

# **Exercise - 01**

**IS - 21215**

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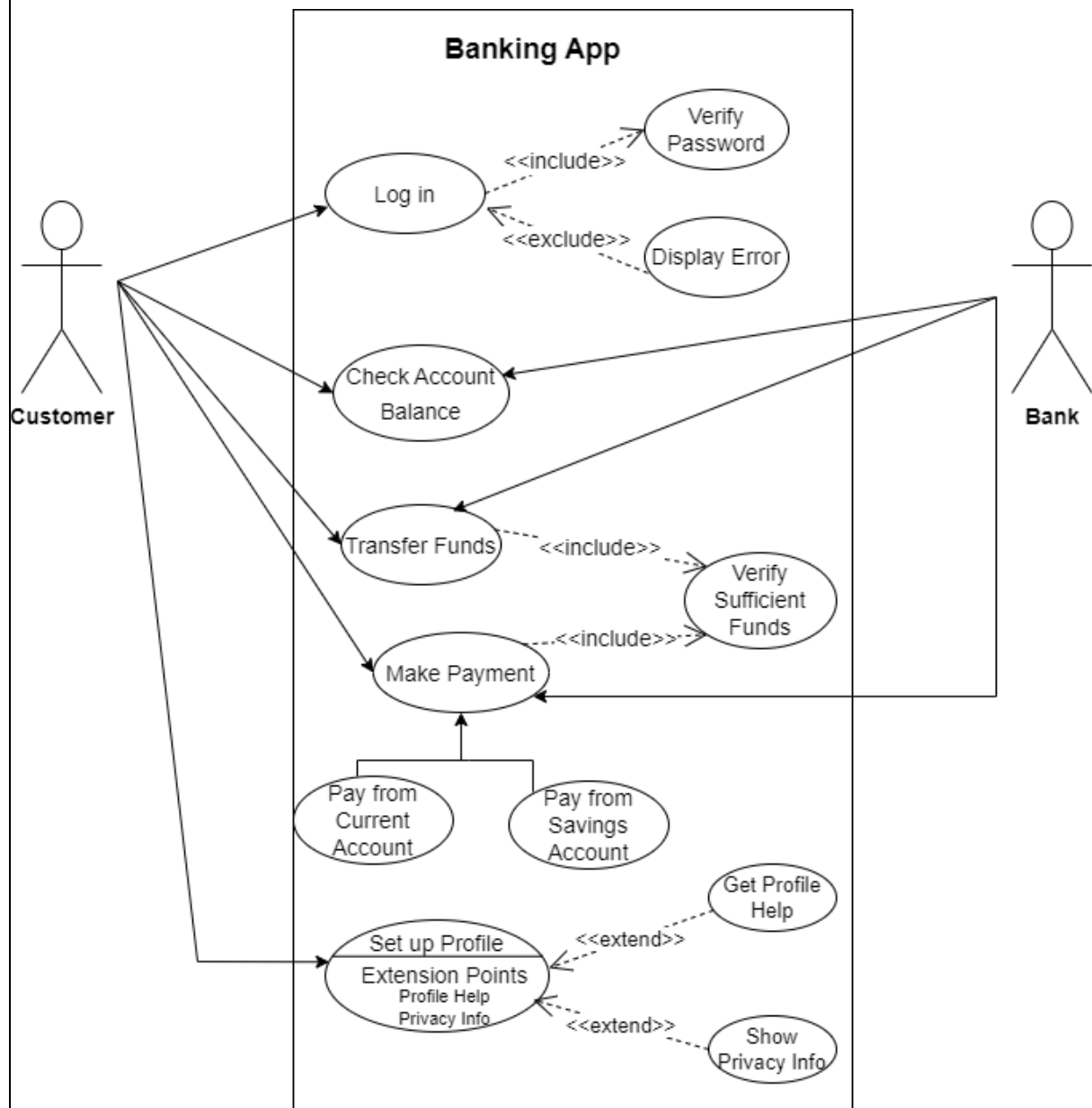
