RIK EBERHARDT: OK. So the way to this day is going to be set up is we've got one hour to go Philip, me, and Drew. We'll go to each team, and we're just going to talk with each team about your updated vision statement-- you should have one by now-- your product backlog you just turned in, and your sprint tasklist you just turned in.

The main thing we want to talk about is just some more detailed discussion based on the presentations you gave, as well. So what are you doing over the next week and a half? What do we think the biggest issues are? What are your plans for Thanksgiving, and not working during Thanksgiving, hopefully?

And we'll go in that order-- so *Heat Wave, Hello Wave, Snap, Cholera,* and *Awesome Cholera.* It should only take about five to 10 minutes per team, unless you have more questions. And then after that, you are free to depart or work in class. We've got the room until 4:00, as well. Before we do that, Phillip had some generalized feedback he wanted to give.

PHILLIP TAN: So after looking through all of the state of the projects in terms of the deliverables that you handed us, when we looked through the product backlogs, we noticed something fairly consistent among all the teams. And that was you know how you have these columns, right? You have your serial number, your item number of your task, the description of the task, usually who it's assigned to, and then a priority list.

Well, first of all, everybody sent us this list sorted by serial number rather than my priority list. That's not so bad, because we can always just resort it ourselves. The problem was that the priorities was something like, task one was priority one. Task two was priority one. Task three was priority one. Task four was priority one. Task five was priority two. And then it goes, two, two, two, two, two, three, three, three, three, three.

And that-- if you get granular enough, that might be fine. But I'm a little bit worried that's not quite granular enough when it comes to your priority levels. Everybody seems to have about three to four levels of priority. And you get these huge swaths of tasks that all have the same

priority. So you don't actually know which one's more important.

Now, you might be thinking, well, they're all assigned to different people. So for everybody who has a set of tasks, they have a priority one task and they know what they're supposed to be doing right away. And that's true for the individual.

The problem is that if you've got-- I'm just going to bring this up. If you've got-- OK. So say this-- what the? Oh, here we go. Say this is your product backlog, and you've got a chunk of priority one tasks, priority two tasks, priority three tasks. And each one of these tasks have been assigned to some individual person.

Maybe you've got something like all your priority one stuff done. All that is cleared. All the most important things got done. We are fine. So now you're somewhere dealing with all of your priority two tasks. And some of them are done. Some of them are not done. Hopefully you're finishing off a priority two task before you get to your priority three tasks.

And so this is person A, this is person B, this is person C. And person C's done their job. Person B's done their job. And person A's still working on it. How complete is your game, actually? Your game's only as complete as person A is capable of finishing their task.

So if you've got like a giant list of priorities-- if I were to take this list of priority one, priority two, priority three and forced sat you down and went through the arduous process of actually giving each individual task a separate priority number so that you could actually solve it and rank it-- I'm going to do that. Because I know it takes a heck of a long time.

But if I were to do that, what you'll find most likely is that you've got a bunch of tasks that are done. You have an undone task, a bunch of tasks that are done, an undone task, and then some stuff done, and a whole bunch of undone tasks. And the game's only this done. You are not here. You are not here. You are here. And you need to be able to see that as a team. You need to be able to actually see, what is the highest, most important thing that's still not completed?

Right now, at the level of granularity that we're looking at all of your product backlogs, all of your product backlogs don't quite have that level of granularity. But, it is possible that in your head, you actually have that level of granularity-- that you actually know in your team what that highest level undone task is, even though they all have the same priority. They're all priority two tasks, or something like that.

So something that will be useful before you depart class today is to actually figure out-- off all of the things that are the highest priority and undone right now, what is really the most important thing? And who's responsible for that?

In fact, all of your highest priority tasks should all be assigned to somebody. And you should have a good sense of what order of priority they are. Because not everybody who's been assigned a task is actually going to be able to complete a task before the next time you meet. And the next time when you meet, when you actually check in and you discover some tasks are done and some tasks haven't been done, you need to know how much progress your team actually made towards completion of the game.

Otherwise, you may say, oh, we got five out of our six tasks-- only that one task that didn't get done turns out to be the most important thing, which means you actually haven't made enough progress on your game at all. And you need to know that so that you can actually start to cut features, scope down, and do all of the things that we talked about regarding crisis control for your team.

So we'll talk a little bit more with each individual team about that. But that's a conversation that you should be having within your own team. Of all your highest priority tasks, which one's actually the highest priority? OK?

RIK EBERHARDT: All right. So take a minute just to meet up with your team, and we're going to go to Heat Wave in one minute. Also, make sure you've got a playable version of your game, because Drew would like to see it. He was not available for the presentations.

Amelia wanted Drew to play, since he's played it during the play test. And there might have been some stuff that changed.

ANDREW GRANT: Oh, excellent. That person's on fire. I like it already. People are dying, and you're asking me questions why? Seriously? You're dying, and I'm talking to you. Why are you talking back when you're dying? All right. Cool.

PHILLIP TAN: So, I just want to be clear. Catching on fire is fainting?

AUDIENCE: Equivalent, yeah.

PHILLIP TAN: Yeah? OK. All right.

AUDIENCE: It's a metaphor.

AUDIENCE: It's meant to invoke an emotional response.

PHILLIP TAN: Yes.

ANDREW GRANT: It does that. Oh my god. They're all dying.

[LAUGHTER]

Hello. Go inside. No. OK. No.

AUDIENCE: Ah. Something you should know is the dialog is just-- the back end's working, but we actually haven't put the content in yet.

ANDREW GRANT: Sure. OK.

AUDIENCE: The dialog will be much more educational and--

AUDIENCE: And have choices, which it currently doesn't.

ANDREW GRANT: OK. Sure.

AUDIENCE: You guys are going to want to--

AUDIENCE: So right now, we don't have an and condition, because the dialog is just--

ANDREW GRANT: Well, you eventually will.

AUDIENCE: Yeah yeah.

ANDREW GRANT: It's currently the *Space Invadors* style. You will eventually die and condition?

AUDIENCE: Yes.

ANDREW GRANT: OK, cool.

RIK EBERHARDT: So I've got the old vision statement. Did you make a new version of that, and is that on Stellar right now?

AUDIENCE: No, it is not. I didn't realize we needed it for today, because it wasn't on the homework assignments.

RIK EBERHARDT: Oh, yeah, yeah. That's OK. Then just--

AUDIENCE: I'll redo it today.

RIK EBERHARDT: OK, cool. Yeah, that's-- I should have put that on the thing.

AUDIENCE: In therms of the task breakdown, its' actually pretty much the same. And the overall vision I haven't looked at in a while, but I think most of our goals are the same.

RIK EBERHARDT: Yeah. It actually looks pretty-- so, like, vaguely, when you're reading through the old 30 of game play, it feels like this game. A lot of these elements are in there.

AUDIENCE: We haven't had any major design changes in terms of that.

RIK EBERHARDT: OK. So between Monday and today, has anything new gone on the chopping block? Are any other features getting cut?

AUDIENCE: Monday is when the product backlog was due?

RIK EBERHARDT: Yeah. Yeah.

AUDIENCE: No. We caught secondary scenes, and everything else seemed doable, because a lot of it-- the only other thing that could possibly be cut is items breaking over time.

RIK EBERHARDT: Yep.

AUDIENCE: Everything else is actually in progress, and just being improved upon.

RIK EBERHARDT: OK.

AUDIENCE: So they might not break. It might be that once you've installed an umbrella, it will last forever, kind of thing-- or a water fountain, or whatever we choose. But everything else is in progress, and I really think we're on track to finishing OK.

RIK EBERHARDT: OK. So you said a lot of the content you have to get in is the dialogue. Then you're also going to be doing some new artwork for the characters.

AUDIENCE: Yes.

RIK EBERHARDT: Is Julia the only person doing artwork on that?

AUDIENCE: She is the only person doing artwork.

RIK EBERHARDT: Is she also doing dialog?

AUDIENCE: No.

AUDIENCE: Uh, no.

AUDIENCE: I'm doing the dialog content.

AUDIENCE: All the backup stuff was for my UAP, so I was kind of--

RIK EBERHARDT: OK. But, I mean, are you still coding the dialog system for this game?

AUDIENCE: Not anymore.

AUDIENCE: Unless it's debugging.

RIK EBERHARDT: So you're saying it's bug-- OK.

AUDIENCE: We need more testing. We know that.

AUDIENCE: If there are issues, I will fix them.

RIK EBERHARDT: That was like the big red flag when Phillip and I were talking, is that one person doing two important things.

AUDIENCE: We know that there's-- no, no. The dialog is split between these two lovely people.

RIK EBERHARDT: Oh, yeah. No, not the creation of the dialog.

AUDIENCE: Yeah.

RIK EBERHARDT: That's not the thing we're concerned about. It's the creation of the art with one person, and that person also being the person in charge of the back end for your dialog.

