

PROFESSOR 1: Yeah, any questions about this? Yeah.

AUDIENCE: I actually have two. One's an incidental question. You keep mentioning something that I never heard of called "ardeeno", or something like that.

PROFESSOR 1: Yes.

AUDIENCE: What is that?

PROFESSOR 1: Arduino is a tiny little microcontroller-- not related to video games, really. But it's a tiny little microcontroller. And you connect it up to a circuit, and then it can tell an LED to blink every five seconds. And it can detect when you press a button, and it can read off of a light sensor, whether the lights are on. So it's a little kind of computer chip that you program to do one particular task that connects out to the world.

AUDIENCE: So then the more generally-- I'm curious what the connection with Kinect is in this course. If we didn't want to use Kinect, is that an option?

The reason I'm a little nervous is because I don't own one, and I don't have access to one. So if I end up building something that requires Kinect, then I won't be able to use it.

PROFESSOR 1: Yes. So you can buy a Kinect that'll work with a PC for about \$200. If you don't want to use a Kinect, that's fine. We have four Kinects and computers with Unity that is all set up to use it. So if you want to use a Kinect, you have the resources.

AUDIENCE: OK-- not a necessary part of doing this course.

PROFESSOR 1: Not a necessary part, no.

AUDIENCE: --to Unity and focus on web apps or whatever.

PROFESSOR 1: Yeah, yeah, yeah. You could do your own thing, totally.

And the Kinect is-- really, it's amazingly simple. So if you have a game that connects with a mouse click and a drag, then you can instantly take the Kinect and say, where it was a mouse click and drag, make it the palm. And it takes like zero transference, right?

PROFESSOR 2: Yeah. So in those simulations you saw, all you need to do to change them from being a Kinect

thing to a not Kinect thing is uncheck one of the scripts in this panel.

So pretend this were my own product-- which isn't on this computer-- this would be with Kinect, and then this would be with the mouse. So you don't have to exclusively choose one.

AUDIENCE: I see.

PROFESSOR 1: Yeah, and then you can program a whole Kinect thing on your computer just assuming mouse clicks are Kinect. And then when you're ready, drag on the script or click on the little thing, and it's ready to work on a Kinect system. That's part of what he's been tasked to do over the last six months was make it really easy to use Kinect if you want it.

Any other questions? And if I don't see your hand up, it's probably because you're in my periphery, so say things.

Yeah?

AUDIENCE: Thought of detecting, [INAUDIBLE.] Is there anything we should download, development kit or anything, to use at home so that we're on the same page as what's happening in class?

PROFESSOR 1: Good question.

PROFESSOR 2: There is a Kinect SDK, and you can download it from the Microsoft website. We are using the newer version of the Kinect. However, the older version is very similar, and I think you just have to remove the little v2 at the end of all the Kinect references in the code.

PROFESSOR 1: And it only works on Windows.

PROFESSOR 2: It does only work on Windows, yes.

PROFESSOR 1: And I see a little apple, I think.

AUDIENCE: I have a thinking on this, so I could probably work.

PROFESSOR 1: Oh, OK.

PROFESSOR 2: Great.

AUDIENCE: What only works on Windows?

PROFESSOR 1: The Kinect, yeah.

AUDIENCE: Oh, OK. That's [INAUDIBLE]

PROFESSOR 1: All right.

[THE PROFESSOR AND STUDENT LAUGH]

Any other? Nope? All right, then--

AUDIENCE: Is there a Kinect simulator so that you could run it on a Mac? Or does that also only work on Windows?

PROFESSOR 1: It probably just only works on Windows, because it uses developments library, a DLL link library that runs on Windows and knows what to do with the inputs that it's getting.

PROFESSOR 2: The version one, I think, can do it-- you can do on Mac.

PROFESSOR 1: Oh.

PROFESSOR 2: It's specific to the version two. The version two, it pushes the USB 3.0s back-- like, really hard. And it's so much data, that I don't think Microsoft wanted to put any extra effort into that. It used to only work on Windows 8.

PROFESSOR 1: And now we can work on Windows 10.

PROFESSOR 2: Yeah.

PROFESSOR 1: Yay! All right. So thank you.

AUDIENCE: Would it be useful to do a poll of who uses Macs, who uses Windows, and Linux, and things like that?

PROFESSOR 2: I mean, you can still program it on the Mac and just do it with the mouse.

AUDIENCE: OK.

PROFESSOR 2: And then just check the little box, as it were.

PROFESSOR 1: And yeah, so you can send it over to one of the systems that has the Kinect and uncheck the box. It shouldn't end up being a problem. If you start working on a Mac, then it should take a little bit of time to look and go, oh, yeah, no problem-- check this, send it over here, and it'll

work.

What I would say is, don't worry about it. Do what's comfortable right now, and then we'll figure out what needs to be adjusted later.