CMSC 330 Project 1

Jade Pearl

Section 6381

Professor Yuhua Jiang

**Approach**

My approach to this first project was mainly that of a trial and error one. I first looked through the codes that were given through the skeleton zip (HollowPolygon, etc.) and used them as an example to help me figure out how to implement the other classes that were not yet created. I ran into a lot of syntactical errors with the tokens and needed to edit the Parser.java file quite frequently. After the parser functioned properly and the shapes were drawn, I edited the classes of other shapes I created like the RegularPolygon and Parallelogram because they would not be properly drawn at first due to trigonometric miscalculations.

**Test Plan**

To test out the elements of the project to make sure everything still were drawn correctly, I made 4 separate text files including the sample input given in the project assignment description. I tested both syntactically correct and incorrect cases.

Test 1: Sample Input

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Test 2: Randomized input 🡪 syntactically correct

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Test 3: Randomized input 2 🡪 syntactically correct

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Test 4: Randomized input 2 🡪 syntactically incorrect

A screenshot of a computer

Description automatically generated



**Lessons Learned & Possible Improvements**

I learned that this took a lot longer than I thought. I tried working on the project a little bit every day but it took a long time and some tutoring for me to be able to get everything working properly and all test cases to come out accurately. I also learned more about how parsers and lexers work in code. One of the ways I can improve is to certainly try to spend more time on bigger coding projects like this. I did not want to overwhelm myself, so I tried doing a bit of it every day. However, we truly have a week to do the projects. I could try to start early if possible or instead contribute an hour or two more of time toward the project.