Wanner HernandezR

CMSC405 Project 3

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**Project 3  
Three js Project**

**Overview**

In this project you will create a unique 3D animated scene composed of Three.js graphic components. The scene should include animation, lighting and multiple objects.

**Requirements:**

1. Using Three.js create a unique 3D animated scene. The scene has the following specifications: a. Size: minimum of 640x480

b. Includes at least 6 different shapes  
c. Uses multiple lighting effects  
d. Includes radio buttons, slider bars or other widgets to turn on or off certain components

of the animation.

1. Use Three.js
2. All JavaScript source code should be written using Google JavaScript style guide.(

http://google.github.io/styleguide/jsguide.html)

1. 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:**

* Three.js
* Animation.html/Animation.txt (The animation text makes it possible for the code to be read but they are both the same.)

**Directions:**

* To make all shapes rotate just select the pair of shapes you want to see rotate and after select “All Animation”
* To make a figure to stop moving deselect the pair.
* To change the size and play around with the shape the Up, Down, left and right keys makes the shapes that are selected do different effects.

**Test Cases/plan:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Shape** | **Animation?** | **Lighting?** | **Responds to Mouse Rotation?** |
| Torus | **Yes** | **Yes** | **Yes** |
| Dodecahedron | **Yes** | **Yes** | **Yes** |
| Cube | **Yes** | **Yes** | **Yes** |
| Icosahedron | **Yes** | **Yes** | **Yes** |
| Sphere | **Yes** | **Yes** | **Yes** |
| Decagon | **Yes** | **Yes** | **Yes** |

**Compile Test:**

**Graphical user interface, application

Description automatically generated**

**Test case 1:** For this I am testing Torus Knot and Dodecahedron Rotation

Graphical user interface, application

Description automatically generated

**Test case 2:** Testing Torus Knot and Dodecahedron Rotation the image shows a 180 degree with a pace animation of 20.

Graphical user interface, application

Description automatically generated

**Test case 3:** Testing both Torus Knot, Dodecahedron, Cube and Icosahedron Rotation.

Graphical user interface, application

Description automatically generated

**Test case 4:** 90 degree ration at a pace of 30, Torus Knot, Dodecahedron, Cube and Icosahedron Rotation.

Graphical user interface, application

Description automatically generated

**Test case 5:** Testing all 6 shapes but the difference is that sphere and decagon move at a speed of 50 pace make it faster than the other shapesGraphical user interface, application

Description automatically generated

**Test case 6:** 180 degree with a pace of 50, all figures.

**Graphical user interface, application

Description automatically generated**

**Summary/Explanation:**

This week Project 3 was really fun and an experimental experience to be honest I completed this project base on experimenting and making up shapes step by step. The fact that we had to create a unique 3D animated scene of Three.js graphic components made this project fun. I learn a lot throughout this week project because I was able to learn new skills. I always looking forward to learn more and take advice on how to make my experiments more exciting and do cool effects.