

1 TOTAL WAR

- **Extra Functionalities Implemented**

1. Changing how a draw in “war” is handled
 - a. In this application, if “war” is not possible because of the lack of cards then alternate “war” will occur.
 - b. the winner of the alternate “war” will be decided based on the top card **suit**
 - i. For example, player1 only has four cards left and the top card is the same as player2 in which “war” should have occurred. However, because you cannot get the fourth card then the winner will be decided by comparing the **suit** of the top card (order from lowest to highest: Diamonds, Clubs, Hearts, Spades).
 - ii. Please examine the Sample alternate “war” result scenarios below.
2. Making a particular type of card have special powers in a “battle” or “war”
 - a. Implemented in “war”
 - i. When “war” is not possible because of the lack of cards, the top card **suit** will be used to determine the winner/loser of the “war”.

- Sample alternate “war” result scenarios

First Sample Scenario:

Before

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Name: ComputerOne
Number Of Cards: 4
The 2 of Spades
The King of Diamonds
The 7 of Clubs
The 10 of Clubs
Top Card: The 10 of Clubs

Name: ComputerTwo
Number Of Cards: 48
The 2 of Clubs
The Queen of Spades
The 7 of Diamonds
The Ace of Clubs
The 4 of Clubs
The 6 of Spades
The 2 of Hearts
The 7 of Spades
The 3 of Spades
The 4 of Hearts
The 2 of Diamonds
The King of Spades
The 5 of Diamonds
The Jack of Hearts
The 6 of Diamonds
The Jack of Spades
The 3 of Clubs
The Jack of Diamonds
The 4 of Diamonds
The Jack of Clubs
The 9 of Diamonds
The King of Clubs
The 10 of Diamonds
The Ace of Diamonds
The 3 of Hearts
The Ace of Hearts
The 4 of Spades
The Ace of Spades
The 6 of Hearts
The Queen of Diamonds
The 3 of Diamonds
The 5 of Hearts
The 8 of Hearts
The 10 of Hearts
The 6 of Clubs
The 7 of Hearts
The 5 of Clubs
The 8 of Spades
The 8 of Diamonds
The Queen of Clubs
The 9 of Spades
The Queen of Hearts
The 5 of Spades
The 9 of Hearts
The 8 of Clubs
The King of Hearts
The 9 of Clubs
The 10 of Spades
Top Card: The 10 of Spades
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After

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Game Winner:
Name: ComputerTwo
Number Of Cards: 52
The 2 of Spades
The 8 of Clubs
The King of Diamonds
The King of Hearts
The 7 of Clubs
The 9 of Clubs
The 10 of Clubs
The 10 of Spades
The 2 of Clubs
The Queen of Spades
The 7 of Diamonds
The Ace of Clubs
The 4 of Clubs
The 6 of Spades
The 2 of Hearts
The 7 of Spades
The 3 of Spades
The 4 of Hearts
The 2 of Diamonds
The King of Spades
The 5 of Diamonds
The Jack of Hearts
The 6 of Diamonds
The Jack of Spades
The 3 of Clubs
The Jack of Diamonds
The 4 of Diamonds
The Jack of Clubs
The 9 of Diamonds
The King of Clubs
The 10 of Diamonds
The Ace of Diamonds
The 3 of Hearts
The Ace of Hearts
The 4 of Spades
The Ace of Spades
The 6 of Hearts
The Queen of Diamonds
The 3 of Diamonds
The 5 of Hearts
The 8 of Hearts
The 10 of Hearts
The 6 of Clubs
The 7 of Hearts
The 5 of Clubs
The 8 of Spades
The 8 of Diamonds
The Queen of Clubs
The 9 of Spades
The Queen of Hearts
The 5 of Spades
The 9 of Hearts
Number of Battle: 377
Number of War: 23
Press any key to continue . . .
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Second Sample Scenario:

Before

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Name: ComputerOne
Number Of Cards: 48
The 3 of Spades
The 4 of Hearts
The 7 of Clubs
The 6 of Diamonds
The 4 of Clubs
The 9 of Diamonds
The Queen of Spades
The King of Hearts
The 5 of Hearts
The 5 of Diamonds
The 8 of Diamonds
The Jack of Diamonds
The 3 of Clubs
The 9 of Spades
The 8 of Hearts
The Ace of Hearts
The 4 of Spades
The 5 of Spades
The 9 of Clubs
The Queen of Diamonds
The 3 of Hearts
The 6 of Clubs
The 3 of Diamonds
The King of Spades
The 6 of Spades
The 10 of Spades
The 7 of Spades
The Queen of Clubs
The Jack of Hearts
The Ace of Diamonds
The 7 of Diamonds
The 10 of Diamonds
The 2 of Clubs
The 4 of Diamonds
The Ace of Spades
The 8 of Clubs
The 5 of Clubs
The 7 of Hearts
The Ace of Clubs
The Jack of Clubs
The 2 of Hearts
The 2 of Diamonds
The 8 of Spades
The Jack of Spades
The 2 of Spades
The 9 of Hearts
The 10 of Hearts
The King of Diamonds
Top Card: The King of Diamonds