AUDIENCE: Oh, yeah. The back end--

AUDIENCE: Well, I mean, it was a lot of work, but again, it's like I was counting the dialog for my UAP instead, so I was definitely doing this fast. It's not a big thing. So the artwork is my, like, contribution for this project for this class.

RIK EBERHARDT: OK. All right. So if you have enough time during the day that if that breaks--

AUDIENCE: I do. I can get the art done. I know that.

RIK EBERHARDT: --and you're doing both. OK. All right. We'll see how that goes.

AUDIENCE: Worst case, we'll have stick figures. It'll be OK.

RIK EBERHARDT: Yeah. Oh, yeah. And from our point of view, it's fine.

ANDREW GRANT: These people are fine.

RIK EBERHARDT: These people are fine.

ANDREW GRANT: Unless they don't--

AUDIENCE: The issue with that is one of the main learning things about this game is choosing who you're going to try and help, and these people do not convey at all their characteristics, which is why we're redoing the art.

ANDREW GRANT: That makes sense.

RIK EBERHARDT: And art is one way of doing it, floating dialog, floating box is another way of doing it, and floating boxes.

AUDIENCE: We have labels.

RIK EBERHARDT: Are they-- they're broken, or?

AUDIENCE: We deleted them, because they-- they were just hard to read, and we didn't have them moving with the characters, so they would stay in place. We could have made them move, but we just decided it was better to redo the art than try and make the little captions better.

RIK EBERHARDT: No. Oh, yeah. That's--

AUDIENCE: If you guys don't think I need to do the art, let's not do the art.

PHILLIP TAN: Well, I mean, the art is awesome, but it is also a huge bottleneck. And if you fall sick and then a lot of the reliance on your art to be able to convey that important information falls through, and the project fails. If you don't fall sick and you get all your stuff done, your game just looks

better, and it's awesome. Right? So.

AUDIENCE: Yeah. So, I mean, we have placeholders. So if for some reason I don't complete it, we can just use what we've got now.

PHILLIP TAN: But I'm just thinking about tinting the [INAUDIBLE], or something that like-- like just through software or something. What else can you do that's a little bit like as a backup?

AUDIENCE: So with heat waves, one thing that happens when you get sick is you turn red. So we could tint them red over time, and like have people starting at different levels of red. But I think-- and that's actually something that we might be looking into separately. Because something Pablo talked to us about was wanting to convey that people are getting sicker over time, and that maybe once you see, OK. Somebody's turning red or has an exclamation point, or some way of conveying that. Let's show the person that they're sick. The users need to know.

But that's something we're doing as, like, a secondary thing, because we want to focus primarily on making the game better as a whole right now.

RIK EBERHARDT: OK. That's cool. All right. Yeah. And all the things we're saying are not at all, do this. It's more--

AUDIENCE: Yeah. No. I--

RIK EBERHARDT: Think about this.

PHILLIP TAN: It's more we're flagging our concerns rather than telling you how to solve it.

RIK EBERHARDT: And prove us wrong, please.

AUDIENCE: All right. I'll prove you guys wrong. Don't worry.

PHILLIP TAN: All right. Cool.

RIK EBERHARDT: The other thing we had was about tutorial and ramping up, right?

PHILLIP TAN: Well, actually more like ramping up. So, right now, the game's frantic. Right? It feels like you have to be everywhere at all places. And that's great for somebody who knows how to play the game, and also great for someone who's just learning how to play the game.

AUDIENCE: OK.

PHILLIP TAN: So you already have this concept of this. I don't know if difficulty is ramping up over this--

AUDIENCE: Actually, currently, right now, it's not.

AUDIENCE: It's not. We were planning on just changing the number of people that come up every day.

PHILLIP TAN: Yeah, so maybe, I mean, just--

AUDIENCE: Starting with less people.

PHILLIP TAN: Yeah, just starting with less people, or reducing the rate in which people, like, fall over or something like that. Just like, how do you ease people into this situation?

AUDIENCE: That is kind of set, because that depends on temperature right now.

PHILLIP TAN: Right. So that-- it's--

AUDIENCE: So we could just have lower temperatures in the first few days.

AUDIENCE: The first couple days. We could definitely do that.

PHILLIP TAN: Yeah. Just think about how you're going to run people in. That's definitely better than going to the expository tutorial route, you know, of the I'm just going to tell you everything that you need to know and hope you remember it when you play the game. Ease people into the experience.

ANDREW GRANT: Yeah. In fact, if it's just the case that you have your high risk person. And if you've got your-- really cool-- I'd like you to tell how that might map to reality. And you don't need to tell me that they're at risk if they're the ones that keep dying like flies. I'll be like, oh my gosh. That's kind of a visceral way learn that lesson. Is the game-- when you guys play the game, do you feel that you are winning it?

AUDIENCE: No. [LAUGH]

AUDIENCE: No.

ANDREW GRANT: All right. So if you don't have it really high in your backlog, you probably should put it there. You need to do the gameplay balancing first, first thing. Because you need to play test that. Even if you guys are-- you can use yourselves as play testers to some extent for difficulty, but keep in mind that if you think the game is hard, the game is impossible. If you think the game

is easy, the game is hard.

AUDIENCE: Well, I think the game's impossible right now.

ANDREW GRANT: All right.

AUDIENCE: Which has to do-- I think we have, like, a bug where too many people show up, which I think is something you noticed also. It's just like, they're all on fire all at once. And I think we definitely-- we only intend to start with like, four or five people, and the fact that there's like 20 there is an accident. We're fixing that.

ANDREW GRANT: Sure. And you could easily have it-- they could arrive over the course level, or whatever, if that's what professors--

AUDIENCE: Yeah. Definitely.

ANDREW GRANT: But, yeah. I would say make sure that that game play piece is really high.

AUDIENCE: Definitely-- game balancing.

RIK EBERHARDT: Have you all played *Diner Dash* at all? Is it free online?

AUDIENCE: Yes.

RIK EBERHARDT: Yeah?

AUDIENCE: Yeah, I think I have. Yeah.

PHILLIP TAN: Yeah. You should be able to find at least a video of it.

RIK EBERHARDT: Yeah.

ANDREW GRANT: Or *Tapper.*

RIK EBERHARDT: Yeah.

PHILLIP TAN: Oh, *Root Beer Tapper.*

RIK EBERHARDT: *Diner Dash* or *Tapper*-- they're basically time management games, very similar to this one. Take a look at those just to see how they ramp up difficulty-- how easy it is when you first start compared to after about five minutes of play, and try to think of that. It might be as a baseline.

AUDIENCE: I had a question. So, somewhere it says that we should have explicit end conditions for our game.

RIK EBERHARDT: That's an explicit end condition. You died.

PHILLIP TAN: Loss is an end condition.

RIK EBERHARDT: Yeah.

PHILLIP TAN: You can--

AUDIENCE: Well, you don't technically ever lose. You just lose people.

RIK EBERHARDT: Oh. So there should be some point where I know that, OK. I can stop trying right now. I can try playing the game again. We try to keep it vague, because every game is going to do it differently. If it's A, the heat wave lasted four days, and you ended those four days of heat wave or whatever, and that heat wave's over, then you're done.

AUDIENCE: OK. We were just going to do it by, like, 20 people dead or something like that.

RIK EBERHARDT: Yeah.

ANDREW GRANT: That will work fine.

RIK EBERHARDT: That's fine, too. Whatever is best for the project.

PHILLIP TAN: You can actually do both, right? If you keep this town going 20 days without losing x number of people, you win, otherwise you lose.

ANDREW GRANT: That's an aesthetic choice, I think. The modern game shtick is that all games have a win condition. But classic games didn't. They had a lose condition only.

PHILLIP TAN: Yeah. You could be like a *Tetris* kind of thing, where you just-- how long can you last? But summer doesn't last forever. If somebody goes for, like, you know, 200 days, it's probably not a heat wave any more.

ANDREW GRANT: That's funny. That's funny. After 90 days, you're like, summer is over. No one is dying of heat wave. Wait for the sequel-- *Winter.*

[LAUGHTER]

ANDREW GRANT: *Cold Snap.*

AUDIENCE: Maybe it's only winter all year long.

AUDIENCE: Oh.

ANDREW GRANT: That's true. Some parts of the world actually is heat wave all year around.

PHILLIP TAN: Mhm. Singapore. [LAUGH]

RIK EBERHARDT: Cool. Any other stuff?

PHILLIP TAN: No, that's it.

RIK EBERHARDT: Last thing for me, then, is product backlog item 20-- menu user interface. Outside menu.

AUDIENCE: Oh, OK.

RIK EBERHARDT: What is that?

AUDIENCE: Yeah. So that's not actually well explained. That has to do with the insoluble items, which-- Roy isn't here. But Roy is working on it.

AUDIENCE: It's kind of like the pods are like add water stations, add umbrella.

