# ATM.Model Description

**Class:** Bank

**Notable Methods:** getUserAccount(…), getUserBankAccounts(…), getBankAccount(…)

**Description:** The Bank class simulates a database of accounts that can be queried.

**Class:** BankAccount

**Notable Methods:** withdraw(…), deposit(…), setAccountLock(…)

**Description:** The BankAccount class contains account information like name, ID, PIN, UserAccount, and a balance. The methods provide account balance management and ability to lock down the BankAccount. To ensure data consistency an object lock was placed around withdraw, deposit and setAccountlock so that when the object is being acted on concurrently only one thread is updating the balance/lock at a time.

**Class:** Receipt

**Notable Methods:** addWithdraw(…), addDeposit(…), addTransfer(…), PrintReceipt()

**Description:** The Receipt class records the account actions done by an Agent (see atm.contoller) to be displayed when PrintReceipt is called.

**Class:** UserAccount

**Notable Methods:** AddBankAccount(…), RemoveBankAccount(…), GetBankAccounts()

**Description:** The UserAccount class contains account information like name, ID, bank accounts owned by the user. Adding a bank account also associates the owner on the BankAccount object before adding it to the list while removing disassociates the owner on the BankAccount after removing it from the list.