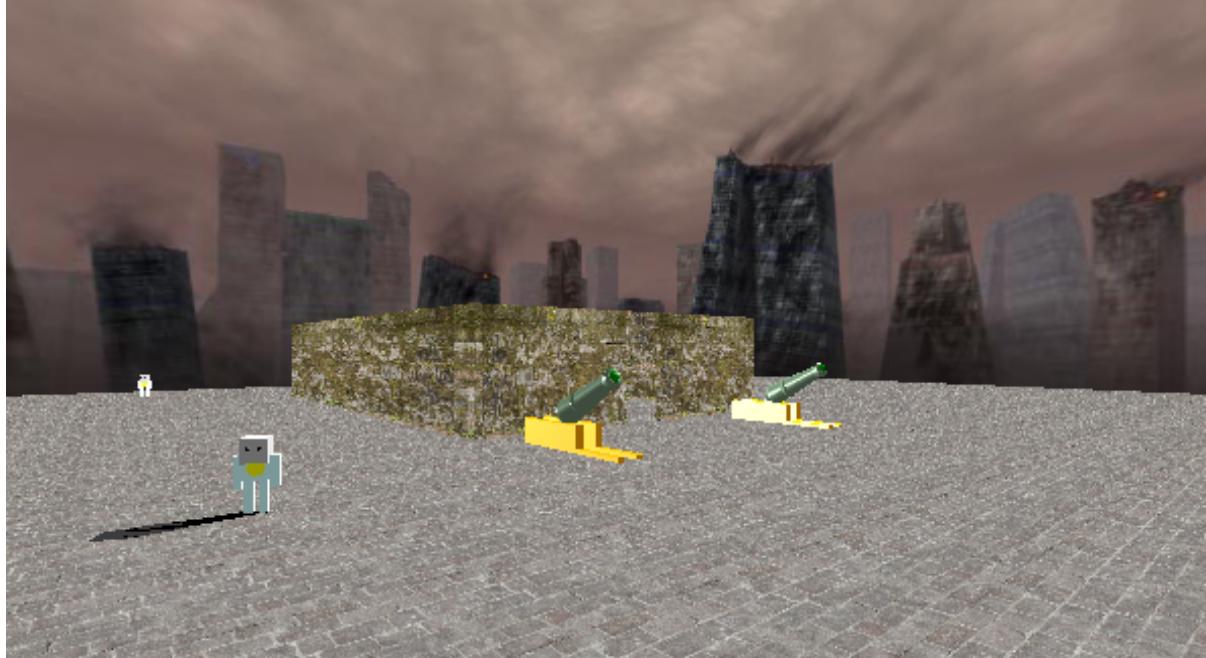


COSC363 Assignment 1 Report

Scene description

The aliens have landed on our planet! An abandoned fortress is occupied by the aliens. In front of the fortress, there are two cannons preventing people approaching their place. There are two robots, one is patrol in front of the fortress and another one is patrol behind the fortress; there is also a spaceship and a spaceship power adapter hidden inside the fortress so that the aliens can take off anytime.

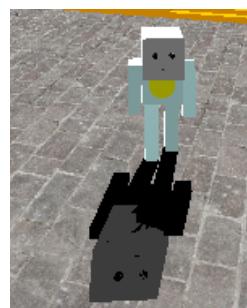


Features

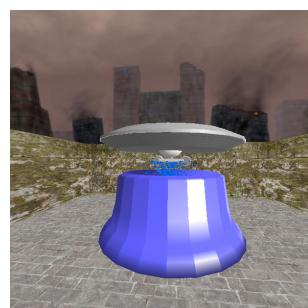
Sky box: you cannot move outside of the skybox scene

Rotation: The spaceship is swing on the power adapter, there are also two lights behind the spaceship.

