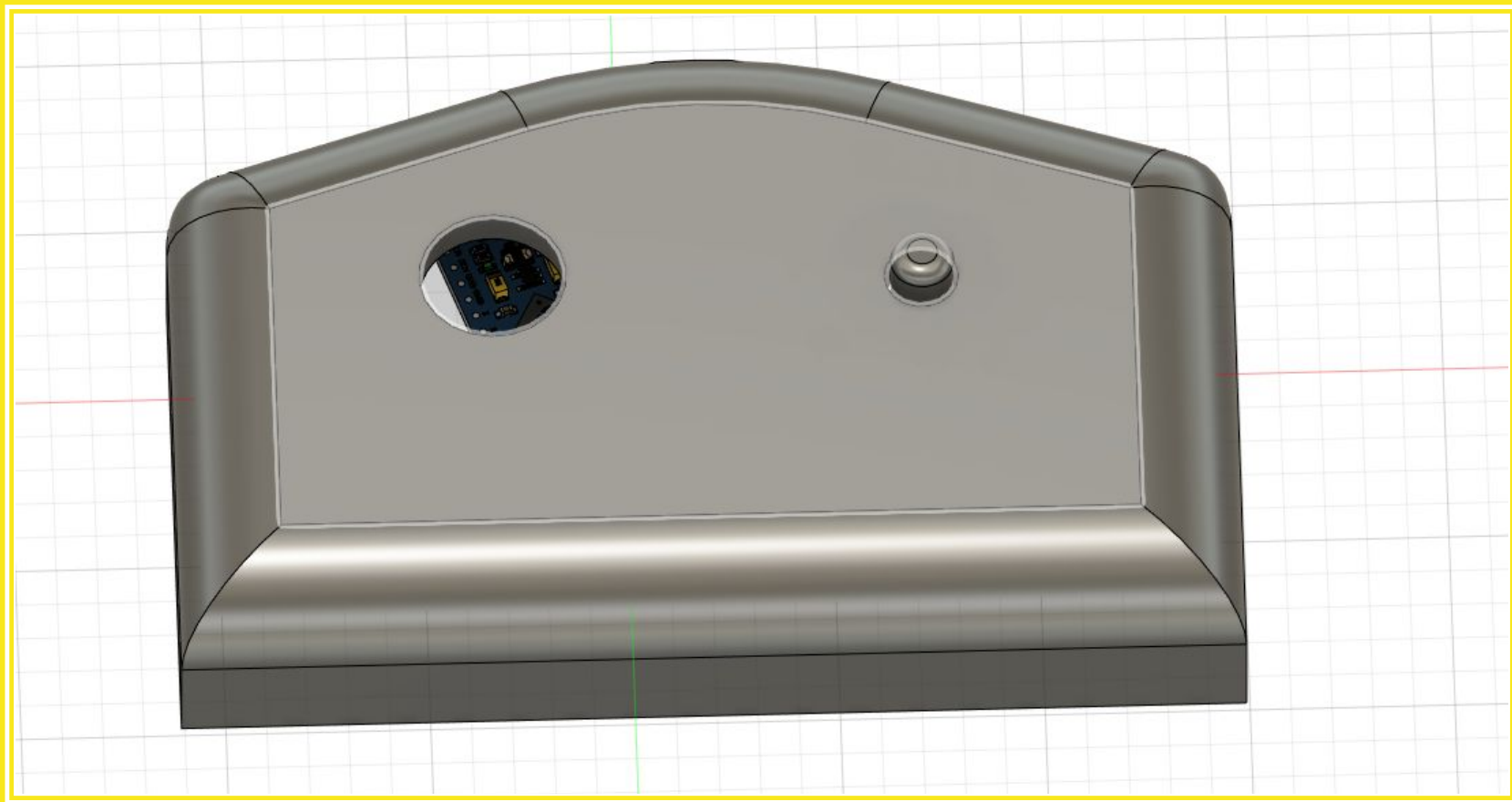


Industrial Hardware Design Final Exam

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Fusion 360 Components

- I used an arduino micro as the brain of the controller
- An LED for the actuator
- A joystick for movement
- A push button for the ability
- Top plate and bottom plate to house all the components
- Not everything got finished but these are the components



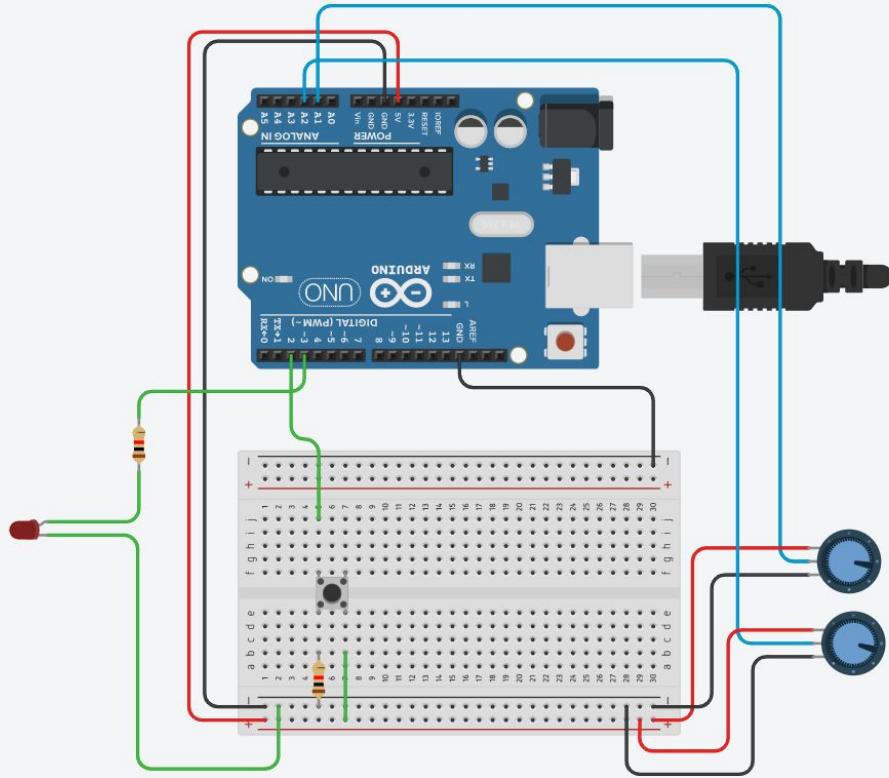
GHOST Controller

Fusion 360 Assembly

- The GHOST Controller features a joystick input for movement and an ability button to activate the Invisibility ability of the ghost.
- The controller is meant to replicate how you would play Pac-man on an arcade machine so it's meant to be set down.
- The shape of the controller takes reference from the ghosts and how they don't really have any rough edges along with the two input slots resembling the eyes of the ghost.
- There's a little slit on the front of the controller that will house the LED.

Tinker CAD Explanation

- I've included 2 inputs with the potentiometers acting as a joystick and the one button as the Invisibility ability.
- An LED is coded so that it turns on when the ability is used and turns off when the ability runs out.
- The potentiometers are coded so that there is a deadzone with no movement. Once moved in a direction it will begin outputting in the serial monitor either "Up", "Down", "Left", and/or "Right".
- The [simulation](#) demonstrates everything mentioned above.



[TinkerCAD Link](#)