Project 2

JOGL OpenGL Project

Overview

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

2. Use Java and JOGL for your implementation of OpenGL
3. All Java source code should be written using Google Java style guide.
4. 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.

   Deliverables:
1. All Java source code used for this project. Code should adhere to the Google Java style guide.
2. Word or PDF file demonstrating with clearly labeled screen captures and associated well-written descriptions, the successful execution of your 3D graphics scene. The document should be well-written, well-organized, include the test plan, include page numbers, captions for all screen captures, and a title page including your name, class, section number and date. References should be included for all sources used and formatted in APA style.

Grading guidelines:

Attribute	Meets
Design	**20 points** Methods used to isolate functionality (10 points) Code is efficient without sacrificing readability and understanding. (5 points) Code can easily be used and maintained. (5 points)
Functionality	**50 points** Uses Netbeans or Eclipse to develop a JOGL application that displays a unique 3D scene. (10 points) Size of scene is at least 640x480. (10 points)

	Includes at least 6 different shapes. (10 points)
	Uses at least 6 different transformation methods (10 points)
	Use Java and JOGL for your implementation of OpenGL (10 points)
Testing	**10 points** Prepares, conducts and documents a test plan verifying application is functioning properly. (10 points)
Documentation and deliverables	**20 points** Submits all Java source code used for this project. (5 points) Code adheres to the Google Java style guide. (5 points) Submits Word or PDF file demonstrating with clearly labeled screen captures and associated well-written descriptions, the successful execution of your 3D graphics scene. (5 points) The document is well-written, well-organized, includes the test plan, includes page numbers, captions for all screen captures, and a title page including your name, class, section number and date. References are included for all sources used and formatted in APA style. (5 points)