RIK EBERHARDT: All right. Cool.

AUDIENCE: Yeah.

RIK EBERHARDT: We just weren't sure what you were talking about there. But that's enough.

AUDIENCE: I meant to fix that. I forgot.

RIK EBERHARDT: No. These documents are for you. As long as you understand what's going on-- that's why Phillip was saying, yes. We didn't understand. There's probably some things in your head that you understand. But also, in case you didn't see that, then we wanted to go over that.

AUDIENCE: Yeah.

PHILLIP TAN: Yep.

RIK EBERHARDT: All right.

ANDREW GRANT: And another thing-- so add water-- is it red on there because it's high priority?

AUDIENCE: No. Red means it was cut.

ANDREW GRANT: Ah. Awesome. OK, cool.

RIK EBERHARDT: And we like that-- cutting the features and leaving them there is fine. Sometimes, as a morale, removing them is also good. Have a party when you do that.

ANDREW GRANT: Well, trying to--

RIK EBERHARDT: But as memory, they're good for institutional memory, to know, hey. We thought about this. We cut it. Later on, oh-- assuming you had another couple weeks. We can go back to it.

ANDREW GRANT: Actually, almost every project I work on, I now have a do not do list. Like, not a to do list. Like this is the thing I thought about, and I really want to do it. And I'm going to write down here so I know I'm going to ever do it. So later, when I think about, what about that? Oh, right.

PHILLIP TAN: You're not going to do it.

AUDIENCE: Never do that.

ANDREW GRANT: Never do that. Because I don't have time. And so I think even if you don't keep those on your main to-do list, it's cool to have them there for a little bit, just so you remember-- oh, right. We cut that.

AUDIENCE: Mhm.

RIK EBERHARDT: OK.

PHILLIP TAN: Well, thank you.

RIK EBERHARDT: Thanks. And actually, so the vision statement isn't due until December 10.

AUDIENCE: OK.

RIK EBERHARDT: Is just we wanted to give you the chance to make an update now if you could, but this discussion is fulfilling that. So, that's good.

AUDIENCE: Cool. Thank you, sir.

RIK EBERHARDT: All right? Thanks. Have a great holiday.

All right, Drew. When you're ready, go ahead and play another game.

ANDREW GRANT: Yes. Oh, excellent.

AUDIENCE: There's still some instructions which are missing from within the game.

ANDREW GRANT: OK.

AUDIENCE: So I'll just explain those now. So the goal of the game is to build up your victory progress to 100%. And the way you do that is by setting your toys to build or--

ANDREW GRANT: Or gather. Mhm.

AUDIENCE: Yeah. And you do that by clicking. So the story is like you brought your toys to the beach, and they have these sand castles. But then the waves-- like, if they cover the sand castles, the toys will then take damage. And they can only get hit by the waves twice. They take damage if they start underwater or end underwater. And so in order to prevent your toys from getting swept under the waves, you can move them by clicking and dragging them to castles.

ANDREW GRANT: OK.

AUDIENCE: And then they will move one castle at a time. So this one will move here, here.

ANDREW GRANT: OK. It's pretty much the same as [INAUDIBLE] play test, then, the last I saw.

AUDIENCE: Oh, OK.

ANDREW GRANT: OK.

AUDIENCE: And then the last thing-- so you can hover over this to see what the predictions are, and you can hover over the castles.

ANDREW GRANT: Oh, I see. And they're no longer perfect. Excellent. I like that. I like that change. All right. Cool. I'm going to say, again, this toy is immune to water damage.

AUDIENCE: But he does not need to be put away.

ANDREW GRANT: Ah, OK. OK.

RIK EBERHARDT: So while he's playing, did you update your-- did you have a discussion about cutting features after Monday, as a team?

AUDIENCE: Yeah.

RIK EBERHARDT: Did you cut anything?

AUDIENCE: We cut, like, kind of any sort of big changes where we would give people special abilities, or give any sort of long tutorial kind of like that.

RIK EBERHARDT: OK. So you cut things you hadn't started yet, basically.

AUDIENCE: Yeah.

RIK EBERHARDT: OK. Anything that if you had to cut today, like could you cut anything right now, or does everything have to go in the way you've thought about the game?

AUDIENCE: So what we mainly have left is UI changes-- like make this a cloud it fits into the theme of our game, or add arrows to show where--

ANDREW GRANT: Where they're going to go, and how they're going.

AUDIENCE: Yeah.

ANDREW GRANT: OK.

AUDIENCE: And so a lot of that is necessary to make sure that our game is standalone. But I guess the worst case scenario, we make that a blob of text, which would be, like, absolute worst-case scenario.

RIK EBERHARDT: Do you already have the feature to do a blob of text?

AUDIENCE: Yeah. That would be our--

RIK EBERHARDT: It's already in there, or?

AUDIENCE: Yeah. That would be our menu screen, which we didn't show you, but.

RIK EBERHARDT: OK. Cool. OK. For your vision statement-- so I said if you have a new one today, we'd like to see it. If you don't have a new one today, make sure you update your vision statement before you turn in the game on December 10.

AUDIENCE: OK. Yeah. We do have an updated vision statement now.

RIK EBERHARDT: Oh, you do?

AUDIENCE: Yeah.

RIK EBERHARDT: Cool. Cool. Then I'll review it. So we review--

AUDIENCE: Should I submit it to Stellar though?

RIK EBERHARDT: Yeah. Submit it to Stellar. Submit it under the December 10 one. And then on December 10, if anything else changes, resubmit it on the December 10 one. That's the one we're going to use and judge the game by. The main thing I saw on the one you have now is that just the 30 seconds of gameplay is really, really vague. So if you changed that for this new one, then you did good.

AUDIENCE: Yeah. OK. Yeah. We made it a lot more concrete, now that we have a more concrete--

RIK EBERHARDT: Great. Cool. That's exactly right. So the biggest thing that Phillip and I saw was about your-- basically about the representational art, the quality spent on the representational art compared to other feedback.

PHILLIP TAN: Yeah. So right now, the graphics that you have in the game look really cute, and they're attractive. They're endearing. They make people want to people want to play the game. And then your UI isn't up to that, right? You have this issue-- and this happens in a lot of games-- where the quality of one asset or one kind of asset is showing how far back the rest of your assets are.

And this obviously means that you might be inclined to make sure that the rest of the stuff looks as good as what you've got-- things like the background, for instance-- probably the most important part of the entire game is the background. But it also looks like the least visually thing that you've got on screen.

AUDIENCE: That's true.

PHILLIP TAN: And also things like when you want to instruct your characters to move around, for instance. Like you said, right now you have to explain it. But I expect to see some sort of visual feedback, UI feedback, when I have, say, instructed someone to move somewhere else.

AUDIENCE: Yeah. That's what we're planning to do. We'll probably have the go to destination and the character goes--

PHILLIP TAN: And the danger right now is that your characters and your sandcastles and your clouds have set the standard of visual quality that the rest of your stuff now needs to meet, which is a pretty tall-- I mean, you clearly have the skills to do it. The question is whether you have the time to do it. And that's what I'm worried about.

AUDIENCE: Sure.

PHILLIP TAN: Because you don't just want people-- you want people to look at your characterize when they're trying to think about whether they want to play a game. When they're playing your game, you want them looking at that background, and where they're going, and the quality--

RIK EBERHARDT: So when it comes to a feature like-- OK, here's an arrow going from one place to another. Do you already have code in place to do that, but just you don't have the art asset? Do you have the art asset, but not the code? Or do you not have any of it?

AUDIENCE: I think that was like our, actually, highest priority to implement highlight to implement by, like, the end of Thanksgiving weekend. So that would be, like, our number one--

RIK EBERHARDT: But you're starting from 0 and going--

AUDIENCE: Yeah.

RIK EBERHARDT: OK. Cool.

AUDIENCE: Don't they have arrows showing where--

RIK EBERHARDT: They have arrows showing that they are moving, but not where they're moving to.

AUDIENCE: Oh.

ANDREW GRANT: And do you have to click twice on a character? Is that correct?

AUDIENCE: No.

ANDREW GRANT: No? OK. It's just a click and hold?

AUDIENCE: Yeah.

ANDREW GRANT: Yeah. But-- yeah.

AUDIENCE: Yeah, it's a little difficult.

ANDREW GRANT: The cancel is-- I mean, the cancel is intuitive to a computer programmer, but no one else. Is there sound?

AUDIENCE: Uh, no sound.

AUDIENCE: That's another one to be implemented.

RIK EBERHARDT: OK. And how far are you on sound? Is it a--

AUDIENCE: We have potential background music, but we're trying to figure out which one we actually want to put in.

RIK EBERHARDT: Well, what about sound for I clicked a thing, and sound for--

AUDIENCE: I have worked on the sound, but we haven't put it in yet.

RIK EBERHARDT: OK. That's--

ANDREW GRANT: My recommendation on that stuff is don't worry about picking the right background music.

