

**KYLE KEANE:** So my rant-- not rant. I keep using the word rant today. My pitch about that is that some people view creativity as everything they do has to be totally unique and they need to think of it all on their own. Otherwise, it's not that cool and they shouldn't be proud of what they did. And a lot of creativity happens by taking something that somebody else has done, following what they've done, and then making a small adjustment, and then making another small adjustment. And then suddenly, you have something that does something different, that is unique, that you made yourself. And that is creative. There's nothing wrong with taking something, learning how somebody else did it, modifying it to suit your needs. That is part of the creative process. And a lot of times, it's the biggest part of the creative process for a lot of different disciplines. It's like science is built on that. You have to do a bunch of stuff, and then make a small modification, because that's what you're able to do. And then you publish that and somebody else does everything, does what you did, and then makes another small modification. We have a tendency to hold up heroes, like Tesla or Einstein or great inventors, who did these amazing things, despite no one else ever having had that thought. And that's just never the case. There's always a history of scientists or a history of artists or history of people who laid a foundation that these people were trained and learned how to do what other people had done and then they make small modifications.

So these first two days are that process. We have taken the Roll-a-Ball ball tutorial and we've just followed along and we've talked to our friends about it. And we asked each other to do small modifications, like add new balls. What does that mean? Can you please help me do this thing? And today, we're going to take it and we're going to modify it. And somebody did a really cool thing-- or started to-- yesterday. So they tried to take the ball and turn it into an egg. And I think that's the perfect example of taking something that's built and being like, what can I do to tweak this to make it kind of fun and different? And so turning the ball into an egg is a great one. When I first did this, I took the ball and I turned it into 25 small balls that were all talking to each other via gravity. So instead of just having one ball roll around the rink, I had 25 small balls that were all attracted to each other by gravity, and so they would roll around and when they would hit the wall they would go [SOUND EFFECT], and they would kind of spread out and then come back together and clump up, because they wanted to be near each other. So that's some small modification of Roll-a-Ball.

And the reason you do small modifications is to make sure that you understand all the

fundamental pieces of what's happening, because unity is this system that has objects and has a file hierarchy and that has the methods that you put on to things, like scripts that you attach to objects, and then you can apply coloring and textures to the objects. And there's all these parts moving around. And by making small modifications, you actually understand if you understand. If you can't modify something, then there's some fundamental internal representation of what's happening that needs to be worked out a little bit more, probably by talking to some friends while you're sitting inside of a room like this. This is a great place to learn. So that's my pitch as to why we have structured the first two days in this way. And then tomorrow, you'll be kind of left to come up with your own idea and try to do a two day, I've come up with my own idea and I've tried to get some people to work on it with me type of thing. And we'll do a small version of that type of creativity, which is I'm drawing inspiration not from a tutorial, but from out in the world, and I'm trying to combine it with the stuff that I learned from the tutorial. So there's this whole-- I kind of sat and thought about how to structure this thing, and I want to share that. Because I believe kind of knowing an approach to education often empowers people to use it more effectively.