Explanation for Final Exam

Components

I made a box for the controller since the controller is not a final design. I added a analog stick to simulate moving left and right. I added 2 buttons to have hiding and attacking. I added a vibration motor to vibrate when you press a button to let the player know when they are pressing the button. There is a cap on the side of the controller to hold all of the electronics inside. This will be held with tap since it is a prototype.

Assembly

I created a box design to simulate an old controller from the NES era. This is because duck hunt is from the NES. The two buttons are at the bottom of the face to easily press them. The analog stick is to the right since most controllers have their movement to the right of the controller.

TinkerCAD

I am using 2 potentiometers to simulate an analog stick since tinkerCAD does not have an analog stick. This analog stick will output its resisted value into the serial monitor, simulating how an analog stick would output I have two buttons that will output hide and attack respectively into the serial monitor. I have my vibration motor linked to my buttons to tell the player when they are being pressed.