

### **Dice Roll Software Requirements**

**1:** A die must contain some number of sides.

**1.1:** Default value for number of sides must be 6

**1.2:** Any other integer value must be able to be used for the number of sides of a die

**2:** A dice roll must return a number from 1 to the number of sides of the die.

**3:** The user must be able to choose the number of sides the die rolled will have.

**4:** The user must choose how many dice rolls to perform.

**5:** A die must be created with a set number of sides

**6:** The die must be rolled however many times the user chose.

**6.1:** Each roll must be stored to a list named results.

**7:** The number of occurrences of each value must be saved to a list named frequencies.

**8:** The data from the rolls must be printed to a bar chart.

**9.1:** The X-Axis must contain the value from each side of the die

**9.1.1:** The title of the X-Axis must be 'Result of Roll'

**9.2:** The Y-Axis must contain the frequencies of each value

**9.2.1:** The title of the Y-Axis must be 'Frequency of Result'

**9.3:** The main header of the chart must be 'Results of rolling D{num\_sides} {num\_tests} times'

**9.4:** The name of the chart must be '**d{num\_sides}\_{num\_tests}executions.html**'