Honors Java Progress Report

**Project**

For this Honors Project, I am creating a coin flip game. The app will have an icon of the head face coin. The app also includes background music. The user can start the game, then guess the coin by clicking one of the face buttons. Lastly, the plan was for there to be media components that show the coin flipping, the guessed answer, and the revealed answer.

**Progress**

Originally, the game was fully programmed. The game required that the player entered a “0” for heads or a “1” for tails. Any other input was an invalid entry, and the program requests another input. The program would then tell the player their current guess, if that guess was correct, and what the correct answer was. I also included a play again feature in the main program using a Boolean and do while loop. If the player entered ‘Y’ or ‘y’ the program would play again. It only accepted valid inputs and allowed the user to play again. Once I finished the console game, I needed to figure out how to include the video file of a coin flipping and create a display of the guessed answers. As I created the program, I realized that I was going to have to fully rewrite the console program and make it a GUI program.

Making the GUI was a very grueling and tedious task (I felt as if I enrolled into a Java 2 class). Now Booleans had to become buttons, outputs had to become labels, and there was a host of factors I never thought I would have to consider. I charted into the unknown and encountered hours of errors. I thought that adding music and video files would be as easy as adding an image file. But, after trying various methods, I finally realized that I would have to download some jars. Including the libraries properly was a task in itself.

Eventually, after a few days of frustration, I was finally able to get the background music playing. Most players only accepted ‘wav.’ files, and even then, I still could not seem to get the program to run without an error. Once I downloaded a Java zoom jar, the mp3 ran with quite some ease (and I had quite the mental celebration of this achievement). Then I ran into a brief issue where the music would not end until the song was over. I had to troubleshoot it and find the proper placement so it would close when the frame closed.

As for the rest of the GUI, one simple error of bracket placement in the coin panel caused a multitude of misleading compilation errors. After a few days, I was able to get the buttons and the program to run. I also was able to add labels that showed the guessed coin and text showing the correct answer. The last two days I could not get text placement exactly the way I wanted to and I also could not seem to get the flip videos I made to integrate into the program. I’m happy I was at least able to get the text to show.

**Conclusion**

Overall, there were a lot of things I did in this program that were probably well above my current level of understanding, which led to many frustrations and days of errors. For the most part, I was able to find a way to get everything in. The only thing I could not seem to implement was the video component, which was disappointing because I made some pretty nice flip video edits. I also would rather have the buttons within the same panel as the coin, but I couldn’t figure out within the time limit how to do so without errors. While the program could look a lot nicer and smoother, I’m content with the amount of effort I put into this program and the success that came with it.