John Maksuta

Dr. Tankeh

CPS231-610

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Final Project

This is the URL for the source code in GitHub:

(https://github.com/JohnMaksutaDCC/Final-Project.git)

I created the EmployeeBank class which inherits from the Employee class and contains a field instance of BankAccount. It has methods to deposit and withdraw money from the account. I included a Main class in Main.java which has the test code for the EmployeeBank.

**Git Clone Repository Instructions:**

(To Clone the repository, you must have Git installed.)

1. Open Git bash in a root directory where you want to create the project directory
2. Clone the repository using the following command:

git clone <https://github.com/JohnMaksutaDCC/Final-Project.git>

1. Git will create a folder “Final-Project” in the directory where you are in git bash that contains the files in the project and a .git folder that holds the repository

**In Eclipse:**

To use in Eclipse, simply create a new java project and use the above steps from a git bash in the “src” directory of the new java project.

**Project Summary and Usage:**

The project is a contains several class files and the .java files that contain examples which were performed in Week 9 and Week 13. They are as follows:

**Main Project files:**

Main.java

Person.java

Employee.java

EmployeeBank.java

BankAccount.java

**Week 9 Files:**

Person.java

Employee.java

Faculty.java

ExampleEmployees.java

ExampleEmployees2.java

ExampleEmployees3.java

ExampleEmployees4.java

ExampleEmployees5.java

ExampleEmployees6.java

ExampleEmployees7.java

ExampleEmployees8.java

**Week 13 Files:**

BankAccount.java

CheckingAccount.java

SavingsAccount.java

**Description:**

The Main.java file contains the Main class which has the main method that runs the demo program which demonstrates the EmployeeBank class.

The EmployeeBank class inherits from Employee which inherits from Person. Employee Bank class contains a field of the Reference Type BankAccount which it uses to perform the withdrawals and deposits and checking the balance. EmployeeBank inherits all other fields from Employee class.

**Class EmployeeBank**

Inheritance:

Object

Person

Employee

EmployeeBank

**Field Summary**

Fields

|  |  |
| --- | --- |
| Modifier and Type | Field and Description |
| private BankAccount | bankAccount  A BankAccount that holds a balance and performs deposits and withdrawals against the balance. |

**Constructor Summary**

|  |
| --- |
| Constructor and Description |
| EmployeeBank()  The default constructor. |
| EmployeeBank(int employeeNumber, int accountNumber, String firstName, String lastName, String emailAddress, double initialCapital)  Creates a new instance of EmployeeBank with the provided fields. |
| EmployeeBank(int employeeNumber, int accountNumber, String firstName, String lastName, String emailAddress)  Creates a new instance of EmployeeBank with the provided fields. |
| EmployeeBank(String s)  Creates a new instance of EmployeeBank with zero balance. The String parameter s was used in one of the examples from Week9 and Week13 but is not functional. Use the default constructor instead. |

**Method Summary**

|  |  |
| --- | --- |
| Modifier and Type | Method and Description |
| public BankAccount | getBankAccount()  Gets the instance of the BankAccount. |
| public void | setBankAccount(BankAccount bankAccount)  Sets the instance of the BankAccount. |
| public void | deposit(double amount)  This method deposits money from the employeeBank's BankAccount. |
| public void | deposit(String amount)  This method deposits money from the employeeBank's BankAccount. |
| public void | withdraw(double amount)  This method withdraws money from the employeeBank's BankAccount. |
| public void | withdraw(String amount)  This method withdraws money from the employeeBank's BankAccount. |
| public String | toString()  Returns a String representation of the object. |

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| Methods inherited from class java.lang.Object |
| clone, finalize, getClass, notify, notifyAll, wait, wait, wait |

**Class Employee**

Inheritance:

Object

Person

Employee

**Field Summary**

Fields

|  |  |
| --- | --- |
| Modifier and Type | Field and Description |
| private int | employeeNo  The employee number or index |
| private int | accountNo  The account number. |
| private String | emailAddress  The email address. |
| private double | initialCapital  The initial capital. |
| private static String | employer  The employer. |

**Constructor Summary**

|  |
| --- |
| Constructor and Description |
| Employee()  The default constructor. |
| Employee (int employeeNumber, int accountNumber, String firstName, String lastName, String emailAddress, double initialCapital)  Creates a new instance of EmployeeBank with the provided fields. |
| Employee (int employeeNumber, int accountNumber, String firstName, String lastName, String emailAddress)  Creates a new instance of EmployeeBank with the provided fields. |
| Employee (String s)  Creates a new instance of EmployeeBank with zero balance. The String parameter s was used in one of the examples from Week9 and Week13 but is not functional. Use the default constructor instead. |

**Method Summary**

|  |  |
| --- | --- |
| Modifier and Type | Method and Description |
| public int | getEmployeeNo()  Gets the employee no. |
| public void | setEmployeeNo(int employeeNo)  Sets the employee no. |
| public int | getAccountNo()  Gets the account no. |
| public void | setAccountNo(int accountNo)  Sets the account no. |
| public String | getEmailAddress()  Gets the email address. |
| public void | setEmailAddress(String emailAddress)  Set the email address. |
| public double | getInitialCapital()  Gets the initial capital |
| public void | setInitialCapital(double initialCapital)  Sets the initial capital |
| public String | getEmployer()  Gets the employer. |
| public void | setEmployer(String employer)  Sets the employer. |
| public String | getInitials()  Gets the employee's initials of the first name and last name. |
| public boolean | equals(Employee that)  Compares the this instance of Employee against another. |

|  |
| --- |
| Methods inherited from class java.lang.Object |
| clone, finalize, getClass, notify, notifyAll, wait, wait, wait |

**Class Person**

Inheritance:

Object

**Field Summary**

Fields

|  |  |
| --- | --- |
| Modifier and Type | Field and Description |
| private String | firstName  This is the first name of the person. |
| private String | lastName  This is the last name of the person. |

**Constructor Summary**

|  |
| --- |
| Constructor and Description |
| Person()  The default constructor. |

**Method Summary**

|  |  |
| --- | --- |
| Modifier and Type | Method and Description |
| public String | getFirstName()  Gets the first name. |
| public void | setFirstName(String firstName)  Sets the first name. |
| public String | getLastName()  Gets the last name. |
| public void | setLastName(String lastName)  Sets the last name. |

|  |
| --- |
| Methods inherited from class java.lang.Object |
| clone, finalize, getClass, notify, notifyAll, wait, wait, wait |