

LAB EXERCISE

ErrorCheck

Assignment:

1. Modify the `CheckingAccount` class example from Lesson 6 to throw an `IllegalArgumentException` in any of the following circumstances:
 - when the account is constructed with a negative balance,
 - when a negative amount is deposited, or
 - when the account is overdrawn (an amount that is not between 0 and the current balance is withdrawn).
2. An `IllegalArgumentException` is an unchecked exception that is thrown to indicate that a method has been passed an illegal or inappropriate argument. More detailed documentation can be found at <https://docs.oracle.com/javase/7/docs/api/java/lang/IllegalArgumentException.html>.
3. Write a test program that causes all three exceptions to occur and catches all of them.

Instructions:

1. Modify the `CheckingAccount` class to handle errors and write a test program as indicated above.
2. Run the program. Turn in your source code and run output.
3. Here is a sample run of the test program (note that user input is in ***bold italics***):

```
ErrorFreeChecking Test

Please enter the starting balance --> -1234.56
Error CheckingAccount: negative initial balance

Please enter the starting balance --> 1250.00

Account opened with balance of 1250.0

Please enter the amount to deposit --> -15.95
Error deposit: negative amount

Please enter the amount to deposit --> 150

Deposit made. Current account balance = 1400.0

Please enter the amount to withdraw --> 2000
Error withdraw: illegal amount

Please enter the amount to withdraw --> -50
Error withdraw: illegal amount

Please enter the amount to withdraw --> 650

Withdrawal made. Current account balance = 749.85

Thank you for using ErrorFreeChecking...goodbye!
```