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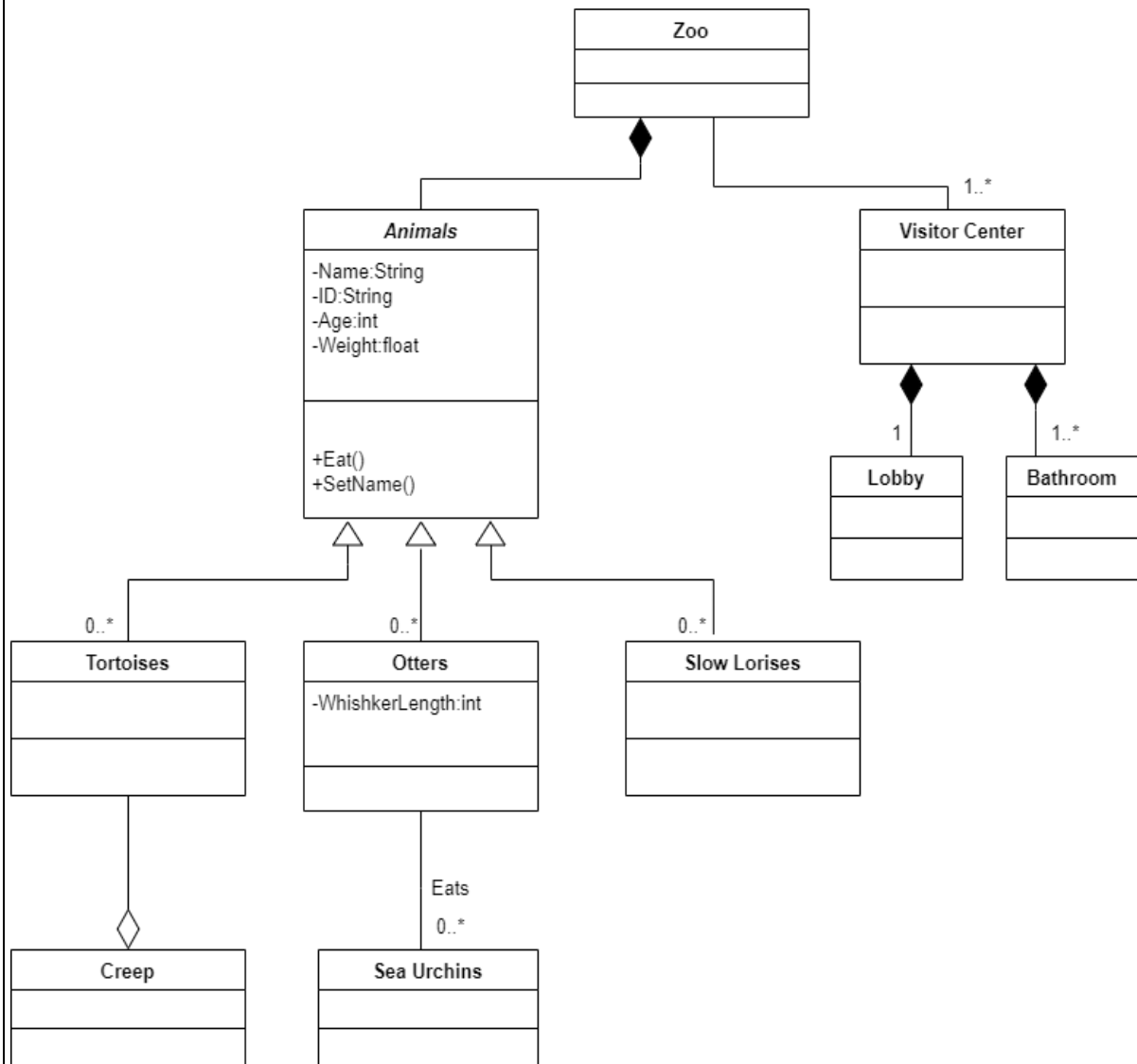
# 1. Banking APP

