CSE 231 Problem Set 05

# Problem 33.1: Identify Level of Redundancy

Identify the level of redundancy in the following class diagram:



If the design is not distinct, suggest a design which is:

# Problem 33.2: Identify Level of Redundancy

Identify the level of redundancy in the following class diagram:



If the design is not distinct, suggest a design which is:

# Problem 33.3: Identify Level of Redundancy

Identify the level of redundancy in the following class diagram:



If the design is not distinct, suggest a design which is:

# Problem 33.4: Design a Class Diagram

Design an inheritance hierarchy exhibiting distinct redundancy to satisfy the following problem definition:

A single transaction in a financial application corresponds to an event which influences the balance. There are many types of transactions. A deposit will put cash into a checking or saving account. A withdrawal will remove cash out of a checking or savings account. A purchase will add several shares at a given prices. A sell will remove several shares at a given price. All transactions have several dates: when the transaction was initiated, when it was completed, and when it was reconciled. Transactions also have a status: Pending, Cleared, Reconciled, Voided.

# Problem 33.5: Design a Class Diagram

Design an inheritance hierarchy exhibiting distinct redundancy to satisfy the following problem definition:

There are several types of users on the system. There is the administrator, with unlimited access to all the system’s resources. There is an auditor, able to view everything on the system but make no changes. There are normal users who have complete access to their account but nothing else. In other words, there is a list of accounts to which they have access. Finally, there is a restricted user. This is like a normal user but has read-only access to a fixed set of accounts. Every user has a username, friendly name, and a password.