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CS 351-1 Computer Graphics

Project B report:
Various Objects (including Shark) floating in a 3d canvas with an adjustable view.

User Guide:

My goal was to use the `LookAtTrianglesWithKey_ViewVolume.js` starter code as well as the BasicShapes and Quaternion Starter code to create a 3d space with spinning objects. This includes a modification of my Project A shark, but with multiple jointed parts as its tail.

There are two different windows with differing viewpoints, and the user has full control over the viewing angle. The user can use the arrow keys to move the camera up, down, left and right. The WASD keys control the tilt of the camera, and thus can be used to navigate around the shapes. Lastly, the M/N keys can be used to zoom in and out of the space, respectively. Lastly, the user can manually spin the torus using the mousepad.
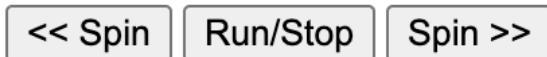
Results:
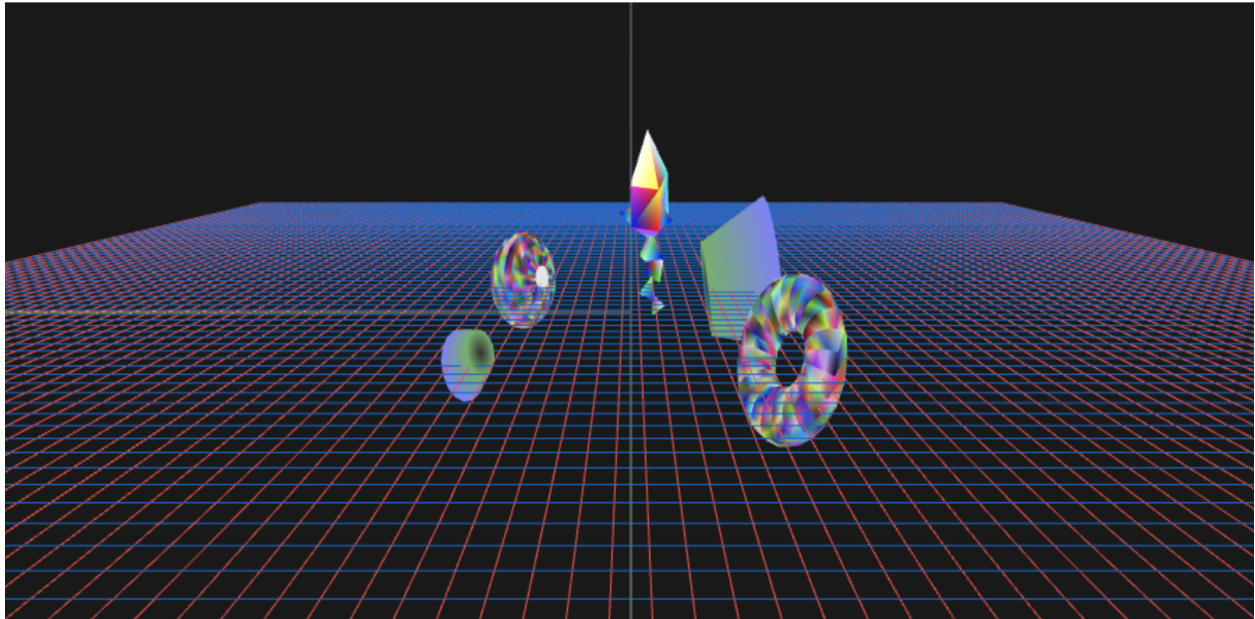
The view of the main window.
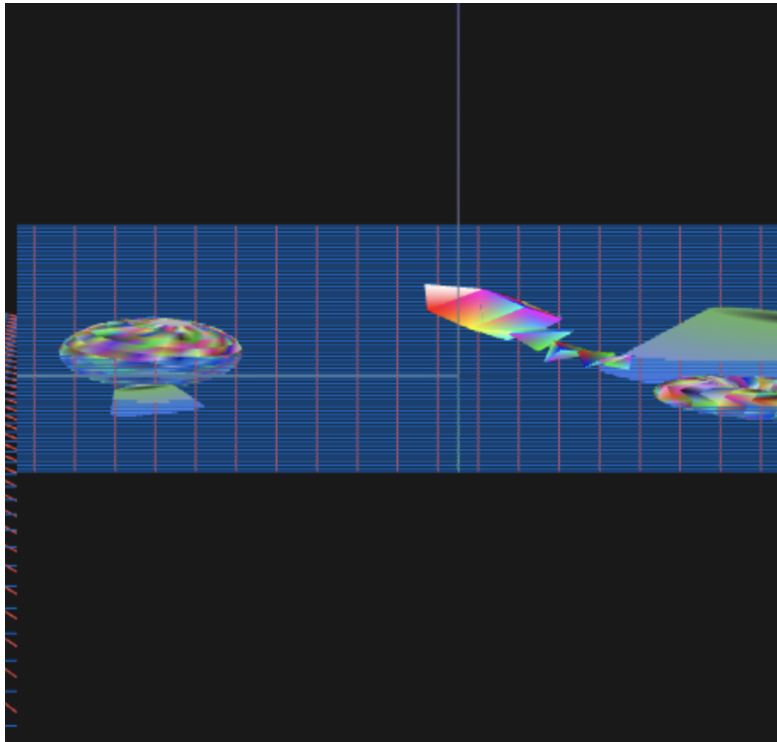
The View of the Orthographic window.

