Heidi Wiebers

Megan Bruening

<div align="center">Yahtzee</div>

Megan and I are going to reuse our game Yahtzee, from computer science 171. There will be many challenges in creating this game. We want to make a text file which will store the name of the user and whatever else we would like to know for that person. We will also use the text file for the game board and to output the final score of the game. We will also use a class that will store our functions that we have previously used in our original assignment. We will approach this by looking at our game and deciding what would be useful to group together into a class. We should be able to figure out how to address all of our challenges using what we have learned in class using classes and vectors. Below is a description of how the game works.

We are going to create the game Yahtzee. In this game there are five 6 sided dice, which are rolled 3 times. The player can keep as many dice as they like per roll. In the upper section there are 1's, 2's, 3's, 4's, 5's, and 6's. The players are looking to get over 62 in the upper section which is approximately three of a kind giving them a bonus of 35 points. In the lower section there is 3 of a kind (total of all the dice in that roll), 4 of a kind (total of all of the dice on that roll), a full house (3 of a kind and 2 of a kind for a total of 25 points), a small straight (a run of 4 numbers for a total of 30 points), and large straight (a run of 5 numbers for a total of 40 points) a yahtzee (5 of a kind for a total of 50 points), and chance (total of all of the dice in that roll). If the person rolls a yahtzee and counts it as a yahtzee they can earn an additional 50 points if a yahtzee is rolled on another turn. They will use that roll to count as something else for example five 6's would count as 30 points for 6's plus an additional 50 points because of the yahtzee. If the player takes a 0 on yahtzee but later receive a yahtzee, they will not get an additional 50 points for the yahtzee. For the purpose of this game we will challenge the player to get a certain amount of points, 250 for example, to win.