**Unity Scene**

The scene we have set up is an executive’s office, a breakroom and a bathroom. It has multiple objects such as a table, chair, book shelves, a television, eyeglasses etc.

The name of the scene file is homework1.unity

To run the scene, simply open the project folder 3D Virtual Environment as a Unity Project. Allow all imports and click on play.

The **left controller** controls **steering** and the **right controller** controls **manipulations**.

**Steering States**

1. **NotSteering –** Idle state where the user is not moving.
2. **SteeringForward –** User moves forward, in the direction the controller is pointing and with a speed equal to left controller’s touchpad value.
3. **SteeringForward –** User moves backward, in the opposite direction the controller is pointing and with a speed equal to left controller’s touchpad value.

**Manipulation States**

1. **Open –** The right controller not colliding with any object.
2. **Touching –** The right controller colliding with an object.
3. **Holding –** Right controller is colliding with the object and the touchpad is pressed. Holding the object for manipulation.
4. **Closed –** Right controller is not colliding with any object and the touchpad is pressed. This enables the user to push objects around without holding them.
5. **Destroy –** Right controller trigger pressed while colliding with an object, makes the object disappear from the scene.

***Objects that can be manipulated***

**Office**

* Books on shelf
* Trophy on shelf
* Laptop on the table

**Break Room**

* iPhone on the shelf
* Stools
* Trashcan