Homework 5 Nothing is Real: Don't hit Oto Game

Utilizing the tutorials available on wiki.jmonkeyengine.org, I have put together a game that is the culmination of everything I have learned. Like in V1.0 The scene employs materials from the town.zip folder for the background, also known as the root node. However, in the Don't hit Oto game there is also a custom height map beyond the town, and you can hear ocean waves crashing on the shore. You will note that the custom height map also has the Nothing is Real green as the "road". Lastly the area where all of the interactions take place is marked with the Nothing Is Real logo placed in the center of town. This space showcases an interactive block textured with the Nothing is Real logo. This block, a child node of the root node, can move in all directions and adjust its size in response to specific key presses. If you were to click on the logo block a hud with instructions on how to play will pop up. Click it again and it will disappear.

This version of the game also has "shootable" randomly colored cubes that react by getting smaller, marking the hit with a green blob, and allowing a spring of water to "pour" from the cube. There is also a headless black character that if you hit it, it will catch the golem on fire and the game will be over. When this action is triggered nothing else works. If the user clicks the tab key before they hit Oto, the position of the logo block and the size of the cubes will revert to their original position.

Each shot is accompanied by a satisfying gunshot noise and a mark, if the "shot" was directed in the designated area. Also, in the upper right hand corner a list will be populated showing the name of what was "hit".

Below is the basic starting position and scale for all nodes:



*Note: The greeting at the top and the instructions on the bottom remain on the gui, regardless of camera angle.

For demonstration purposes a different set of keys were chosen to demonstrate ability. Using the above image as reference, the following will demonstrate how the logo cube moves for certain key binds.

Move Left: "F" key



Notice the directions have a custom picture background.

Move Up: "T" key



6 (11)

Move Right: "H" key

Move Down: "B" key



Zoom In(Scale down): "R" key



Zoom Out(Scale up): "Y" key



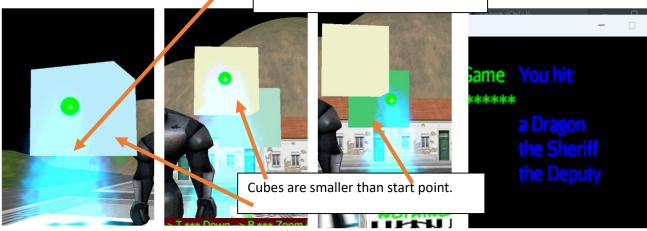
Rotate: "Space bar"



What happens when items are clicked:

Cubes:

Water flows with a higher gravity than fire and a significantly slower velocity to give the appearance of water flowing from the cube.



Notice when the user clicks on the cubes that they get marked with a green blob and "pour" water. I each of the following frames each block was clicked in succession. Notice that the water stops pouring from one block and moves on to the other. The fourth picture shows the list that populates in the right-hand corner when the cubes are clicked.

Floor:



List now says "the floor

Green marker where user clicked.

Logo cube:



Clicking on the cube again:



Note: The cube will display directions regardless of its position on the map. See below:





When this happens, the user must click the escape key to close the game. Nothing will happen when any other key is clicked.

Pressing the Tab key before hitting Oto:

Before pressing Tab:



All three cubes have been clicked multiple times reducing the size.

List populated to show hits.

After pressing Tab:



Size of cubes returned to original scale.

List still populated.

As noises are hard to demonstrate on paper, I have attached a short video that demonstrates the functions of the game including sound.