JANE: Hi, everyone. So our project is called Mini Worlds. So basically, we want to view this video game where you can build your world with Kinect by just grabbing things and build them by dropping them. So the idea is you can go into this 3-D environment to design your own home and your own room.

So my name is Jane. So I'm from Course 3 and I'm a graduate student.

CATTLEYA: I am Cattleya, I am Course 6 undergrad student, class of 2019. So we address this problem of when we try to create our own world, as Jane has already introduced. So we then come up with a word game called Media World. And we will show you our demo now.

[SIDE CONVERSATION]

JANE: So Cattleya will be controlling the game and I will be doing here.

[SIDE CONVERSATION]

JANE: So I hope it's not capturing me.

PROFESSOR: You may want to restart.

JANE: Yeah, we will restart.

PROFESSOR: There's going to be technical difficulties. One of the [INAUDIBLE] presentation [INAUDIBLE].

JANE: OK. So now we are trying to locate ourself in our home.

PROFESSOR: Move a little closer.

JANE: Could it be it is capturing other people?

MARK VRABLIC: I mean you can check for this.

CATTLEYA: Yeah, maybe. I think so. It's [INAUDIBLE]

JANE: Yeah, I think it's not tracking her. So--

STUDENT: Do you have the [INAUDIBLE]?

JANE: Yes.

MARK VRABLIC: You should pull that out. I don't know how [INAUDIBLE]

[SIDE CONVERSATION]

JANE: OK. So somehow, we just got indoor. Because we saw a house and we just went through that door to go into your room. And your getting all of you to your yard.

PROFESSOR: So how are you switching rooms?

CATTLEYA: We changed the scene. We can disable it right now.

PROFESSOR: [INAUDIBLE]

CATTLEYA: To a wider problem.

[INAUDIBLE]

JANE: So what we just did is that we deleted that door. So cannot go indoor and now you can travel more freely in your yard, not through just that door.

CATTLEYA: We tried to really show you the thing, how to like-- we can choose the material and then choose the object to paint into [INAUDIBLE].

Then you can [INAUDIBLE].

Oh, sorry.

[INAUDIBLE] low position if you delete. So that we-- here, you will see [INAUDIBLE] oh. We can also rotate thing around, I can show you.

JANE: So the only problem here is it's a little bit hard to control things. But we will get there.

[APPLAUSE]

CATTLEYA: Let me show you. Now, we will get rid of all the stuff we have build and we will try to build from the scratch for you.

[SIDE CONVERSATION]

JANE: So we just deleted the yard and you want to locate yourself again. No-- oh, yeah. Here. Good.

CATTLEYA: Now, we have to grab some object here. And then--

JANE: And you can create that object.

CATTLEYA: And then you can create it by raising your hand.

AUDIENCE: What?

[LAUGHTER]

You can delete it by lower your hand down. Also, now I will try to do the rotation.

[SIDE CONVERSATION]

[INAUDIBLE]

JANE: I think that's fine.

PROFESSOR: This is an operation [INADUCIBLE].

JANE: OK.

CATTLEYA: OK. So now, you can create a bridge. And you can grab it and rotate it around like this.

[APPLAUSE]

[INAUDIBLE]

[APPLAUSE]

CATTLEYA: Another thing that you can control this, the camera. If you wanted to, maybe you can do something like this or-- and so now like this. Also, if you want to rotate a camera, you can [INAUDIBLE] move body like this.

[LAUGHTER]

[APPLAUSE]

PROFESSOR: Awesome. Do we have any questions?

AUDIENCE: How are you so amazing?

[LAUGHTER]

CATTLEYA: Thank you.

AUDIENCE: What were the-- what's the role did you use to establish what kind of protocols? Were there some kind of preformatted roles that connect, or did you all just do that scratch?

JANE: Oh. So for the Kinect, our TA have already made the script that allow us to keep track of the coordinate in 3D of our hands and the other joints like hips. And what I do is that we-- I implement-- For example, the zoom in and zoom out. I implement that if your right hand is behind your right shoulder for a certain amount, you will got zoom out. And if it-- I think it's the C direction, C index. If it more than your shoulder, it will go to zoom in like that.

PROFESSOR: So they build a lot of their own intervals based on x and y and z coordinates. So any gesture that she was doing she actually programmed just based on plain logical rules about where two points in space are.

MARK VRABLIC: So you train it beforehand. And then I'm curious whether if you had another Kinect, it'd be more responsive if you had one in the front and the back. That really makes the sensors twenty one mega sense.

[SIDE CONVERSATION]

MARK VRABLIC: That's going to be hard to implement, but yes, theoretically, it would be better. People do do it. It'd be a lot of math to get the two to match up. Also, there are [INAUDIBLE] camera who probably started to render at each other. Okay.

JANE: Question?

AUDIENCE: Have you had Unity experience before this class?

JANE: I have a little bit. But yes, but learn from this class a lot. Yes.

AUDIENCE: And what about Kinect?

JANE: No, it never happened. Yes.

PROFESSOR: Any other questions? All right. Awesome.

[APPLAUSE]