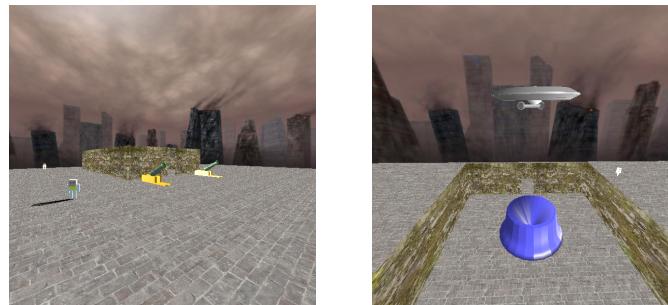
Planar shadow: robot has a Planar shadow cast, the shadow moves as the robot move



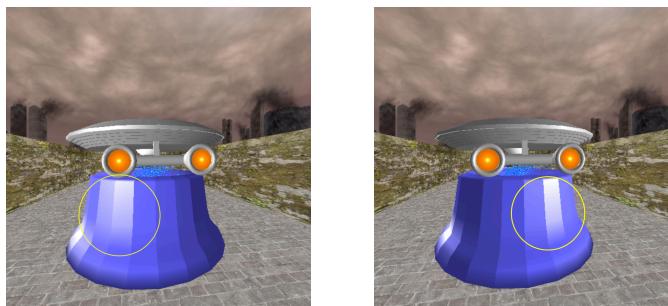
Particle system: particle system used to simulate energy



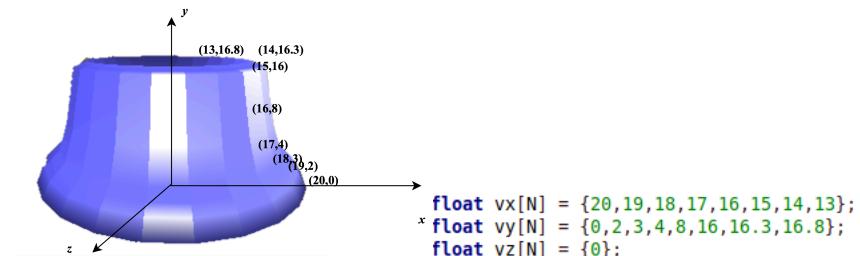
Two camera modes: view towards spaceship and first-person view, use HOME key to toggle between two modes



Spot light: Robot holding a light for night patrol, you can see light change on the cannons and the back of the spaceship



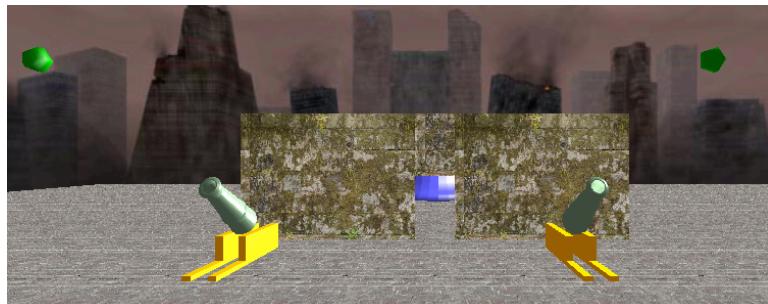
A custom-built sweep surfaces



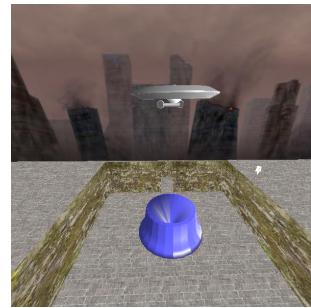
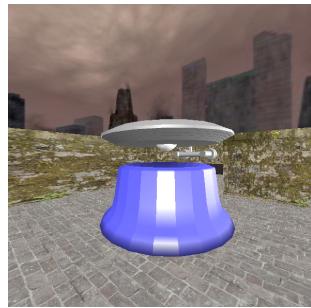
Control functions / Keyboard events



key 'c': The cannon fire.



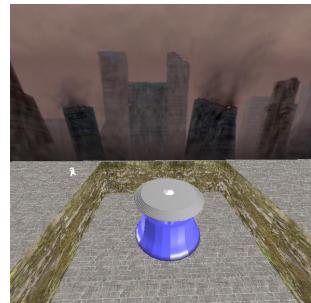
key 's': Spaceship lift up; camera view change towards the spaceship.



HOME key: toggle between the two modes.



Mode 1



mode 2



Up arrow: move camera forward in the current direction



Down arrow: move camera backward in the current direction



Left arrow: Turn left by 5 degrees



Right arrow: Turn right by 5 degrees

References

- <https://proofofalien.com/5-possible-types-of-the-alien-spaceship/>
- <http://www.custommapmakers.org/skyboxes.php>
- <https://www.textures.com/>