Banking App

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COE528 - 011

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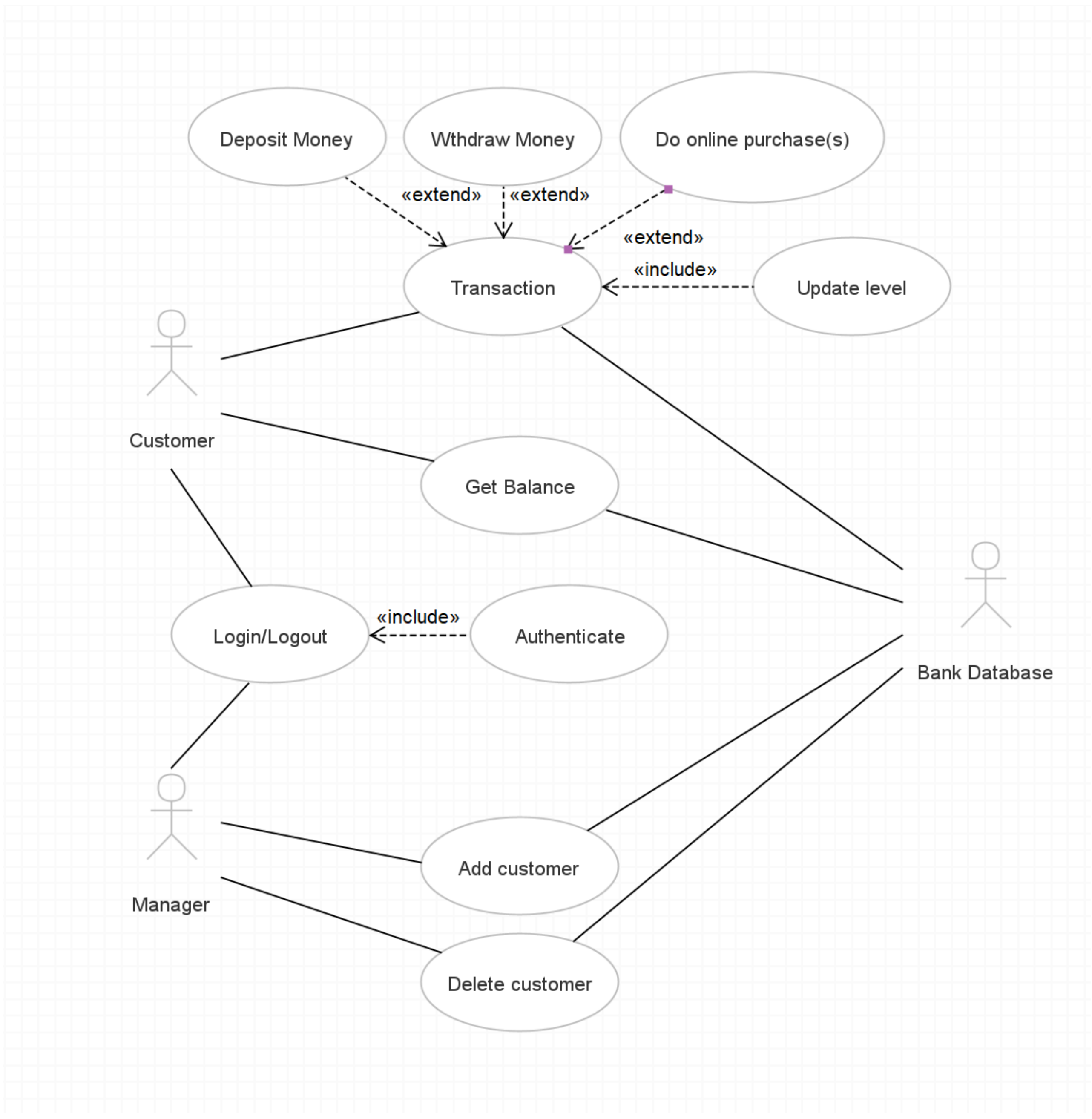
24th March 2024

