Team: Parikshit Solunke, Stephen Lambert, Justin MacDonald

Following the assignment constraints, our team leveraged the physics requirement to create more player interactions with the Cave. We initially didn't intend on using the wand controller but using it in the simulation was actually pretty fun. So, we implemented intractable objects. This is super exciting for our gameplay since the wand can introduce cooperation between the detectives to help each other navigate the map to ultimately identify the thief.

For our visuals, we used two low poly asset packs since our game is visual demanding. The character and building pack are eye catching and blend really well together. This is important to our design since the thief needs many visuals to hide behind.

Speaking of visuals, our characters have walking and idling animations. They also use a pathfinding system with a nav-mesh to navigate the city in predictable patterns. This predictability design choice is for and against both the thief and detective.

* Your demo must use at least 3 forms of 3D physics.
* - Wand grabbable objects (Parikshit)
* - Thief collide with objects (Justin)
* - Thief jump (Justin)
* Your demo must use at least three lights, three sounds, and three textures.

- 3 spotlights: all in the streetlights (Justin)

- 3 sound: people talking track, city noise track, cha ching [collide with stolen object] (Stephen)

- 3 textures: Within characters, buildings, props (Justin)

Your demo must use 2 AI techniques

-Pathfinding (Parikshit)

-FSMs for animations (Stephen)

* 2 examples of Mecanim, one of which must be a rigged character model

- Rigged walking animation

- Idle animation

\*Note: Our graduate student was unable to successfully get his own pathfinding working. However, I still included his work (Folder titled: Graduate\_Work) as he spent quite some time trying to figure it out. But ultimately for the sake of time he decided to stick with Unity’s pathfinding which might reduce his credit. My hope in bringing attention to this is so that he can possibly still get credit for the work he did. He was able to get his own nav-mesh and pathfinding working but simply unable to get character movement with unity crashing. Please consider this detail, as I personally believe my team-member deserves some credit even though it didn’t make the cut.