RIK EBERHARDT: Yeah.

ANDREW GRANT: Put in stupid background music, and then you will hear it, and then you'll be motivated to change it. But most importantly, you'll have proven that your code can support background music and click simultaneously, et cetera, et cetera-- which it can, because it's not hard. But just be safe. Put in placeholder sounds, put in placeholder art for whatever. If it is, in fact, the case that you end up with your cool, cute toys being more visually exciting than your UI, there's another cheat you can do, which is lower the quality of your characters if you don't have time to improve the quality of your UI.

PHILLIP TAN: Just pixelize them.

ANDREW GRANT: [LAUGH] Obviously, improving the quality of your UI is better. But again, you can cope with that. But, yeah. You do want people to focus on the right things.

RIK EBERHARDT: From a usability standpoint, we're going to be looking stronger at if I click a thing, it gives me an audio feedback that I clicked a thing, more than there's background music going on.

ANDREW GRANT: Sure.

RIK EBERHARDT: Background music's an aesthetic element that we're also going to look at, but when we're ranking our priorities, usability is higher than aesthetic.

ANDREW GRANT: Yeah. Another thing is that, right now, for usability, there is no hint. So we're talking about hints about where is this going? The guy is moving, not moving, whatever. But currently, there's no clue that he's clickable, except for the instructions.

AUDIENCE: Yeah.

ANDREW GRANT: So you want him to react in some way. The easy, easy way is to make them bigger, and just scale them. So have them scale up, or something, when your mouse is over them, or something. Just give us some really simple clue. It doesn't have to be complicated code-wise, but you definitely need that clue. Also, the part where this guy, if he's-- this castle's perfectly safe. It's never in danger. I saw in your backlog we've got to figure out how to solve that problem. I would make that pretty high priority-- actually, higher priority than any polishing you're doing. Because your game, currently, has a pretty easy strategy of leave a guy there and click for 100 turns, right?

AUDIENCE: Well, the only thing is you have to be at [INAUDIBLE].

ANDREW GRANT: Sure. You may never win, but it's easy to never lose, certainly. That's not interesting. Actually, no-- this guy, by himself, doing nothing but building, can win the game in 100 turns. Right? So--

AUDIENCE: Our proposed solution to that is after you lose two guys or one guy, you lose the game.

RIK EBERHARDT: OK. Cool.

AUDIENCE: That's not [INAUDIBLE].

RIK EBERHARDT: Sure. All right. Cool. But I would try to make that sooner, because your game is not-- make sure anything that your game has not done-- like, I feel like that is not done with that flaw. And, as you actually mentioned in your backlog, this may add new tasks and bugs, because it will. So make sure that's relatively high priority.

AUDIENCE: OK.

ANDREW GRANT: I would say--

PHILLIP TAN: Because then you have to test all of that on people.

ANDREW GRANT: Yeah.

PHILLIP TAN: Because you are going to have a different kind of bar graph. That's what I'm getting from what you're describing. You're going to maybe rearrange the way how your fonts and your progress bars and stuff, and all of that is going to be understood differently by people who've never seen your game. And you need to get that information pretty soon.

ANDREW GRANT: Oddly, in some sense, the poor bar graph tells me is that, right now, I know this is a bar graph. It's probably giving me information. So I should figure out what that information is. As soon as you turn this into something that looks like a cloud or something, I might stop knowing that it's information.

AUDIENCE: Oh. That's interesting.

ANDREW GRANT: Right. So right now, I see it and I think to myself, what does it do?

RIK EBERHARDT: That's something you can really quickly paper prototype and get in front of people who have never seen this before.

AUDIENCE: Yeah.

ANDREW GRANT: Yeah. In fact, you could take a screenshot of this. And just stick it into Photoshop. Put your thing on there.

PHILLIP TAN: Mock it up.

ANDREW GRANT: What does this mean, random person on the street I've never met before? [LAUGH]

PHILLIP TAN: Family member that you might see.

ANDREW GRANT: Over Thanksgiving, for example. But, yeah. You don't need to put it in the game to test it, so.

AUDIENCE: OK.

PHILLIP TAN: Yeah. There's a lot of different ways you can get that bar graph to look like it's part of the scene while making it look like a bar graph. It doesn't necessarily need to be made out of

clouds. It could be in a cloud.

ANDREW GRANT: Yeah.

PHILLIP TAN: It could be projected on a cloud. It could be--

ANDREW GRANT: Yeah.

RIK EBERHARDT: Yeah. OK.

ANDREW GRANT: All right.

RIK EBERHARDT: Moving on.

First things first. On Monday, I mentioned try to do an updated vision statement.

AUDIENCE: Yes.

RIK EBERHARDT: It's due December 10. If you have one now and it's in Stellar now, awesome.

AUDIENCE: Yeah. We did not submit it.

RIK EBERHARDT: OK.

AUDIENCE: We haven't submitted it, but we did just rewrite it.

RIK EBERHARDT: OK. Cool. Then submit that to Stellar under the December 10 final one.

AUDIENCE: Final-- OK.

RIK EBERHARDT: And then resubmit it again with changes.

AUDIENCE: Resubmit it again for changes? Sure.

RIK EBERHARDT: OK? The big thing we see--

AUDIENCE: What do you want risks to have? Because it seems like by the end, their risks are kind of meaningless.

ANDREW GRANT: By December 10, risks are too late.

RIK EBERHARDT: Yeah. So just keep the risks you originally had.

AUDIENCE: OK.

RIK EBERHARDT: If you want to have--

AUDIENCE: So we updated the risks right now, because pretty much ever risk we had before didn't make sense.

RIK EBERHARDT: That's perfect. The thing I'm really looking at is 30 seconds of game play.

AUDIENCE: That completely changed.

RIK EBERHARDT: That's-- cool. Because that's the thing we're judging your game one. If your game does not look like the 30-second game play, it's a huge red flag for us.

AUDIENCE: Yes.

PHILLIP TAN: Actually, there probably are still risks on December 10. There won't be implementation risks. It won't be like, can we implement something? It will be more of the what happens when real people try to use this thing?

AUDIENCE: Yeah.

PHILLIP TAN: Right? So you can write those up.

AUDIENCE: Well, I think that risk is December 8.

PHILLIP TAN: Possibly.

AUDIENCE: So--

PHILLIP TAN: Well, I mean--

AUDIENCE: Because we're testing with 100 players.

PHILLIP TAN: Yeah. But what happens when the next 100 players come along?

AUDIENCE: Sure, sure.

PHILLIP TAN: What happens long-term?

AUDIENCE: Yeah. There's real-- there's real deployment.

PHILLIP TAN: You can change it then.

AUDIENCE: Charlie.

RIK EBERHARDT: For your product backlog and task list, are these prioritized when you look at them? Like, you're using Asana, right?

AUDIENCE: Yeah.

RIK EBERHARDT: Do you use priority?

AUDIENCE: We did not do a good job of--

AUDIENCE: We sort of do soft priority-- small, medium, large-- on some tasks.

AUDIENCE: Yeah. We have different--

RIK EBERHARDT: No. That size.

PHILLIP TAN: No--

ANDREW GRANT: That size. But you don't necessarily have--

AUDIENCE: So I think theoretically, they should be ordered by priority.

RIK EBERHARDT: OK.

AUDIENCE: Yeah. That would be--

RIK EBERHARDT: OK. Because it doesn't look like they're ordered by name and something else. I don't know. We couldn't tell how you were authorizing it, so hopefully you are thinking about that as you are moving towards the deadline. You're going to have to choose-- I'm going to work on this right now. Make sure it's organized.

AUDIENCE: Yeah. I think now that will be more important.

RIK EBERHARDT: How are you-- are you doing work over the weekend, over the break?

AUDIENCE: I will.

AUDIENCE: I probably will do a little bit, but mostly other work.

RIK EBERHARDT: Oh. No. We tell you don't. Like, don't plan on having, like-- that's bonus work, right? But if you are working individually elsewhere and you're not able to talk to each other, how do you know what you're working on? That's the big thing for that.

PHILLIP TAN: One of the big things that we're noticing on your list of things-- a lot of them are both the server and game-system based. Probably also because you've been getting a lot of feedback from Pablo and people how have been running this game in front of the audience, we're not getting a whole lot of feedback from the people who are actually playing it on the playing site.

AUDIENCE: Yes. That's true.

PHILLIP TAN: So the thing that I'm really, really worried about is that the client-side user interface doesn't look like it's actually changed all that much. I'm sure the technology has, but the actual user experience hasn't.

AUDIENCE: Yeah.

PHILLIP TAN: So I am worried that you're not actually getting in useful usability information and that iterative playing experience.

AUDIENCE: Yeah.

RIK EBERHARDT: And so you mentioned in the presentation you were dropping Phaser. are you in the process of dropping Phaser, or started?

AUDIENCE: We are done with with that.

