

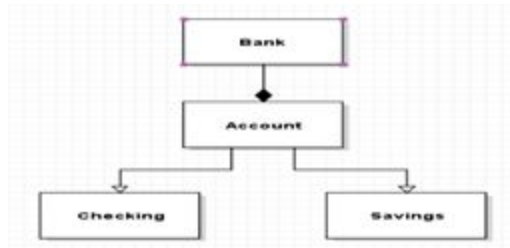
CS 162 Final Project

Skills used from the course:

- **Classes**
- **Exceptions**
- **Files**
- **Inheritance**
- **Plotting**
- **Searching Algorithms**
- **Sorting Algorithms**

Structure

- Simulate a bank that has customer accounts supporting opening/closing, withdrawals, and deposits of money.
- The program should be designed for a bank teller and should have a menu that allows the teller to do the actions in the bullet above, including to quit the program.
- The structure of this should be classes using inheritance as follows:



- It should be possible to close an account; operations against a closed account must fail.
- There will be a bank class that holds multiple checking and savings accounts.

Exception messages

Sometimes it is necessary to raise an exception. When you do this, you should include a meaningful error message to indicate what the source of the error is. This makes your code more readable and helps significantly with debugging.

- Create appropriate exceptions

Processing

- Output accounts to separate files by type (e.g., there is one file for checking and one for savings)
- Input account files by type.

- Once a file of accounts is input sort the accounts in order of last name on account.
- Print out the list.
- Create a search to search for a specific account.
- Print out the account information if the account exists or handle what happens if it does not exist.
- Create a plot of the total amount in each type of account.