How to evolve your problem statement

Single Application, Single Class, Single Method

- A local bank operates in a city. A bank has a bank name, address, balance amount and code. A bank can only give its own complete information.

To be able to define :
Class
Attributes
Member function.
(Constructor and Destructor implicit)

Single Application, Single Class, Multi Method

- A local bank operates in a city. A bank has a bank name, address, balance amount and code. A bank can only give its own complete information. A bank can update its personnel information and relocate itself.

1+ To be able to define multiple member functions.

Single Application, Multiple Class, Multi Method, Simple Relationship

- A local bank operates in a city. A bank has a bank name, address, balance amount and code. A bank can only give its own complete information. A bank can update its personnel information and relocate itself. At the bank a user can have only one account. Users should be able to view their account balance, withdraw cash (i.e., take money out of an account) and deposit funds (i.e., place money into an account).

2 + To be able to implement simple association between single and multiple classes.

Single Application, Multiple Class, Multi Method, Complex Association

- A local bank operates in a city. A bank has a bank name, address, balance amount and code. A bank can only give its own complete information. A bank can update its personnel information and relocate itself. At the bank a user can have only one account. Users should be able to view their account balance, withdraw cash (i.e., take money out of an account) and deposit funds (i.e., place money into an account).A user can open account in other banks.

3 + To be able to implement complex association among multiple classes.

Single Application, Multiple Class, Multi Method, Aggregation/ Composite Association

- A local bank operates in a city. A bank has a bank name, address, balance amount and code. A bank can only give its own complete information. A bank can update its personnel information and relocate itself. At the bank a user can have only one account. Users should be able to view their account balance, withdraw cash (i.e., take money out of an account) and deposit funds (i.e., place money into an account).A user can open account in other banks. Bank has installed a new automated teller machine (ATM) to allow users (i.e., bank customers) to perform basic financial transactions. The user interface of the automated teller machine contains the following hardware components:
- • a screen that displays messages to the user
- • a keypad that receives numeric input from the user
- • a cash dispenser that dispenses cash to the user and
- • a deposit slot that receives deposit envelopes from the user.
- An ATM session consists of authenticating a user (i.e., proving the user's identity) based on an account number and personal identification number (PIN), followed by creating and executing financial transactions. To authenticate a user and perform transactions, the ATM must interact with the bank's account information database.

4+ To be able to implement aggregation and composition among multiple classes.