RIK EBERHARDT: You're done with that. So you're no longer in Phaser. You've got something else?

AUDIENCE: Yeah.

RIK EBERHARDT: It's buggy, but you've got something else.

AUDIENCE: It's a little bit buggy, but it's almost as good as we had before.

RIK EBERHARDT: OK. Cool. Because we were going to ask do you really need to drop Phaser? And so you're already done, so why bother asking?

AUDIENCE: Yeah.

RIK EBERHARDT: What else? Oh. And give some time looking at your scoring mechanism. While you kind of hand-waved through it during the presentation-- as we've got, here's a couple of different ways we can do scoring. Are you thinking about scoring as a team? Or are you relying on the client to come up with that?

AUDIENCE: So I'm actually not sure why our scoring works the way it does, because it's harder to implement--

RIK EBERHARDT: Yeah. It's also not very intuitive.

AUDIENCE: It doesn't make sense.

RIK EBERHARDT: Yeah.

AUDIENCE: Like, there's a specific function that makes sure that you only get one point when you might as well get more than one point. I think that's just something that has been low-priority, and hasn't been fixed-- especially because nobody actually understands how their getting points. And they only ask at the end of the game, wait a minute. How did I get points?

RIK EBERHARDT: Yeah.

PHILLIP TAN: Two ways that you can resolve that-- one is you play test it, and then you ask people how they think that they should be getting points.

AUDIENCE: Yeah.

PHILLIP TAN: And the other way is you just ask Paolo.

AUDIENCE: Yeah.

PHILLIP TAN: And let him make a decision for you.

RIK EBERHARDT: The third way-- if you're with family members, you can play the regular, the analog game. Come up with a scoring mechanism-- like, just do it. You don't need to be programming to do it. You can probably do it really quickly.

PHILLIP TAN: My guess is that a accumulated scoring system will give you more differentiation between players, whereas the one point for everybody kind of situation means a lot of people get the same score.

AUDIENCE: Yeah.

AUDIENCE: Yeah.

ANDREW GRANT: Are these-- it looks like you have, actually, three backlogs. Is that true?

RIK EBERHARDT: This is backlog, and these are tasks lists.

ANDREW GRANT: Oh, I see. I see. I see.

RIK EBERHARDT: That's on the--

ANDREW GRANT: I see.

RIK EBERHARDT: Same system, yeah.

ANDREW GRANT: Oh, OK. So does that mean it's repeated? This is the backlog and these are task lists, are the same thing? I think they're repeated in both places. Do you have one list--

AUDIENCE: No.

RIK EBERHARDT: Yeah.

ANDREW GRANT: So you have somewhere one list that lists everything you need to do, prioritized. So that way, one of you--

AUDIENCE: OK. We don't have something exactly like that.

ANDREW GRANT: And the reason why you want that is so that if I'm working on the back end and I have gotten all of my priority two stuff done. I'm working the priority three stuff. But on the front end, there's a whole bunch of priority one bugs. I need to switch to the front end.

AUDIENCE: I see.

ANDREW GRANT: Right?

AUDIENCE: So far I don't think anybody has-- initial on the switch. It was permanently switched.

AUDIENCE: Yeah.

ANDREW GRANT: Now, part of that, there's a learning curve problem for doing that. But if you get that far out of whack, you really need to be ready, or to be aware of the fact that that might happen.

AUDIENCE: I see. Yeah.

ANDREW GRANT: So it also does you no good job to implement a feature on the back end that's not implemented on the front end, and vice versa, really-- for the features that pair, at least, right? So there's got to be really close communication. And one way to handle that is to have a unified list-- bugs and features intermingled sometimes.

AUDIENCE: Right.

ANDREW GRANT: What's the most important thing to do next? But I would be a little bit worried if this is your entire organization system, about stuff falling through the cracks pretty easily, especially since you're dividing your team up into subgroups to sort of handle front end, back end problems.

AUDIENCE: Yeah.

ANDREW GRANT: That means that there's a-- it's not a communication barrier, but there's no highway of communication. Since you are separated out, you will tend to forget to inform the other side of what's going on.

AUDIENCE: Yeah.

ANDREW GRANT: So, and the one list also helps with that. And also, let's see. Did I see here that you're already adding word lists or did I make that up? No, I just saw cloud, words, and export.

RIK EBERHARDT: They have a word cloud on the back end now.

AUDIENCE: Yeah. Not for players--

ANDREW GRANT: I see.

AUDIENCE: --for the back end. That's been around.

ANDREW GRANT: Got it. So the back end-- I see. I see. I see. OK. So are you, for example, not bothering to have a feature for collusion or cheating?

AUDIENCE: No.

ANDREW GRANT: OK.

RIK EBERHARDT: Yeah. Cool.

AUDIENCE: I think we have no anti-cheating tasks.

ANDREW GRANT: All right. Cool. You probably should mention that explicitly somewhere. I'm not sure where that goes, though.

PHILLIP TAN: Maybe interpretation document.

ANDREW GRANT: Yeah. It's an anti-task, certainly.

AUDIENCE: That's actually--

ANDREW GRANT: And to the client, for example, you'd want to make sure the client knows this is the thing we're not doing. And you probably don't care, because of your use case. But we should mention in case you go, no. Wait a minute.

RIK EBERHARDT: Your final presentation's a great place for that, as a here's something we thought about and didn't do because of that.

ANDREW GRANT: Yeah.

RIK EBERHARDT: Yeah.

ANDREW GRANT: Although if you do have any conversation with the client, mention that. Because if they're like, that's crazy, you want to know that before the final presentation-- you might not be able to do anything about it with the time you've got, but it'd be good to be aware if maybe there is an easy solution the client come up with or whatever that you haven't-- because maybe full cheating stopping is not necessary, but some minor things are.

AUDIENCE: I mean, I think the way they run it-- if you cheated it would be obvious, first of all. Like, they're going to show you did it.

ANDREW GRANT: Oh, because the cloud.

AUDIENCE: So, like--

ANDREW GRANT: OK, yeah.

AUDIENCE: What you did--

ANDREW GRANT: Who put cat and dog in here? That's ridiculous.

AUDIENCE: Yeah.

ANDREW GRANT: OK. Sure. All right. Cool. That may well be enough right there.

AUDIENCE: And also, they wants us to focus on pretty serious players, right?

ANDREW GRANT: So who aren't going to be cheating?

AUDIENCE: They're not going to cheat.

ANDREW GRANT: All right. Cool.

AUDIENCE: [INAUDIBLE].

ANDREW GRANT: That's a nice advantage. And that's a thing to include in your-- if you mention your target audience is, in fact, people who've already drunk the Kool-Aid. They're already on your team. They're not trying to-- it's not whack people on the internet who are going to do whatever they want. That's an important--

AUDIENCE: Yeah. It's almost like not players.

ANDREW GRANT: Yeah.

AUDIENCE: It's not a typical player.

ANDREW GRANT: That's an important thing to mention in your vision statement, actually, if it's not in there already-- I'm behind on that, but.

AUDIENCE: Yeah.

PHILLIP TAN: One other thing is given that your game is designed to work both on phone and on laptop, on PC, you do want to set up multiple test sessions so that you can test your user interface on both clients. Maybe you're testing them simultaneously, but then you have to make sure that when you're getting your usability feedback, you are getting some usability feedback on the phone users, and some-- because it's very different on the different device.

AUDIENCE: So I think that's sort of a weird feature where, as far as the class is concerned, I don't think we care about the mobile interface.

RIK EBERHARDT: OK. All right.

AUDIENCE: Like, that's not something that we're promising in terms of the course.

RIK EBERHARDT: OK. Oh, good. Good.

PHILLIP TAN: That wasn't clear on the priority list, too.

AUDIENCE: On the other hand, it seems easy enough, and the client really wants it.

RIK EBERHARDT: OK.

PHILLIP TAN: You might want to do we'll guarantee that the PC site will work, and if you wanted us to do the mobile site, maybe pay us.

RIK EBERHARDT: Here's 0.9B. You get 1.0 with the dot.

PHILLIP TAN: I mean, seriously, this is real work that you're doing that real people get paid to do. And for the sake of this class, we want you to turn in a polished product, and we never ask you to target two platforms. The client does, obviously. But then it's also reasonable to tell the client, first priority is get one--

RIK EBERHARDT: Beyond the scope of the class.

AUDIENCE: Well, I think he's-- he's been very good about mentioning that every time, that he wants us to do well in the class, not make him happy.

ANDREW GRANT: Sure. Sure. Well, and that's another place where your prioritization can help a lot, right? You want to make sure that the web interface on a thing with a keyboard is the one that's the highest priority. And if you have time, then you make the mobile one work. And you're already going to have problems for you poor mobile people on their phones, who are typing really slowly compared to the people on their computers.

AUDIENCE: Yeah. This is something we talked about, in fairness, that sort of got dropped because it's very hard to do.