## UML Use Case Diagram



## 2. Zoo System

### UML Class Diagram



### **3. Online Shopping Cart Scenario**

There are two kinds of users who engage with the online shopping cart platform. They are customers and administrators. Both users have a user ID, password, login status, and registered date. As well, users can verify their logins.

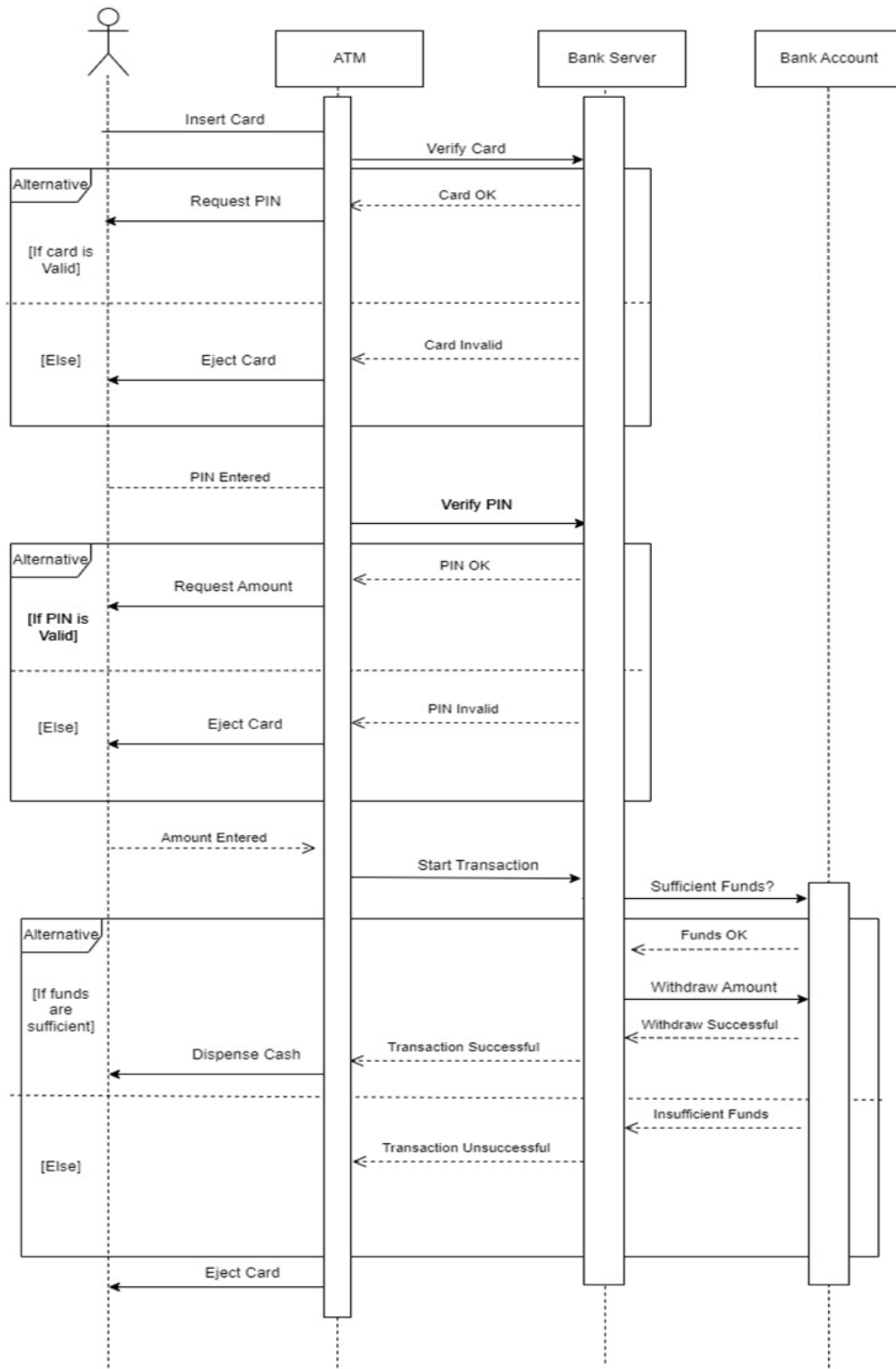
Administrator should provide name and email to the system and they are able to update the catalog. Customers should provide their name, address, email, credit card information, and account balance to the system. They can register or login to the system and update their profiles.

The customers have a shopping cart and it requires a cart id, product id, quantity of the product, and date added in order to add a product to the cart. Customers are able to add cart items to the cart, update the quantity, view cart details, and checkout the products in the cart.

Customers can place orders by providing attributes such as order id, date created, date shipped, customer's name, customer id, status of the order, and shipping id. An order consists of order details and shipping information.

Order id, product id, product name, quantity, unit cost, and subtotal are the attributes that come under order details and, using those attributes, the system is able to calculate the price. Shipping information contains shipping id, shipping type, shipping cost, and shipping region. Furthermore, shipping information can be updated.

#### 4. Interactions at a Banking ATM Sequence Diagram



## 5. Vending Machine

### Behavioral State Machine Diagram

