

**GUEST SPEAKER** So we also tried to learn how to use processing. It's pretty bare-bones, but I guess-- so  
1: essentially, we have a little widget and punch. Oh.

So the set size right now is set to eight. Originally, we wanted to be able to remotely control it.  
So that's one count, and I'll do two, three, four, five, six.

**GUEST SPEAKER** You can see that you've set set size to eight. So it'll stop when it's eight, and then it'll recount.  
2: We also have this thing that we labeled "Temple" because it's related to our game. But it  
actually correlates with how fast you're punching. So if we smooth this out, this is actually  
telling you how fast you're punching for each one. Yeah-- and then this to average.

**GUEST SPEAKER** Average set speed is pretty much the eight different punches that you have divided by the total  
1: amount of time to do those eight punches. So I can do my next set and be like, 1, 2, 3, 4, 5, 6,  
7, 8. And then we'll be on set two or set three.

So it's pretty basic right now, but there's a lot of different features that we could add with the  
gyro if we had more time. And if you have two hands, then they could communicate. Maybe  
we can show the game.

**GUEST SPEAKER** Yeah.

2:

**GUEST SPEAKER** OK. So we have to actually upload that.

1:

**GUEST SPEAKER** So some other thing--

2:

**GUEST SPEAKER** This is "Smoke on the Water," the song that you're supposed to play.

1:

**GUEST SPEAKER** So it plays the song for you first.

2:

**GUEST SPEAKER** And now it'll say, your turn. And that's just the first part, which is like, bum, bum, bum. So it'll  
1: be like, mm, mm, mm.

[COMPUTER BEEPS]

**GUEST SPEAKER** Got it. Yeah. So yeah, it said, "Good job." And then now it's the second part, so you punch that  
2: beat.

**GUEST SPEAKER** But it's hard to hear.

1:

**GUEST SPEAKER** Yeah. OK. Yeah, you got it. And then it goes on to the next part. And then basically, you cycle  
2: through the different parts.

**GUEST SPEAKER** I think that's the part when it breaks.

1:

**GUEST SPEAKER** So ideally, if we could actually play the music on something better than a buzzer, I think it'd be  
2: a lot better.

[LAUGHTER]

**GUEST SPEAKER** Yeah. But it was definitely a really nice project to learn how to use a bunch of different  
1: sensors. We also had a heart rate monitor, which was able to get beats per minute, but it was  
pretty inaccurate. But it was nice to learn to set it up. We had an RFID sensor.

**GUEST SPEAKER** Yeah, the LEDs.

2:

**GUEST SPEAKER** And we have LEDs that depending on how hard you punch, a certain amount of them got lit  
1: up. We just took them out, and it was a free, fluid project in terms of a good beginner learning  
project. But yeah, I think this is a good example of a wearable and how you can embed a  
bunch of different sensors to get different features.

**GUEST SPEAKER** Yeah.

2:

[APPLAUSE]