**Chapter: 6**

**Assignment: WAR!**

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**EXECUTIVE DESCRIPTION:**

**“WAR!” Vers. 1.0**

This program is called ”WAR!”. The program is ready for Beta testing.

This program is designed to run a modified version of the children’s card game “WAR!”. Using as little code as possible, I captured the player’s names (due to the nature of WAR there are only two), and ran a random number generator to select cards for the players. These two numbers are then compared and the winner gets a point. Once a player gets ten points, the game is over, the winner is announced, and the program ends. To play a second game, simply restart the program.

**INPUT**: I will ask the users to enter their name, as I always do. There is no error module as this is the only information I need the users to enter and I trust them to spell their names correctly. Immediately following this section, the game begins.

**PROCESS/ASSIGNMENT STATEMENTS**:

Here, I will be using a while loop with a dual counter. PlayerOne and PlayerTwo are counting up from 0 toward 10. The OR logical operator is used in Raptor to break the loop.

Assigning these variables:

PlayerOne = integer (contains the score for player one)

PlayerTwo = integer (contains the score for player two)

FirstNumber = integer (Randomly generated value between 1 and 13, Player one’s card value)

SecondNumber = integer (Randomly generated value between 1 and 13, Player two’s card value)

NameOne = string (player one’s first name)

NameTwo = string (player two’s first name)

These all must be initialized, or in other words, set to 0, with the exception of the names, which will be overwritten by the values given by the players at the beginning of the program.

**InputProcess Module**

I opted to combine input with processing here to make things tighter. My game is a series of selection structures. Namely a While loop, followed by nested if/then statements.

Here is a sample of the structure:

1. While (PlayerOne <= 10 And PlayerTwo <= 10)
2. Set FirstNumber = Floor(Random\*13) + 1
3. Set SecondNumber = Floor(Random\*13) + 1
4. Write “” + NameOne + “ has a card value of “ + FirstNumber + “.”
5. Write “” + NameTwo + “ has a card value of “ + SecondNumber + “.”
6. Write “”
7. Write””
8. If FirstNumber > SecondNumber Then
9. Set PlayerOne = PlayerOne + 1
10. Write “” + NameOne + “ wins the hand!”
11. //
12. If FirstNumber < SecondNumber Then
13. Set PlayerTwo = PlayerTwo + 1
14. Write “” + NameTwo + “ wins the hand!”
15. //
16. Else
17. Write “This round is a draw.”
18. End If
19. End If
20. End While

**Winner Module**

This segment of the code simply acts as final output for the program. Our winner is announced using an if/then statement to determine the outcome of the game, and we write a congratulatory statement to the screen using the name we captured earlier. After the winner is announced, I thank the players both for participating, and ask them to play again soon. This concludes the program.

**The program completed in 64 lines of code.**