RIK EBERHARDT: Oh, yeah. You can't compensate for the fairness, but it's a thing to be aware of, obviously. All right.

AUDIENCE: Yeah. So I have one question about deployment. How long after the course will the game have to be up?

RIK EBERHARDT: At least through January.

PHILLIP TAN: Or through the whole of January.

RIK EBERHARDT: Yeah. Through the whole of January, if possible. And if you can't do that, let us know. And we'll come up with a different solution. Grading is really soon. We're going to do grading. Yeah.

ANDREW GRANT: Grading will be before then-- way before then, obviously.

RIK EBERHARDT: If you have a way to deploy it to a different platform, a different server, if that is what is necessary, then we'll think about that. But that's the other thing. We're going to have a conversation with Pablo at the end of the class to figure out how it's going to be used.

PHILLIP TAN: And OCW would like to figure out, also.

RIK EBERHARDT: Yeah. OCW wants to actually-- that's right. Forever.

ANDREW GRANT: [LAUGH]

AUDIENCE: So ours is a little bit more tricky.

RIK EBERHARDT: Yours is more tricky.

PHILLIP TAN: I'll find a solution for that.

RIK EBERHARDT: Something we could talk about after class, because I don't think we can talk about it during class. That after January 1, it's not going to be part of the grade. Because the grade's already done by December 15.

AUDIENCE: Yeah.

RIK EBERHARDT: But for OCW capture, we'd like to have something there.

ANDREW GRANT: What does it run on now?

AUDIENCE: It's a node server.

ANDREW GRANT: It's a node server.

AUDIENCE: [INAUDIBLE].

AUDIENCE: Actually, it's two node servers, unfortunately. One for the back end and then one that runs the front.

AUDIENCE: The front end is just static files.

AUDIENCE: Actually, the front end is HTML now.

AUDIENCE: Yeah.

RIK EBERHARDT: So maybe we can talk to [INAUDIBLE] about finding money to pay for the servers, basically.

AUDIENCE: Yeah.

PHILLIP TAN: And maybe even money for one of your [INAUDIBLE].

ANDREW GRANT: Exactly.

RIK EBERHARDT: So that's something to put in your vision statement too-- or as a release note or something, somewhere.

ANDREW GRANT: Is there any place the caveats go for the risks--

AUDIENCE: The risks section might be OK.

ANDREW GRANT: Yeah, actually risks is a good place. That's as close as we've got for that. Risks, cheating, risks, server goes down. [LAUGH]

RIK EBERHARDT: All right. We've taken too much of your time. Thank you. Have a good holiday.

ANDREW GRANT: Thank you very much.

RIK EBERHARDT: So looking at your project, the biggest thing we found was can you cut one of your main characters? Is that even possible?

AUDIENCE: So, yeah. We already cut one of our games. And we're at three.

RIK EBERHARDT: So how-- you're at three? So you cut one down to three. Do you need three? Is three the magic number that just says, everything's wrapped up together? Or if one of those fell away and we polished two, is that good enough?

AUDIENCE: I think two would significantly change how the game fundamentals. It's kind of a puzzle. So it's

like if you only had two clues, which is three clues, so more of a puzzle element.

AUDIENCE: Also the fact that each game covers-- we cut down one game and combined it to minimize-- to still try to cover everything we want to teach.

AUDIENCE: Yeah. We'd have to find to teach the-- what was in the game we cut in other game dialog or something.

ANDREW GRANT: Absolutely. Cool.

RIK EBERHARDT: So cutting them in the game would, in fact, mean a lot of work.

AUDIENCE: Yeah.

ANDREW GRANT: Great. That's the perfect, excellent answer.

RIK EBERHARDT: Otherwise, we're looking through your product backlog. Your prioritization looked really good to me and Phillip.

AUDIENCE: Great.

RIK EBERHARDT: So I think you're-- do you feel like you're in control of the information that you have right now, of where you are on your team, where you are on your project?

AUDIENCE: Yeah. I think our team, since the way we structured it, it's like everything has to come together. But putting it together will not take as long as it would originally. Because we kind of all divided up tasks. Everyone's working on the same kind of tasks, like for the same thing, but we just have to put it all together, if that makes sense.

AUDIENCE: Yeah. So it's very modular, since we have three mini games. Then we have somebody to work on the main scene. And then we have end scenes. So you just have to put some pieces together.

RIK EBERHARDT: OK. Cool. Can you pull up the vision statement really quick?

ANDREW GRANT: Yeah.

RIK EBERHARDT: So on Monday I mentioned talk about vision statement. Change it if you need to. On yours, it looked pretty good. I really like the narrative aspect of the 30 seconds of game play. Does your game still feel like there's a narrative to it, though? Like, is it as strong in that game?

AUDIENCE: So I think it's probably not as strong as we want it to be now but, that's only because the dialog hasn't been--

AUDIENCE: --really written. I mean, been drafted.

AUDIENCE: Yeah. Exactly.

AUDIENCE: Yeah. We're going to that [INAUDIBLE].

RIK EBERHARDT: OK. Cool. It's not due until December 10, for reals. So that was an exercise just to make sure that you do it now rather than waiting until the last minute.

AUDIENCE: Yeah.

RIK EBERHARDT: So once you have a finished version in, turn it in on Stellar under the December 10 deadline. And, yeah. Really make sure that the 30 seconds of game play are more representative of what the game really is.

AUDIENCE: OK.

RIK EBERHARDT: Are you having problems with the title?

AUDIENCE: Hmm?

RIK EBERHARDT: Are you having problems with the title?

AUDIENCE: I would say so.

AUDIENCE: Yeah.

AUDIENCE: Yeah.

RIK EBERHARDT: Is the problem too many ideas, or too few?

AUDIENCE: Too few.

AUDIENCE: Too few.

RIK EBERHARDT: OK. That's actually the easier one to deal with, I think. Because when you resolve it, no one's mad.

AUDIENCE: Yeah.

[LAUGHTER]

RIK EBERHARDT: What are your strategies for that?

AUDIENCE: We haven't-- we've been ignoring it.

ANDREW GRANT: You've been ignoring it.

AUDIENCE: OK. That's-- that's actually a fine place to be. Because it's relatively to brainstorm it. But if you tried that and it didn't work, eh.

ANDREW GRANT: Because, yeah. A title does-- even if it happens last minute-- it's another art asset to create. Another thing to integrate.

RIK EBERHARDT: Yeah.

AUDIENCE: Yeah. We've been thinking like, as we do it, we'll just get a name for the village, and we'll be like, *Saving Village Name.*

RIK EBERHARDT: Village name?

ANDREW GRANT: Beautiful.

RIK EBERHARDT: Sure. That sounds easy. That's fine. Have you been brainstorming water themes, like water names?

AUDIENCE: Water names?

RIK EBERHARDT: Maybe like the Ghanaian word for water?

AUDIENCE: We looked through like Ghana stuff, like Ghana city names. And then we haven't actually, like, looked through specifically-- we have to work on that.

ANDREW GRANT: OK.

RIK EBERHARDT: All right. Is that on your backlog?

AUDIENCE: It is.

RIK EBERHARDT: All right. Score.

AUDIENCE: It's at the--

ANDREW GRANT: The very, very bottom. Yeah, yeah.

RIK EBERHARDT: All right. Cool.

AUDIENCE: Find a name that isn't offensive.

ANDREW GRANT: [LAUGH] Yeah. That's important.

RIK EBERHARDT: How has that been going along since we last talked to you, about the--

AUDIENCE: Research?

RIK EBERHARDT: Research and stuff? Are you done with that, or are you still on-progress with that?

AUDIENCE: Well, we got together and did a mega research, like-- find all of the things and get inspiration from it, mainly for the artists, so that we can get a cohesive theme together. And I think that also helps inform the decision, the design behind water filtration, for example. So, yeah. I mean, I think still if the artists ever need to make something new, we still look up and see if we can find references.

RIK EBERHARDT: Yeah. OK. That's good.

AUDIENCE: But--

RIK EBERHARDT: All right.

ANDREW GRANT: So I don't think that I have played this game, because mini game sounds like a new thing to me. *Saving All the Village*. Give me a quick five-second play-through. I hit that, I'm sure. Mini Game 1. Yes. Purified water conversation goes here. I will purify. Yay! This is the mini game? Hmm. Hmm.

AUDIENCE: The down button should be a Next button.

ANDREW GRANT: Oh, excellent. Oh, excellent. And now I play the game where I'm doing essential sorting, and this is an actual game. All right, cool. I am going to assume that I do something like this. All right, cool. The main thing I-- so when I am putting on my feasibility hat and I hear the word mini game, I always think [GASP]. But it seems like you actually have a mini game. Good job-- a mini game.

AUDIENCE: [LAUGH]

RIK EBERHARDT: Mini games tend to just be--

AUDIENCE: Game games?

