Project 2

**Title:**

# The Beetle Game!

**Course:**

CSC-5

**Section:**

46023

**Due Date**:

July 31st ,2014

**Author**:

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**Introduction:**

Title: The Beetle Game

The way that “The Beetle Game” is played is that you have a certain number of players (in my codes case it’s two players) who are trolling one dice to try and draw their beetle first. For example, if you were to roll a 6, you would get to draw the body. You must roll a six first, otherwise you will not be able to draw anything else. Then you must roll a 5 to get the head. After a 5 and 6 it does not matter what you roll, it becomes how much you roll. For instance, you must roll a 1 twice in order to get two eyes. You must roll a 2 twice for both antenna. You must roll a 4 twice for both wings. And finally you must roll a 3 six times to get all six legs. The person with the least amount of rolls is the winner.

**Summary:**

Project size: 400+ lines of code

Number of Variables: Roughly about 25

Number of methods used: About 10

“The Beetle Game” took a bit longer to change the code in order to check off methods in the checklist. When I first turned it in, in Project 1, it was roughly about 1000 lines long because you have the option of playing two or three player. Due to how long the code was the first time I decided to change it down to two player. It displays the amount of rolls done before the correct number was rolled. I went up to 100 rolls because anymore would have been illogical, people would have gotten tired by then, and I wanted it to be as close to a random game as possible.

This Project took about 3 days to change and shorten the code.

It is much easier and much less complicated to write this code using arrays and calling functions.

**Description:**

The point of this program is to write the code to be able to output random results each time to be able to represent a dice. The dice is needed for this game to roll and draw the body parts of the beetle.

**Pseudocode**

Initialize

Call showRules function

Define Variables

Insert first name (Player 1)

Insert second name (Player 2)

Save names to file

Export names from file

Players roll for the body

Whoever throws less will win unless they tie

Players will roll for the head

Whoever throws less will win unless they tie

Player will roll for the eyes

Two eyes are required for each player

Sum the rolls for the eyes per player

Whoever throws less will win unless they tie

Players will roll for the antenna

Two antenna are required for each player

Sum the rolls for the antenna per player

Whoever throws less will win unless they tie

Players will roll for the wings

Two wings are required for each player

Sum the rolls for the wings per player

Whoever throws less will win unless they tie

Players will roll for the legs

Six legs are required for each player

Sum the rolls for the legs per player

Whoever throws less will win unless they tie

Call the sum value for the total of all throws per player

Output who has the least throws. They win

Request to play again

If yes, ‘y’

