

Students:

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20.5 Program 2a: Playing Cards

Objectives

1. Practice with classes and objects
2. Code a class of playing cards

Background Reading and Resources

- ZyBooks Chapter 7 Objects and Classes
- Make sure you have an IDE that you can use

Program to turn in

We are going to stick with this playing cards theme and this time just focus on the characteristics and functionality of just the cards themselves. In this program you will be creating a "PlayingCard.java" file in your IDEs that will have the following characteristics:

Class Variables:

```
public String rank;  
public String suit;
```

Class Methods:

```
class PlayingCard  
-public String getIdentificationString()  
-public PlayingCard(String rank, String suit)  
-public String goodCard(String rank)  
-public String getRank()  
-public String getSuit()  
-public String toString()
```

public String getIdentificationString(), this will be found in almost all of your programs for the year this just returns a string with the program number and letter, your first and last name, and your cssc number. For example:

```
Program 2a, Firstname Lastname
```

public playingCard(String rank, String suit), this will be your constructor for your class. Be sure to use "this." to set the rank and suit of the constructor to the class variables rank and suit.

public String goodCard(String rank), I am looking for some good cards when I draw them and this method is going to help me out. If a card is a "10", "Jack", "Queen", "King", or "Ace" have this method return a string that says:

```
That's a good card!
```

If it is not one of those cards have it say:

```
This card is alright.
```

public String getRank(), return the rank of my card

public String getSuit(), return the suit of my card

public String toString(), have this method return a string with the rank and the suit of the card in the format of how you would say it's name. So for example:

```
2 of Hearts
```

or

```
Ace of Spades
```

Help

Be sure to get started with plenty of time to work on this. If you need any help with anything be sure to stop by Professor Kraft's office hours, or any of the TAs that are available in the lab. You can also put your questions in the discussion to see if any of your fellow classmates might be able to assist you. I'm sure all of us would be glad to help you out. Have fun and go learn something!

LAB
ACTIVITY

20.5.1: Program 2a: Playing Cards

15 / 15



Submission Instructions

Compile command

```
javac PlayingCard.java -Xlint:all -  
encoding utf-8
```

We will use this command to compile your code

Upload your files below by dragging and dropping into the area or choosing a file on your hard drive.

Playing...d.java

Drag file here
or[Choose on hard drive.](#)[Submit for grading](#)

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1: Unit test ^ 3 / 3

Tests makes a "3 of Clubs"

2: Unit test ^ 3 / 3

Test checks to see if "3 of Clubs" is a good card

3: Unit test ^ 1 / 1

Test getIdentificationString()

4: Unit test ^ 3 / 3

Tests makes an "Ace of Spades"

5: Unit test ^ 3 / 3

Test checks to see if "Ace of Spades" is a good card

6: Unit test ^ 1 / 1

Tests "3 of Clubs" rank

7: Unit test ^ 1 / 1

Tests "3 of Clubs" suit