Wanner HernandezR

CMSC405 Project 2

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April 8, 2021

**Project 2  
JOGL OpenGL Project**

In this project you will create a unique 3 graphics scene composed of OpenGL graphic components using transformation methods.

**Requirements:**

1. Using Netbeans or Eclipse, develop a JOGL application that displays a unique 3D scene. The scene has the following specifications:

a. Size: minimum 640x480  
b. Includes at least 6 different shapes  
c. Uses at least 6 different transformation methods

1. Use Java and JOGL for your implementation of OpenGL
2. All Java source code should be written using Google Java style guide.
3. Prepare, conduct and document a test plan verifying your application is working as expected.

This plan should include a test matrix listing each method you tested, how you tested it, and the results of testing.

**Source Code:**

* My3DScene.java
* MyShapes.java

**Added source:**

* gluegen-rt-natives-macosx-universal.jar
* gluegen.jar
* jogl-all-natives-macosx-universal.jar
* jogl-all.jar

**Test Cases:**

**Test case 1:** For the first test case my shape seems to be rotated to it side and easy to visualize.

A picture containing text, kite, flying, vector graphics

Description automatically generated

**Test case 2:** For these images all my shapes unlike previews to test case 1 have done a 90\* rotation plus move around

**Logo, company name

Description automatically generated**

**Test case 3:** For this image All have move around close to the center and some of the shapes are displaying a different combination of colors

Logo, company name

Description automatically generated

**Test case 4:** for this test I made sure we get a different combination of color and the shapes be more spread out making some of the shapes look like a 2D image.A picture containing text, flying, vector graphics, colorful

Description automatically generated

**Test case 5 Error:** For this test I wanted to show the biggest error of this code that gave me a lot of trouble during this code

Graphical user interface, application, Word

Description automatically generated

**Summary/Explanation:**

This week Project 2 was a really challenging experience for me because I ran into so many troubles trying to do a JOGL OpenGL project due to the fact that even when I added my Attachments GLU did not want to work for my compile. Through a lot of trials and watching multiple videos plus for the help of my classmates I was able to finally able to make my code compile. Through this week I learn to be very patience because I was working on this code for almost 3 weeks due to the fact that NetBeans at first was not opening properly so I had to switch to Eclipse for this project. For this week project I learn about creating a unique 3 graphics scene composed of OpenGL Graphic components and using transformation methods. In my code I was able to put 7 different shapes with different transformation, I was able to learn a lot on this week project and had to do a lot of trials and error to acquire my succeed end result in my code.