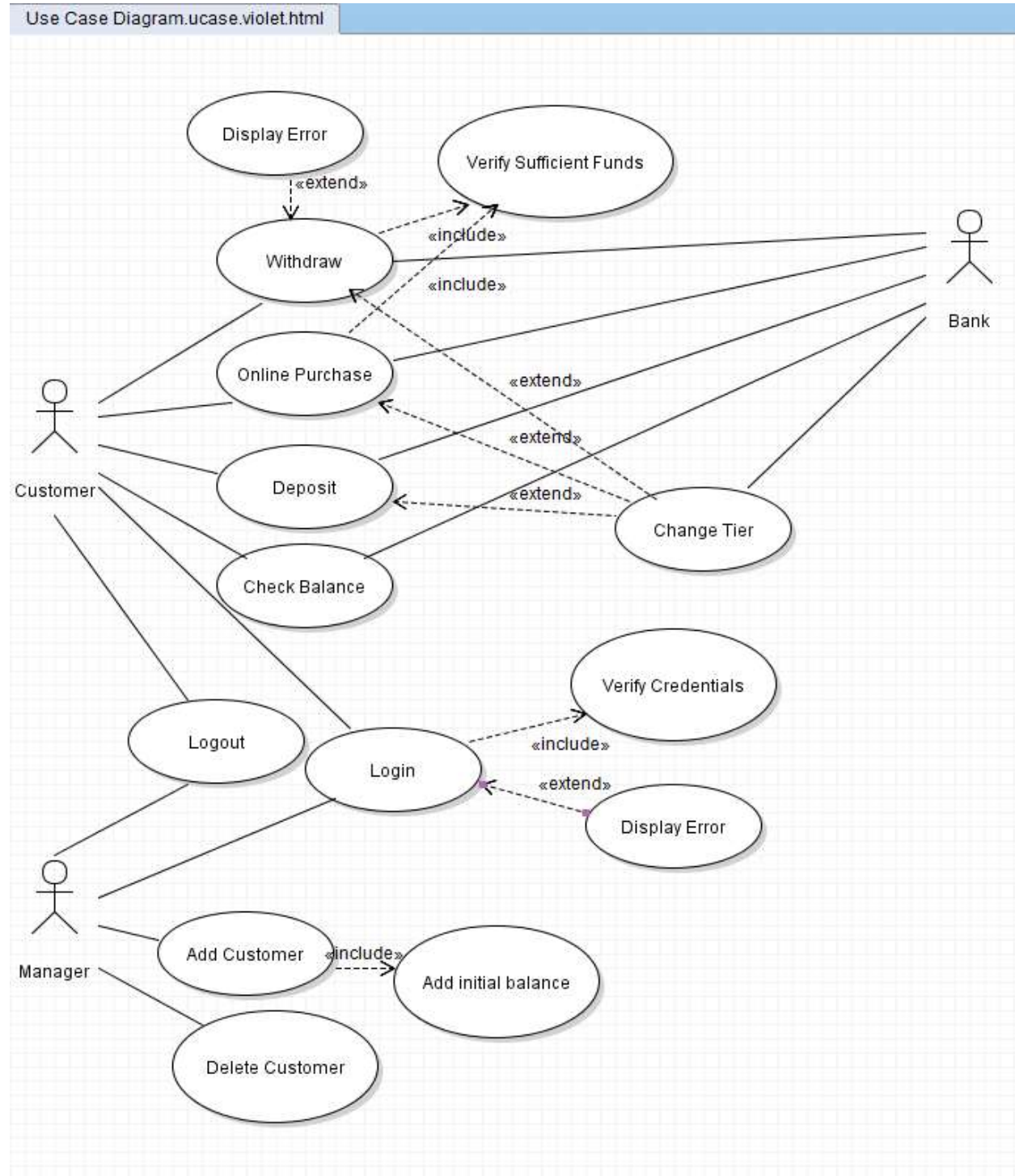


Figure 1: Use Case Diagram

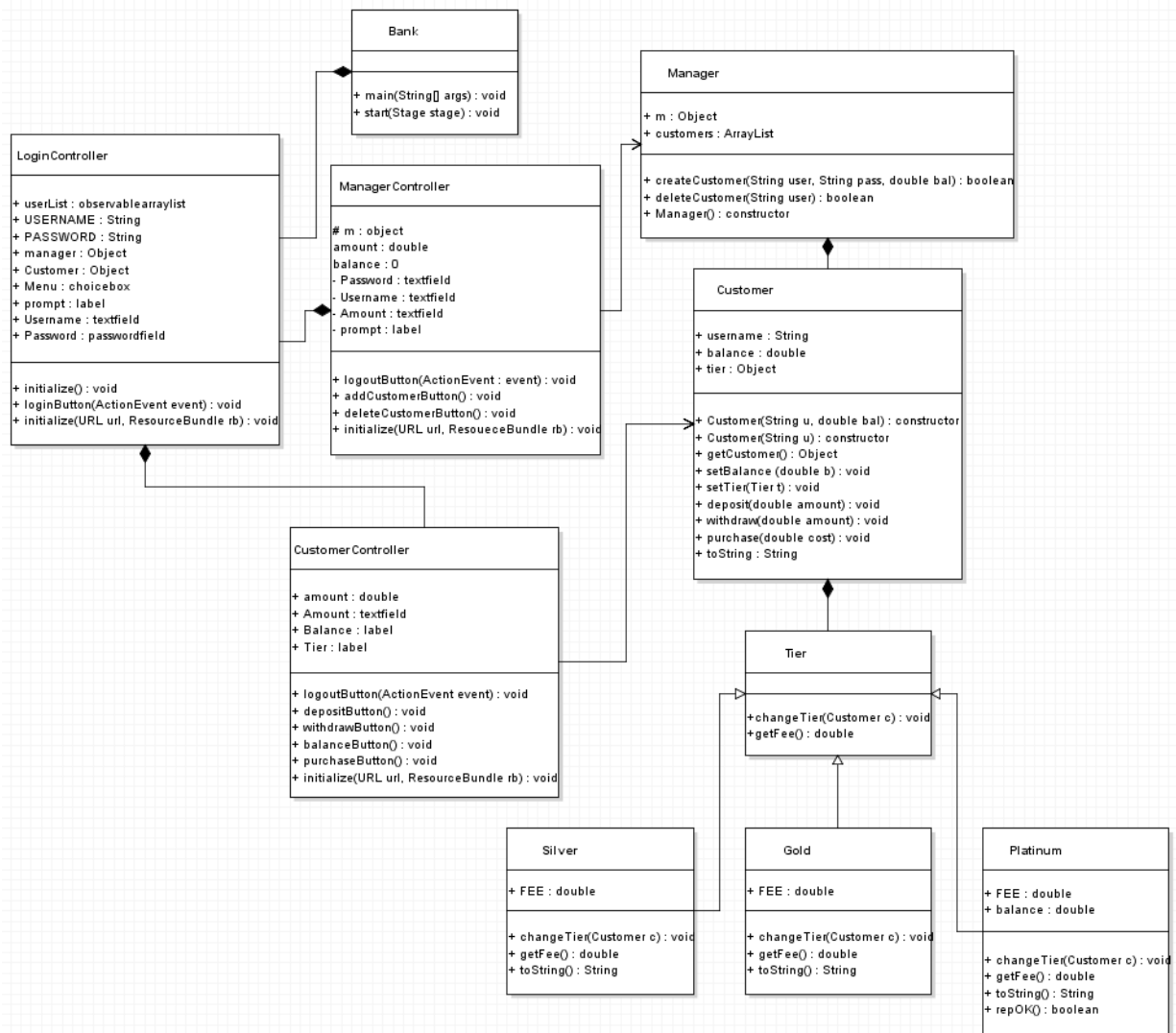


Figure 2: Class Diagram

Class Diagram:

This banking application is first initialized through the main method along with the start method through the Bank class. This opens the user interface for the login page which is controlled by the LoginController class. The user then logs into either the Customer class which is controlled by the CustomerController class, or the Manager class which is controlled by the ManagerController. The Manager interface allows the user to add a new customer along with their balances as well as delete existing customers. The Customer interface allows the user to check balance, deposit, withdraw and make online purchases. When making online purchases, the customer has to pay a fee depending on their respective “tier” ranging from Silver to Gold and finally Platinum(inherits Tier). Changes to tier are made depending on the amount of money within their account.

Use Case Diagram:

There are two primary actors (Customer and Manager) and one secondary actor (Bank) for this program. To start off, the manager and customers are able to log in, which requires(includes) a credential verification and can extend to an error message, and log out of the banking application. Once logged in, the manager is then able to create a new customer account which requires(includes) a specific balance or delete an existing customer account. The customer on the other hand, once logged in, can check their balance, deposit money, withdraw money/ make online purchases, which requires(includes) verification of sufficient funds and can extend to an error message. The parts that form the state design pattern are Tier and Silver/Gold/Platinum. Tier is the abstract class that object classes Silver/Gold/Platinum inherit.