Reflecting on the Design Process- Sutton Elliott

1. Did you like your program topic? Why (not)?

I did like the project topic. It was a fun little game that I can play for an assignment for class, and it put everything together that we were learning about in class. The game that we made ended up being really easy, so unless you aren't paying attention, then you are going to beat the computer every single time. So, if I ever need a confidence boost for connect 4, then I can play against the computer.

2. Did your team stick with your initial bottom-up approach to program development, or did you switch to a different design approach at some point? Which approach did you prefer and why?

We stuck with the bottom-up design process that we used, using functions are the main thing that drove our program. This made the game split up into a few different functions for almost the whole thing. I personally like the top-down design process because I like to go piece by piece and make sure that I know which part is doing what.

3. Did your final design closely match the original hierarchy your team developed? In what ways is it the same? In what ways is it different?

It very closely matched the plan that we drew up. We started with the functions that we knew we were going to have, so that was the first thing that we figured out. In those ways it was the same. It was different in the more creative things that we put into it like the evil computer and the hall of fame that came with it.

4. Briefly describe the thing(s) you learned on your own, beyond what was covered in the lectures. How did you incorporate them into your program?

The thing that we mainly used that was new from the lecture notes is the function display(). We used this in our math labs sometimes to get a better look at the function or equation that we were using, so we used that in our game. This was used to get a good display of the board after each move that was made by the player and also the computer. Another thing was the pygame to make the graphics work the way that we wanted it to.

5. If you had more time to work on your program, what additional features would you want to add? Is there anything about your submitted program you would change?

If I had more time to work on it, then I would want to use the turtle graphics to make the board. It would look a ton cleaner if the board was the right colors and everything. It wouldn't be too hard since it would be mainly just squares and circles, so it could be done for the board. The board would be the main thing that I change since it is very robotic looking right now.

6. What was the most difficult part of this assignment? Please explain.

The most difficult part of the assignment was the actual winning part. The board could be played really well between the player and the computer, but when there was 4 in a row and someone won, then the game would keep going. We had to go part by part and see if it was win horizontally, vertically, diagonally. Getting that to work was definitely the hardest part.

7. Estimate the portion of the assignment completed by each member of your team (yourself included). Please explain any significant workload imbalances and give a brief summary of who did what. For this question it's ok to make a bulleted list instead of writing complete sentences.

- Jonathon- 25%- worked on the graphics part of the assignment and made the game check is the computer or player won
- Vedanti- 25%- worked on getting the moves to work and the computer to make its move after the player made a move
- Justin- 25%- Did the pdf and planned how we were going to do the project, wrote out the rules and came up with the evil computer/hall of fame
- Sutton (Me)- 25%- Did a bulk of the coding, most of the functions and got the file working and writing the hall of fame in a new file