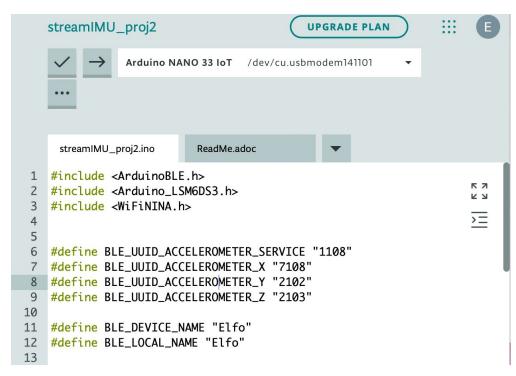
M5 Pong Presentation

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Right Player - Arduino

Use M2 Project to turn on bluetooth for Arduino

- UUID Service: 1108
- Accelerometer X: 7108



Right Player - Arduino

```
In central.js: discover arduino services
   const uuid service1 = "1108" - UUID
   const uuid value1 = "7108"-Xvalue
   noble.on('stateChange', async (state) => {
      if (state === 'poweredOn')
          console.log("start scanning")
          await noble.startScanningAsync([uuid service1], false, config);
```

Right Player - Arduino

In index.ejs: move right player based on X value of sensor data

Additional Functionality: When the arduino is not moving (choose this to be sensor values between -0.3 to 0.6) then the right player stops and does not move

```
xmlhttp.open("POST", SERVERADDRESS, true)
xmlhttp.setRequestHeader("Content-type", "application/json")
xmlhttp.send("")
if (sensorValue1 > 0.6 ){
    if (rightPlayer.positionY > 0) {
        rightPlayer.positionY -= rightPlayer.speed;}}
else if (sensorValue1 < -0.5 ){
    if (rightPlayer.positionY < canvas.height - rightPlayer.height) {
        rightPlayer.positionY += rightPlayer.speed; } }
```

Left Player - Computer Keys

In index.ejs: adds event listener to check if up or down arrow is pressed

```
document.addEventListener('keydown', (event) =>
   var name = event.key;
   var code = event.code;
      (code === 'ArrowUp')
       keyPressed['Up'] = true; }
       (code === 'ArrowDown')
       keyPressed['Down'] = true;} }, false);
```

Left Player - Computer Keys

In index.ejs: moves the left player if up or down is clicked- called every second

```
function updateKeyPresses()
   if (keyPressed['Up'])
       if (leftPlayer.positionY > 0) {
           leftPlayer.positionY -= leftPlayer.speed; } }
      (keyPressed['Down'])
          (leftPlayer.positionY < canvas.height - leftPlayer.height)
           leftPlayer.positionY += leftPlayer.speed; } }
```

Final Product