Otherwise exit program

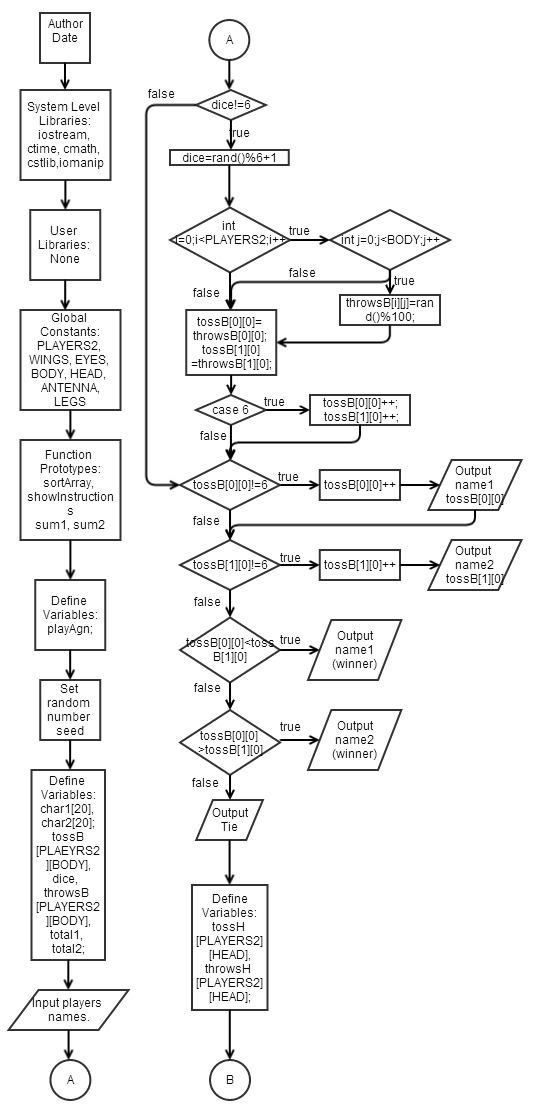
Define showRules function

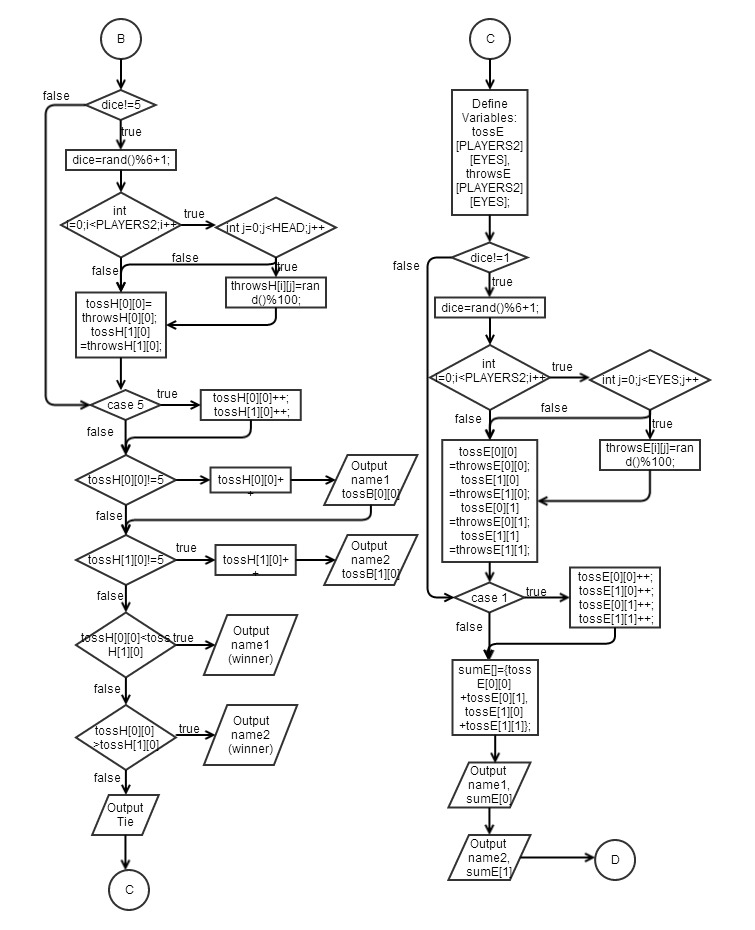
Define the sum value

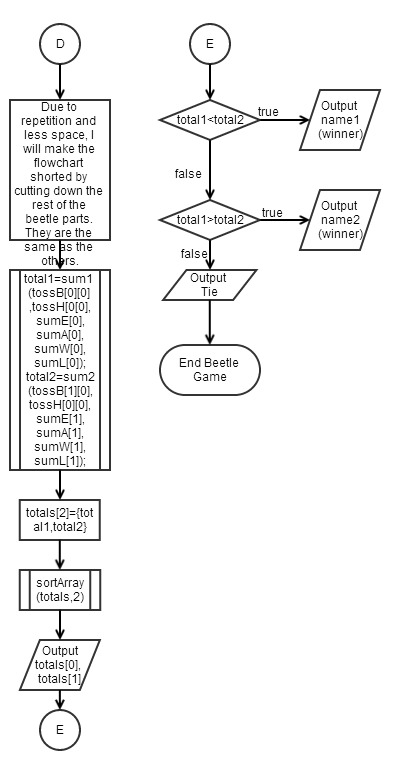
**Checklist:**

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| --- | --- |
| Chapter (Gaddis) | Examples in Code/Checklist |
| Chapter 6 | void showInstructions function  ^(lines 27, 44,456)  call sum value  ^(lines 406-407, 471-479) |
| Chapter 7 | two-dimensional array used in each beetle part<(lines 50, 52, 111-112, 162-163, 222-223, 282-283, 342-343)  one-dimensional array used on beetle part sums<(lines 202, 262, 322, 406-407) |
| Chapter 8 | sort array  ^(lines 487-505) |

**Flowchart**

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