RIK EBERHARDT: --many games.

AUDIENCE: Many games. [LAUGH]

RIK EBERHARDT: M-A-N-Y.

ANDREW GRANT: Yes. Many games is not what you want. What you actually want is mini game.

RIK EBERHARDT: [LAUGH]

ANDREW GRANT: Oh my gosh.

RIK EBERHARDT: This is [INAUDIBLE]. [LAUGH]

ANDREW GRANT: All right. You've got a lot of-- you've got a lot of features, here.

RIK EBERHARDT: Yeah.

ANDREW GRANT: And that is cool.

RIK EBERHARDT: Is this a mini game, or is this--

AUDIENCE: This is the mini game.

RIK EBERHARDT: All right.

ANDREW GRANT: All right. All right. I see here. OK. Cool. And so how much more do you think is going into these mini games?

AUDIENCE: So we just-- for two of them, I haven't actually had an update on the symptoms one.

RIK EBERHARDT: On the second one.

AUDIENCE: But the symptoms one should probably just be dialog and the pictures. That's it.

ANDREW GRANT: Got it.

AUDIENCE: The water filtration should be instruction page, or interactive tutorial beginning, so you just don't like dive into it and it's like, what's happening? And I think just clearer instructions with the water placement.

ANDREW GRANT: I see. OK.

AUDIENCE: The main thing that we have to do right now is just the end game-- making sure that once you finish all the mini games, you have the clues you need to take it from there. Then you can have that conversation.

RIK EBERHARDT: OK. OK.

ANDREW GRANT: OK.

AUDIENCE: And also art assets.

RIK EBERHARDT: Cool.

ANDREW GRANT: Cool. I win. Yay. All right. Cool. All right. So you have three mini games, and they're, like, doing stuff. That's good. All right.

RIK EBERHARDT: Those are the symptoms.

ANDREW GRANT: Do you have any-- because it seems like, for the most part, these mini games are relatively simple. The code is actually not--

RIK EBERHARDT: You're raising--

ANDREW GRANT: Click the right thing. You're using assets because of that.

AUDIENCE: Yeah.

ANDREW GRANT: Do you have any unknown sort of tech-wise at this point? You sort of know everything, or is there-- we're not sure how that works. that left?

AUDIENCE: So I don't know how-- I think something that has been buggy consistently-- maybe it's changed now. I'm not updated on it. Is the conversation UI?

RIK EBERHARDT: Yeah.

AUDIENCE: Yeah. We need to iron out a few bugs with the conversation UI and make the visual aspect of it more appropriate with the theme that we're going with the assets. But other than that, code-wise, there's just a couple bugs that won't be hard to fix.

ANDREW GRANT: OK. All right. Cool.

AUDIENCE: Yep.

RIK EBERHARDT: So do a glance-- I'm sure you already have. But make sure that anything that has any question marks at all with it gets higher priority.

AUDIENCE: Yep.

ANDREW GRANT: Many not even finishing it-- right? Like if it's the case that you go over the tasks and you're like, OK. Now the question marks are gone, and I'm comfortable moving it down in priority, feel free to do that. But make sure that those question marks are done sooner than later. Because anything that has a question mark, it might become five question marks. And then you're in trouble. So just make sure you look at it seriously as a high-priority item.

RIK EBERHARDT: When is sound going in?

AUDIENCE: So we have sound files in a folder, but, yeah. They should probably go in.

RIK EBERHARDT: OK.

AUDIENCE: We ended up-- they were taking a long time to push. According to Rachel, they were taking a long time to push to our test server.

RIK EBERHARDT: OK.

AUDIENCE: So we just removed the assets and just pushed it without the sound.

RIK EBERHARDT: OK.

AUDIENCE: We do have some sound.

RIK EBERHARDT: All right. Cool.

ANDREW GRANT: And generally speaking, sound, much like art, if the file is the problem, use a stupid file. At this stage of development, it's more important that it makes sounds than it make the right sound. And so-- again, you might discover that, oh. It turns out playing that sound is harder than we

thought, because we can't use an Ogg file. That's the kind of thing you want to know.

AUDIENCE: Yeah.

ANDREW GRANT: But, all right. Cool.

RIK EBERHARDT: Great.

AUDIENCE: Thanks.

RIK EBERHARDT: Thank you. Have a good holiday.

AUDIENCE: Thank you guys. You too.

ANDREW GRANT: I think I've only played the paper version.

AUDIENCE: No, you played the computer version.

ANDREW GRANT: No, I did-- way back when. Way back when, yes I did.

AUDIENCE: You were our first tester.

ANDREW GRANT: You are so right.

AUDIENCE: Because we have a new version that we're building up, and it's still very broken-- the new one.

RIK EBERHARDT: OK.

ANDREW GRANT: So nothing more playable than that.

AUDIENCE: Correct.

ANDREW GRANT: OK.

AUDIENCE: Unfortunately.

AUDIENCE: And the minute we kind of rehauled the system, the game play's focus is a lot different. We cut out a lot of stuff, and we're focusing more on, washing your hands is great. And cholera travels through water.

AUDIENCE: Yeah.

ANDREW GRANT: Good.

RIK EBERHARDT: Is that based on feedback from Monday, or this previous lecture?

AUDIENCE: Yeah. That's correct. We got some very good feedback.

RIK EBERHARDT: Good. Good, good.

AUDIENCE: It was interesting. So one of the crucial things we were wondering about is we were sort of designing our game to have a huge variety of options. But we recently switched to this new thing that we really like a lot, which is that basically we roll out the mechanics one by one, so we start with one build, using like two or three [INAUDIBLE]-- maybe only two. And it actually just is the case that one of them is better than the other, right?

Because if the point of the game is to teach you something, it's OK if just washing your hands is [INAUDIBLE] and something else is not so great. Right?

RIK EBERHARDT: Uh huh. Mhm.

AUDIENCE: And then it actually slowly becomes more and more of a game, where we roll out another village. And then you have to trade off balancing your resources. But then another village appears upstream of both of them. And suddenly, the trade-offs become not so clear. Where before it was just one thing was more price-effective than another. Suddenly you actually have to care about how infected they are. Because boiling your water will reduce the extent to which you're infected by upstream water. And he really liked that as a--

RIK EBERHARDT: So that's sounds awesome. How does that get affected by that change based on the UI that we saw? Is it using the same--

AUDIENCE: It's going to end up up being the same sort of system. It's only that the pop-up screen now eliminates a bunch of options, because they aren't necessary anymore.

RIK EBERHARDT: OK. So these are you removed a ton of options, you weren't creating new options.

AUDIENCE: Correct.

RIK EBERHARDT: That's what I'm hearing, right?

AUDIENCE: We're basically--

AUDIENCE: We basically gutted a whole bunch of the options that seemed redundant and apparently weren't helpful to people on a local scale. And then we changed those options so that they're more distinct. So while before it was just, like, the higher magnitude to price ratio of affect, now it's like some things only really touch infection rate. Some things just cure people [INAUDIBLE] infection rate.

RIK EBERHARDT: Cool.

AUDIENCE: And now you have things that have that upstream, downstream play affecting it.

ANDREW GRANT: Exactly.

RIK EBERHARDT: OK.

AUDIENCE: Yeah.

AUDIENCE: So the other crucial thing we were struggling with before is how to make legitimate, actually meaningful gameplay choices. When, if you just have a bunch of options, there's going to be some static build-- just the correct one, right? So we need to make it so that it was more situation-dependent. And [INAUDIBLE] had a great idea, which was to be highly effective.

Basically we have a thing that's the best for reducing the infection rate both ways, and then a thing that's the best for reducing the symptom which could spread infection downstream. And I think that's the best at protecting you from infection.

RIK EBERHARDT: Oh, that's great.

AUDIENCE: And then suddenly-- that can be made incredibly clear to the player, right? We're not hiding what the best build is.

ANDREW GRANT: No. You're playing Rock, Paper, Scissors, is what it sounds like.

AUDIENCE: Yeah. Exactly.

RIK EBERHARDT: OK. Awesome.

AUDIENCE: And--

ANDREW GRANT: But-- so it sounds like UI-wise, obviously this is a huge, huge improvement, just removing the options, et cetera, et cetera. But when you start having a little bit of-- do you already have

cross-talk in your game code between villages going on?

AUDIENCE: Yes. We had that previously.

ANDREW GRANT: All right. So again, it really is you're actually mostly cutting rather than adding, it sounds like.

AUDIENCE: Pretty much.

ANDREW GRANT: All right. Cool.

RIK EBERHARDT: But you are still adding the new UI--

AUDIENCE: Correct. Which

RIK EBERHARDT: --which I imagine we would see. If we're looking at your backlog now or soon, a lot of that would be in the backlog.

AUDIENCE: Yeah.

RIK EBERHARDT: Because I think right now you've got some very-- actually, go to the task list. I think this might have been the vague one.