Name: ComputerTwo
Number Of Cards: 4
The 6 of Hearts
The 10 of Clubs
The Queen of Hearts
The King of Clubs
Top Card: The King of Clubs
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After

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Name: ComputerOne
Number Of Cards: 44
The 3 of Spades
The 4 of Hearts
The 7 of Clubs
The 6 of Diamonds
The 4 of Clubs
The 9 of Diamonds
The Queen of Spades
The King of Hearts
The 5 of Hearts
The 5 of Diamonds
The 8 of Diamonds
The Jack of Diamonds
The 3 of Clubs
The 9 of Spades
The 8 of Hearts
The Ace of Hearts
The 4 of Spades
The 5 of Spades
The 9 of Clubs
The Queen of Diamonds
The 3 of Hearts
The 6 of Clubs
The 3 of Diamonds
The King of Spades
The 6 of Spades
The 10 of Spades
The 7 of Spades
The Queen of Clubs
The Jack of Hearts
The Ace of Diamonds
The 7 of Diamonds
The 10 of Diamonds
The 2 of Clubs
The 4 of Diamonds
The Ace of Spades
The 8 of Clubs
The 5 of Clubs
The 7 of Hearts
The Ace of Clubs
The Jack of Clubs
The 2 of Hearts
The 2 of Diamonds
The 8 of Spades
The Jack of Spades
Top Card: The Jack of Spades

Name: ComputerTwo
Number Of Cards: 8
The 2 of Spades
The 6 of Hearts
The 9 of Hearts
The 10 of Clubs
The 10 of Hearts
The Queen of Hearts
The King of Diamonds
The King of Clubs
Top Card: The King of Clubs
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Third Sample Scenario:

Before

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Name: ComputerOne
Number Of Cards: 1
The 2 of Hearts
Top Card: The 2 of Hearts

Name: ComputerTwo
Number Of Cards: 51
The 6 of Spades
The Jack of Diamonds
The 4 of Clubs
The 8 of Spades
The 9 of Diamonds
The 10 of Spades
The 3 of Spades
The 7 of Clubs
The 7 of Hearts
The Jack of Spades
The 6 of Diamonds
The 8 of Diamonds
The 9 of Clubs
The Jack of Hearts
The 2 of Clubs
The 5 of Spades
The Jack of Clubs
The King of Spades
The 5 of Hearts
The 6 of Clubs
The Queen of Hearts
The Queen of Clubs
The 4 of Hearts
The 7 of Spades
The King of Clubs
The Ace of Clubs
The 8 of Clubs
The 4 of Spades
The Ace of Spades
The Ace of Hearts
The 2 of Spades
The King of Hearts
The 9 of Hearts
The 10 of Diamonds
The 3 of Clubs
The King of Diamonds
The 3 of Hearts
The Ace of Diamonds
The 4 of Diamonds
The 5 of Diamonds
The 3 of Diamonds
The 9 of Spades
The 5 of Clubs
The 10 of Clubs
The 6 of Hearts
The 10 of Hearts
The 7 of Diamonds
The Queen of Spades
The 8 of Hearts
The Queen of Diamonds
The 2 of Diamonds
Top Card: The 2 of Diamonds
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After

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Name: ComputerOne
Number Of Cards: 2
The 2 of Diamonds
The 2 of Hearts
Top Card: The 2 of Hearts

Name: ComputerTwo
Number Of Cards: 50
The 6 of Spades
The Jack of Diamonds
The 4 of Clubs
The 8 of Spades
The 9 of Diamonds
The 10 of Spades
The 3 of Spades
The 7 of Clubs
The 7 of Hearts
The Jack of Spades
The 6 of Diamonds
The 8 of Diamonds
The 9 of Clubs
The Jack of Hearts
The 2 of Clubs
The 5 of Spades
The Jack of Clubs
The King of Spades
The 5 of Hearts
The 6 of Clubs
The Queen of Hearts
The Queen of Clubs
The 4 of Hearts
The 7 of Spades
The King of Clubs
The Ace of Clubs
The 8 of Clubs
The 4 of Spades
The Ace of Spades
The Ace of Hearts
The 2 of Spades
The King of Hearts
The 9 of Hearts
The 10 of Diamonds
The 3 of Clubs
The King of Diamonds
The 3 of Hearts
The Ace of Diamonds
The 4 of Diamonds
The 5 of Diamonds
The 3 of Diamonds
The 9 of Spades
The 5 of Clubs
The 10 of Clubs
The 6 of Hearts
The 10 of Hearts
The 7 of Diamonds
The Queen of Spades
The 8 of Hearts
The Queen of Diamonds
Top Card: The Queen of Diamonds
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2 REFERENCES

Card and Deck Class

Huxford, S. (2016). *FIT1051 Programming foundations - Week10 Lab*. Melbourne: Monash University.