Initial design:

**Main**

Calls Game in a do-while loop, looping until the user decides to quit.

**Game**

Constructor:

* Displays menu: Play, or quit. Quit returns to main and ends the program immediately.
* If play is selected, prompt for:
  + Number of rounds (up to 5000)
  + Type of die for each player
  + Number of sides of dice for each players (Must be greater than 2. can be different for both)
* Creates the necessary Die/LoadedDie objects
* Loops the number of rounds
  + Plays one round
  + output the detailed result of each round, including:
    - the side and type of die used for each player
    - the number each player rolls
    - the score result
* display the final score and the final winner of the game
* ~~Prompt to play again~~

Private:

Die for player 1

Die for player 2

Counter for player 1 score

Counter for player 2 score

**Die**

Protected:

Integer number of sides

Public:

Roll die – returns a random number between 1 and $sideNumber

**LoadedDie**

Public:

Roll die – returns a random number between 2 and $sideNumber

Test Plan

Input validation (user enters too high, too low, zero, decimal, letters)

Loaded die wins long term