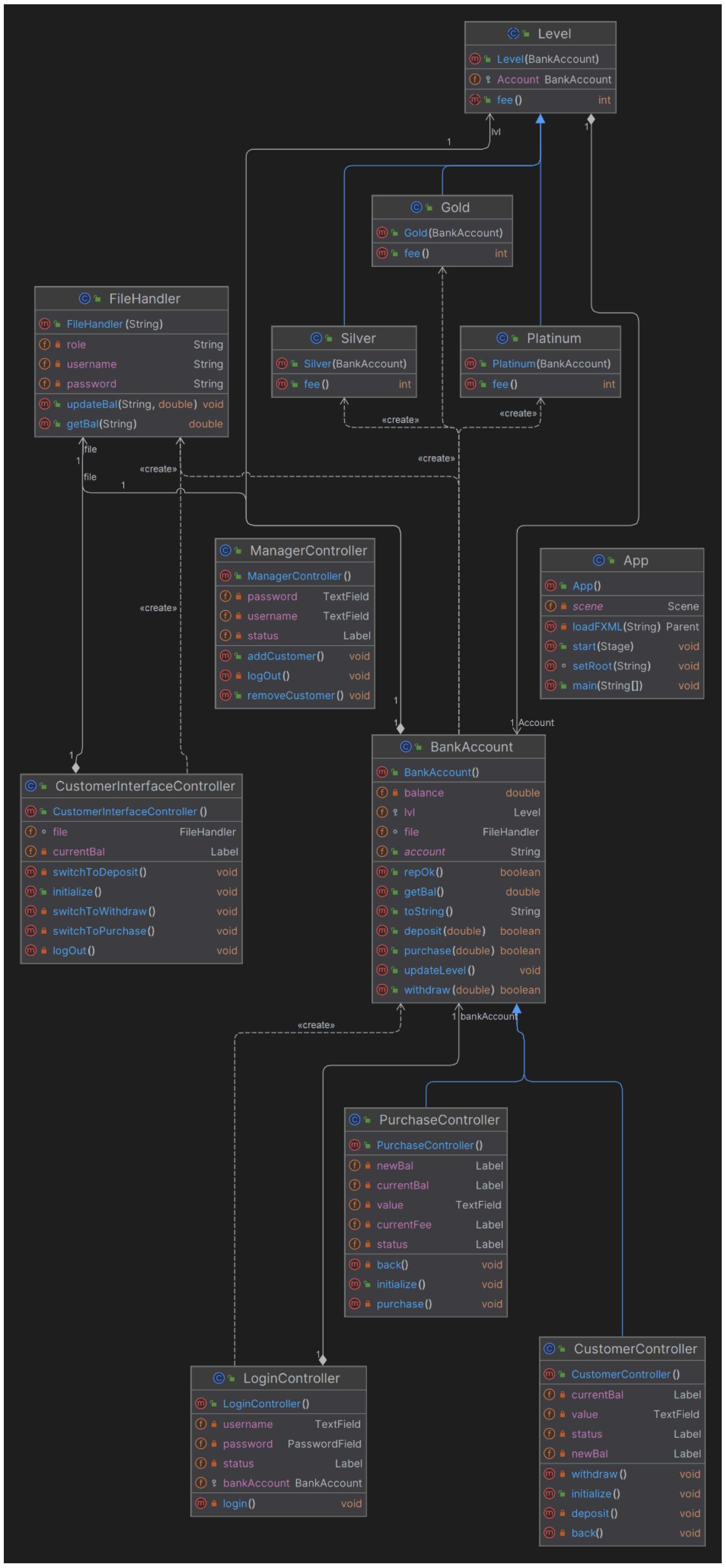
Overview

The report for The Bank App Project is presented herein. It consists of sections explaining different parts of the final project for the COE 528 course. This report consists of a Use Case Diagram, Class Diagram, Descriptions of the Case and Class Diagrams, mention of a class with full javadocs, an indication of where the State design pattern was used and any references used.

Use Case Diagram



Class Diagram



Description:

The Use Case diagram shows users' interactions with the Banking App system. The Bank App uses a Use Case Diagram to illustrate the Manager and Customer interactions. The Manager can log in, log out, add customers, and delete customers. The customer can log in, log out and perform transactions. The user also contains a level which updates depending on the amount of money they have in their account.

Name	Get Balance
Participating actors	Customer, Bank Database
Entry Conditions	Customer exists within the database
Flow of events	1. The customer logs into the account 2. The Bank Database returns the account balance
Exit conditions	The customer logs out or performs a transaction
Quality Reqts.	None

Description:

This class diagram shows the structure and relationships within the Banking application. The diagram shows various classes with their instance variables as well as the methods they contain. Relationships between classes, such as associations, aggregations, compositions, and inheritances, show how they interact within the system. This diagram shows a visual representation of the system's architecture and design.

Selected Class for Point Number 2:

The class “BankAccount” has been chosen to address point number 2. As per point number 2, this class has the necessary clauses, abstraction function, the rep invariant and implementations as mentioned in point number 2.

State Design Pattern in UML Class Diagram:

As seen in the UML class diagram the classes BankAccount, Level, Silver, Gold and Platinum make up the state design pattern. Where Silver, Gold and Platinum are possible states that level can be, seen in the class diagram.

References