## Eugene Choi, echoi1

My project will essentially be a mock of temple run using pygame. The theme is to be decided, since I have to think about what kind of theme I can do with simple rectangles/squares for my 3d objects.

It'll start out with a simple menu that uses the mouse pressed events in pygame to access the instructions, back buttons, play buttons, and whatever else I'm going to integrate as buttons.

The user controls will be quite simple, W is jump, S is crouch/duck, A is move to the left a lane, and D is moving right a lane, the left arrow is turning to a left path and right arrow is turning to a right path. For the things to jump over and crouch under, I can probably get away with putting horizontal poles, since the 3d image of it can be the same from all angles, and I'd just have rectangular prisms "holding up" the bar per se.

In terms of the graphics, to simplify things, I think I'm going to keep the camera angle the same throughout the entire game. I'll use some geometry to calculate what part of the 3d objects are shown by the camera. I'll use cubes/rectangular prisms at first and probably stick with it, making some bridge/castle-esque thing in order to simplify the 3d objects again. As I've said before I can probably implement cylinders or spheres, but I'm going to stay away from making abstract objects.

Once I get the all the basic cube 3d rendering to work, the project will seem pretty straightforward; the other complexity would come from generating the obstacles or turns using machine learning potentially.

Modules to use: Pygame