

Chapter 13 – Extra Practice

Extra Practice

Extra practice is for those who would like to do some extra practice projects to further hone their skills learned in each assignment. There are no additional points to be gained by completing these projects.

Card Dealer

Create an object-oriented program that creates a deck of cards, shuffles them, and deals the specified number of cards to the player.

```
Card Dealer

I have shuffled a deck of 52 cards.

How many cards would you like?: 7

Here are your cards:
Jack of Hearts
Jack of Diamonds
2 of Diamonds
6 of Spades
Jack of Spades
6 of Hearts
King of Diamonds

There are 45 cards left in the deck.

Good luck!
```

Specifications

- Use a Card class to store the rank and suit for each card. In addition, use a method to get a string representation for each card such as “Ace of Spades”, “2 of Spades”, etc.
- Use a Deck class to store the 52 cards in a standard playing deck (one card for each rank and suit):
ranks: 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King
suits: Clubs, Diamonds, Hearts, Spades
- The Deck class should include a method that shuffles the deck, a method that counts the number of cards in the deck, and a method that deals a card from the deck, which should reduce the count of the cards in the deck by 1.
- When the program starts, it should get a new deck of cards, shuffle them, and display a message that indicates the total number of cards in the deck. To shuffle the cards, you can use the shuffle function of the random module described in chapter 6 in the text.
- The program should prompt the user for the desired number of cards. Then, it should deal the user the desired number of cards and display a message that indicates the number of cards left in the deck.

Customer Viewer

Create an object-oriented program that reads a list of Customer objects from a CSV file and allows the user to enter the data for a customer by specifying the customer's ID.

```
Customer Viewer

Enter customer ID: 103

Art Venere
8 W Cerritos Ave #54
Bridgeport, NJ 08014

Continue? (y/n): y

Enter customer ID: 104

Lenna Paprocki
Feltz Printing
639 Main St
Anchorage, AK 99501

Continue? (y/n): y

Enter customer ID: 99

No customer with that ID.

Continue? (y/n): n

Bye!
```

Specifications

- You should find the customers.csv file in Assignment 13 section of Canvas that contains customer data.
- Use a Customer class to store data. This class should include these attributes: id, firstName, lastName, company, address, city, state, zip.
- In addition, this class should include a property or method that returns the full address. This address should have three lines if the company attribute is empty or four lines if the company attribute is not empty.
- Create a function that reads the customer data from a CSV file and creates Customer objects from it.
- To find the customer with the specified ID, you need to loop through each Customer object in the list of Customer objects and check whether the specified ID matches the ID stored in the Customer object.
- If the specified ID isn't found, display an appropriate message.