

# Project 4

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**Due** Mar 4 by 11:59pm      **Points** 50      **Submitting** a file upload

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For this project, I want you to create another game. This time, there is going to be a little more restraints though.

The game you will make is kind of like the card game war, only with dice instead of cards. The user will input how many dice they are rolling, and the number of sides on the dice.

The player will start with a set amount of "money" (you can choose the amount).

You will choose an amount you are betting on the next play

You and a computer will both roll the amount of dice, and determine the winner (by sum of dice)

You will gain or lose the money bet

You will then choose to bet again or to cash out

The game will continue until you cash out or are bankrupt.

What you should include in your code:

A dice class which should include (you may include more than this list)

- constructor
- string magic method
- All Comparison magic methods (6 in total listing in slides)
- An add operation magic method (this may be useful in the next class)
- some way to roll it (this may be its own method or in the constructor)

A "Cup of Dice" class which should include (you may include more than this list)

- constructor
- A list of dice defined on creation
- string magic method
- All Comparison magic methods (6 in total listing in slides)
- Some way to roll all dice (this may be its own method or in the constructor)

A main method where that runs your game (you may have other methods as well)

**Some Rubric (1)**

Criteria	Ratings		Pts
<p>Coding Style</p> <p>Comments are used well to explain the code. Variables are named reasonably. Indentation matches expectations. Named constants are used instead of placing values directly into the code. Code is generally readable. Etc.</p>	<b>7 pts Full Marks</b>	<b>0 pts No Marks</b>	7 pts
<p>Uploading To Git</p> <p>The project is uploaded correctly to your git repository</p>	<b>3 pts Full Marks</b>	<b>0 pts No Marks</b>	3 pts
<p>Dice Class</p> <p>The dice class is created with constructor, string, and add</p>	<b>8 pts Full Marks</b>	<b>0 pts No Marks</b>	8 pts
<p>Dice Comparisons</p> <p>The 6 Comparison Methods are included</p>	<b>7 pts Full Marks</b>	<b>0 pts No Marks</b>	7 pts
<p>Cup of Dice Class</p> <p>The Cup of Dice Class is created with constructor and string method</p>	<b>8 pts Full Marks</b>	<b>0 pts No Marks</b>	8 pts
<p>Cup of Dice Comparisons</p> <p>The 6 comparisons are included in the Cup of Dice Class</p>	<b>7 pts Full Marks</b>	<b>0 pts No Marks</b>	7 pts

Criteria	Ratings		Pts
Game is Playable The Game is completely playable as descibed	10 pts Full Marks	0 pts No Marks	10 pts
Total Points: 50			