Click the buttons to affect the rotation or change speed

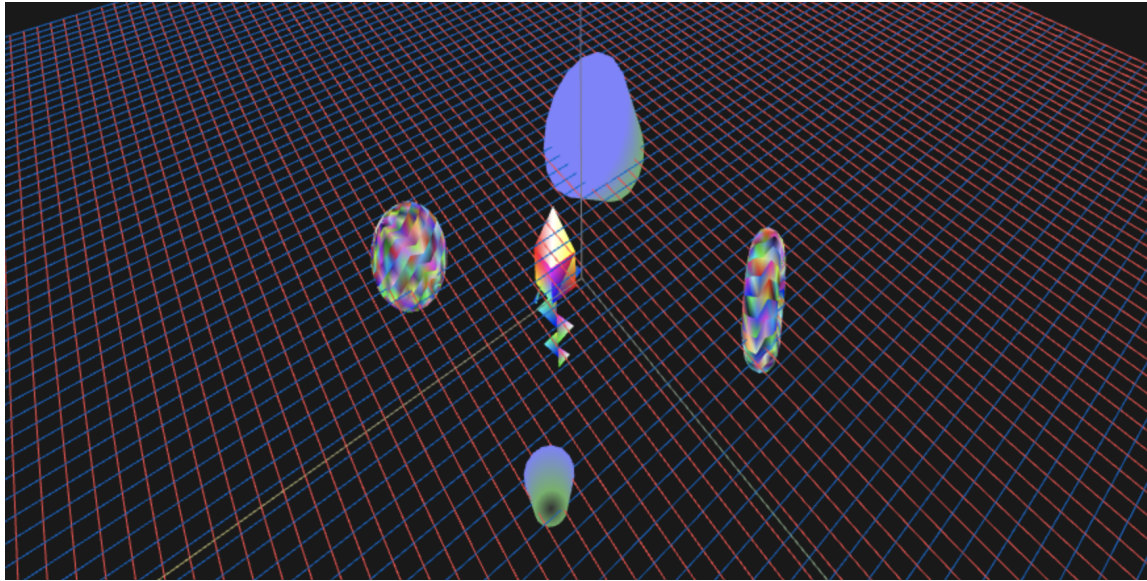[<< Spin] [Run/Stop] [Spin >>]

Use the arrow keys to move the location of the camera.
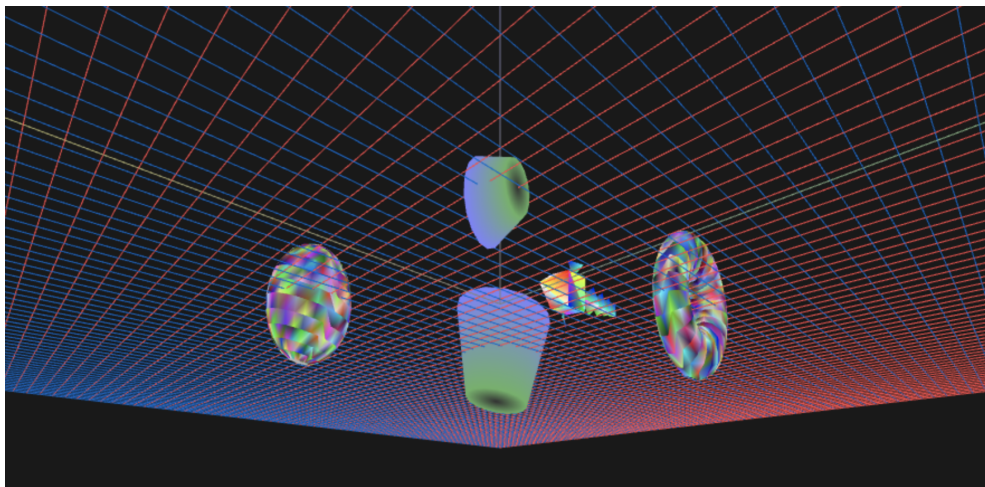Use the M key to zoom in and the N key to zoom out.
Use the WASD keys to control the tilt of the camera.
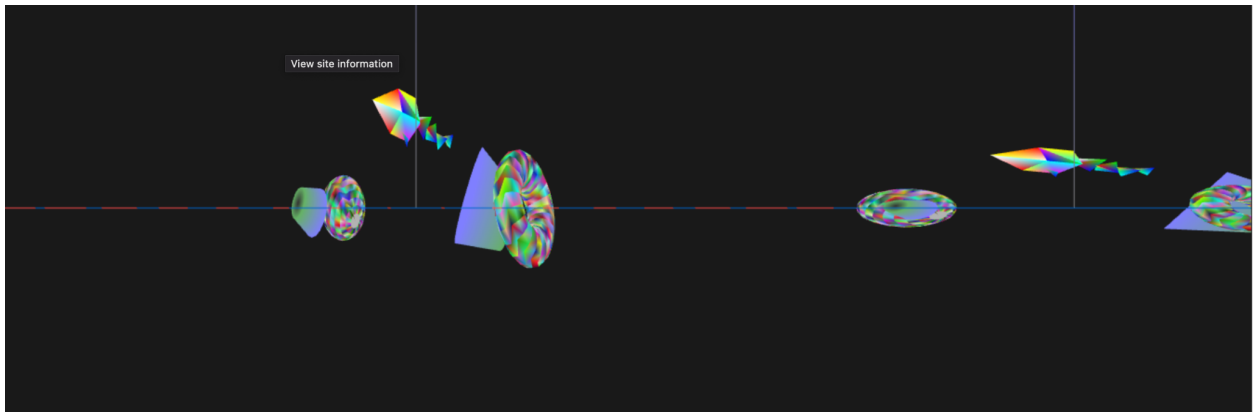Use the mouse to control the donut.

The movement of the camera described on the webpage.

The objects after an overhead camera adjustment.

The objects from below.

The Objects when both views are aligned.