

Python Programming

Polymorphism Homework 1

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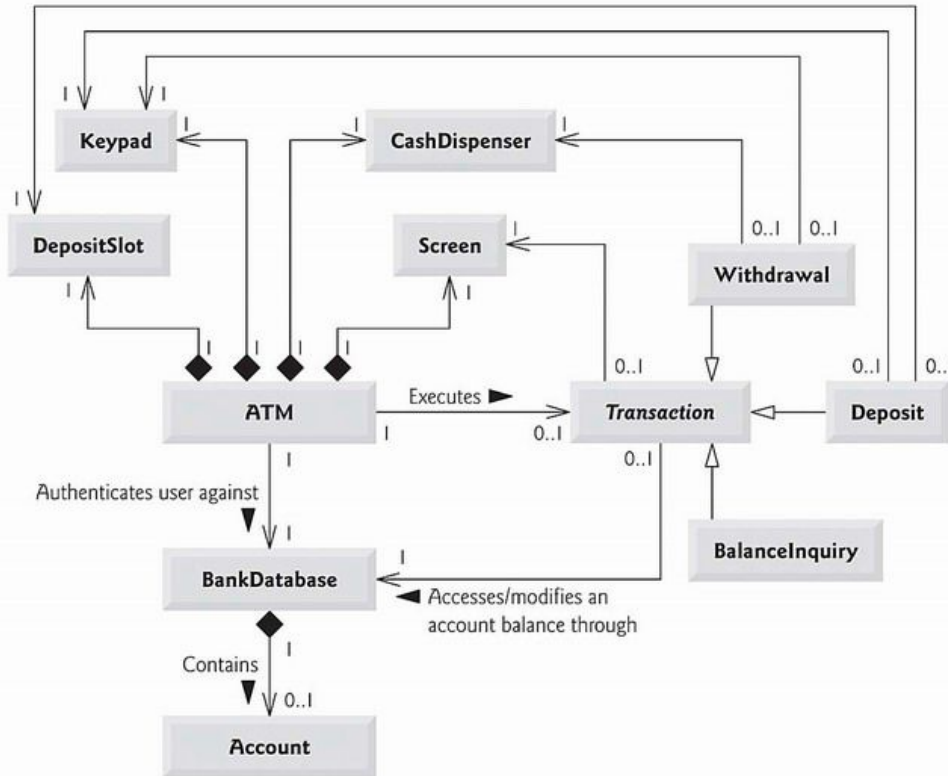
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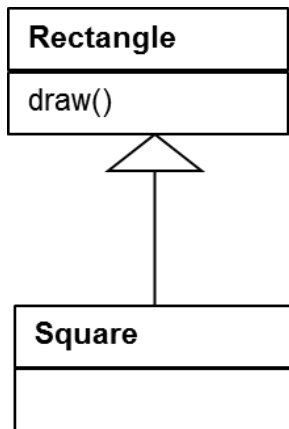
Problem #1: Explain ATM-Machine UML



- Like most of ATM Machine
 - You can check your balance
 - Withdraw or deposit money
 - E.g. from separate parts



Problem #2: Square



- A fresh engineer designed the following diagram
 - Why do you think he thought this way?
 - Figure out a reason why it is a risky design?
 - Code this inheritance modeling
 - Figure out another way to design the same purpose

Problem #3: Package Delivery Service v2

- Recall our implemented packages: StandardPackage, TwoDayPackage, HeavyPackage
- Extend the system with the following:
 - The customer can create a shipment, which is set of packages of different types
 - Total shipment price = sum of each package price
 - Each shipment has information of card used for payment (debit or credit)
- Add a few new classes that represents the updated system

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”