

Homework 2

Due January 28th, 11:00 AM

50 points

CS 2235

Data Structures and Algorithms

1. Using the CreditCard class:
 - a. Modify the CreditCard class to include a method that changes the account number. Demonstrate your method works by changing the account number of the California Savings card, wallet[0], to 0000-1111-2222-3333 and printing the new number.
Note: This class treats the account number as a String in the format "0000-0000-0000-0000". Use this format when demonstrating your change.
Hint: Use
wallet[0].yourMethod(yourNewAccountNumber) to change the limit and wallet[0].getAccount() to print it.
 - b. Modify the CreditCard class so that it ignores any request to process a negative payment amount and informs the user of an invalid payment amount. Test your modification by attempting a payment of -100 to any of the three cards using the makePayment method.

Submit your source code and output screenshots. The CreditCard.java file is posted on Moodle.

Scoring

1. 10% - Code compiles without errors
2. 20% - New method created and performs intended function
3. 20% - Method demonstrated correctly with new account number shown in output
4. 20% - Correct Modifications done to program for a negative payment amount
5. 20% - Modifications demonstrated and user informed of invalid payment amount
6. 10% - Meaningful comments and header

Sample Output:

```
The account number for this card is: 0000-1111-2222-3333  
This is a invalid payment amount
```