

Account

-name : String
-id : int
-balance : double
-annualInterestRate : double
-dateCreated : java.util.Date
-transactions : ArrayList

Account()
Account(newID : int, newBalance : double)
Account(newName: String, newID : int, newBalance : double)
+getID() : int
+setID(newID : int) : void
+getBalance() : double
+setBalance(newBalance : double) : void
+getAnnualInterestRate() : double
+setAnnualInterestRate(newRate : double) : void
+getDateCreated() : java.util.Date
+getMonthlyInterestRate() : double
+getMonthlyInterest() : double
+makeWithdrawal(amount : double) : void
+makeDeposit(amount : double) : void
+toString() : String

Name data field

Account ID default = 0

Account balance default = 0

Account interest rate default = 0

Account date created

Transaction data field

No-arg constructor

Create an account with specified ID and balance.

Create an account with name, ID ,
and balance

Get ID and return it.

Set a new ID number

Get current balance and return it

Set balance

Get annual interest rate and return it.

Set annual interest rate.

Get the date account was created.

Compute monthly interest rate equal to annual interest divide by 12.

Compute monthly interest earned = balance * monthly interest rate.

Withdraw money from account.

Deposit money into account

Create a string representation of account

Transaction

-date : java.util.Date
-type : char
-amount : double
-balance : double
-description : String

+Transaction(type : char, amount : double, balance : double, description : String)
+getDate() : java.util.Date
+getType() : char
+setType(newType : char) void:
+getAmount() : double
+setAmount(newAmt : double) : void
+getBalance() : double
+setBalance(newBal : double) : void
+getDescription() : String
+setDescription(newDesc : String) : void
+toString() : String

The date of this transaction

The type of transaction 'W' for withdrawal 'D' for deposit

The amount of transaction

The new balance after this transaction

The description of this transaction

Construct a Transaction with the specified
date, type, balance, and description.

Return the date of transaction

Return the type of transaction

Set the type of transaction

Return the amount of transaction

Set the amount of transaction

Return the balance

Set the balance

Return the description

Set the description

Create a string representation of transaction