AUDIENCE: OH, yeah. The sprint tasklist?

RIK EBERHARDT: Yeah. Yeah. That's, like, wicked vague.

AUDIENCE: [INAUDIBLE] tomorrow, but this needs to be submitted today. So you get this really vague description.

RIK EBERHARDT: Yeah. We figured that.

AUDIENCE: Sorry.

RIK EBERHARDT: No, that's--

AUDIENCE: It'll probably be in sprint tasklist five. I'll outline the stuff that we're assigned.

RIK EBERHARDT: I don't care what's in this. I use what's in this to know what you're doing. So I knew exactly what was going on.

AUDIENCE: So that's fine.

RIK EBERHARDT: That's OK.

AUDIENCE: All right, good.

RIK EBERHARDT: And if you didn't me in anything, that's like, OK. You're really on fire.

ANDREW GRANT: [LAUGH]

RIK EBERHARDT: All right. Cool. So Phillip and I were talking about the UI that you were doing. You had mentioned, in the presentation, civilization. But Phillip and I-- Phillip actually remembered this. If you go to *Molleindustria*-- Paolo Pedercini is a serious game designer. He might hate the term "serious." But he made a game called-- I think it was called the *McDonald's Game?*

ANDREW GRANT: I don't know.

RIK EBERHARDT: I think it's called the *McDonald's Game*-- again, this is Phillip's idea. Basically, there's a lot of different screens going on in that game. But if you were to make your game--

AUDIENCE: Oh, is it the cutesy one?

RIK EBERHARDT: It might be, yeah.

PHILLIP TAN: OK. I know exactly which one that is.

RIK EBERHARDT: If your game had as much UI as one of those working screens, then you'd be golden. So that's kind of like a bar to set yourself towards, that I think you could probably match, especially now that you've cut a bunch of this stuff.

AUDIENCE: Yeah.

ANDREW GRANT: Yeah.

RIK EBERHARDT: But you can look at that as yet another way of seeing how he's putting together all of these UI elements, or doing all of these systemic changes in this very simple interface. So take a look at that. Otherwise, can you go to the vision statement?

ANDREW GRANT: Yep.

RIK EBERHARDT: So vision statement-- on Monday, I asked for you to revise it.

AUDIENCE: Yep. I have it revised. I haven't submitted it yet.

RIK EBERHARDT: OK. Cool.

AUDIENCE: It's right here on my computer.

RIK EBERHARDT: Great. Submit it under the December 10 deadline.

AUDIENCE: OK.

RIK EBERHARDT: And then if you have a new version afterwards, submit it there. And again, the big thing that I was really looking for is that 30 seconds of game play actually reflecting what the game really is.

AUDIENCE: Yeah.

AUDIENCE: OK.

RIK EBERHARDT: Did you do the--

AUDIENCE: If you want to read it real quick, this is what I have now for the 30 seconds of game play, if that's better.

AUDIENCE: Yeah.

ANDREW GRANT: Yeah.

RIK EBERHARDT: That sounds like-- well, kind of. That looks to me like an overview of a lot of game play.

ANDREW GRANT: More than 30 seconds.

AUDIENCE: The thing is it was hard to cut it into 30 seconds, because if you don't know the beginning of the game, then doing 30 seconds in the middle doesn't make sense, and doing 30 seconds in the beginning doesn't make sense either. So that's why I kind of like--

ANDREW GRANT: Well, I might question that. What is it that you are doing in 30 seconds in the game-- is you're probably looking at one village and saying, what's the right intervention for me to do right now? Can you describe that experience in a way at all?

AUDIENCE: OK.

ANDREW GRANT: Like I decide that because there's nobody downstream, I don't need to worry about this thing. So I'm going to just direct everyone to boil their water. Like--

AUDIENCE: OK. I--

ANDREW GRANT: Describe the thought process.

RIK EBERHARDT: Yeah. So that might be more like the major game play concept, or the vision itself.

ANDREW GRANT: Yeah.

RIK EBERHARDT: [INAUDIBLE].

ANDREW GRANT: That's what you're doing for the whole game, absolutely. You're doing all of that stuff.

RIK EBERHARDT: Yeah.

ANDREW GRANT: But the 30 seconds of game play is really about what does the game feel like in the moment? And it's a planning game, so it's hard to do in 30 seconds of game play that's meaningful. But--

RIK EBERHARDT: So if Rock, Paper, Scissors is a way to synthesize that, or I'm making choice A versus Choice B now.

AUDIENCE: Right.

ANDREW GRANT: Because your game is about weighing choices and making a good one.

AUDIENCE: Yeah.

ANDREW GRANT: So 30 seconds of game play should be about making a choice.

AUDIENCE: OK.

ANDREW GRANT: So if what you have that runs now is very similar to what I saw a while ago at this point, is this backlog up to date, out of curiosity?

AUDIENCE: So not really. It still needs to be fixed.

ANDREW GRANT: All right.

AUDIENCE: A lot of this stuff is like-- [INAUDIBLE]. It's difficult.

ANDREW GRANT: OK. So--

AUDIENCE: Tasks have been split up, and, like, I'm somewhat removed from the coding. So I don't actually know what's being done. So, for me, it's hard to edit it. And so I exactly sure what--

RIK EBERHARDT: Do you have a--

ANDREW GRANT: So I would claim that-- not over the holiday. But, you know, the priority on Monday would be to make sure it is up to date so you guys know what's going on. Because for me looking at it, hearing that I can't play a newer version of the one I played a while back and seeing this backlog, I think, uh oh. So it may be that you're much better off than that. But I think your highest priority task on, say, Monday is find out if you're in trouble or not.

AUDIENCE: Yeah.

ANDREW GRANT: And if the answer's we know we're in trouble, then, OK. You still need to do it so you know what trouble you're in and how to adapt. Because I don't have much information, but I'm a little bit nervous right now. But I suspect you're better off than it looks on that page.

AUDIENCE: Yeah.

RIK EBERHARDT: So you have a one, two, three, four, five-person coding team?

AUDIENCE: Mhm.

RIK EBERHARDT: Would you say one person on that team fits lead? Like, do you have a lead coder?

AUDIENCE: Uh, Harry, probably.

AUDIENCE: Yeah.

RIK EBERHARDT: Does he know he is lead--

AUDIENCE: Harry is mostly the back end. I think he does. Because he mostly doles-- him and Derek dole out the tasks, so I assume they know that they're the leads. But--

ANDREW GRANT: OK.

RIK EBERHARDT: Yeah. Because that could just be you meeting with them to make it easier rather than a full eight-person--

ANDREW GRANT: You might not need the entire eight-person team for that. But again, also there's a difference been the person who knows what the coders are doing and the person who's doing the most

code. Those are two different things. And so you want to figure out who's really wearing what hat there. Yeah. Cool.

RIK EBERHARDT: Have we kept you longer? Thank you.

ANDREW GRANT: Yes. Thank you for your patience.

RIK EBERHARDT: And, yeah.

ANDREW GRANT: Do you have any specific sort of questions, worries that we can try to talk about, or just get me out of here. It's Thanksgiving. [LAUGH]

AUDIENCE: I don't know. I think the big unknown for us right now is the new UI. We have the mechanics that we want. We've really been playing with the numbers for a while for what infection rates and what efficacies and treatments and what prices into a--

RIK EBERHARDT: Got it.

AUDIENCE: --beatable game that's also not trivial.

RIK EBERHARDT: All right. Cool.

AUDIENCE: So we have that. The big question is the UI. The old version of the UI has all sorts of problems, where it'll constantly orphan UI elements, and they'll sort of accumulate on the screen.

ANDREW GRANT: Got it Got it. So it's buggy, among--

AUDIENCE: It's buggy. So I'm much more worried about having a functioning UI. So one thing I'm thinking about is if we suddenly find we don't have anything working at some point, what sort of bare-bones UI would work? Like, for example, you could concieve-- and this is sort of unclear. You can see that the UI can work entirely-- it would be very, very simple. It would take half an hour to write. For absolutely every single action in the game, it's like a keyboard thing. The four villages are mapped to the columns Q through Z, W through X.

ANDREW GRANT: Right.

AUDIENCE: And that grid of 12 buttons does every single action.

ANDREW GRANT: Right.

AUDIENCE: So it could be reduced to that. It would take a half hour to write.

ANDREW GRANT: Sure.

AUDIENCE: The question is--

AUDIENCE: That would mean having to explain that, though.

ANDREW GRANT: Oh, yeah.

RIK EBERHARDT: Yeah.

ANDREW GRANT: So you can't ship with that. But it might be worth doing it, [INAUDIBLE] half an hour, so you can test your game as it exists, internally.

AUDIENCE: There's also concern whether we-- we're still clear if we have to-- maybe other people aren't. But I remember at one point hearing from you tablets were what we--

AUDIENCE: We don't need to worry about that.

RIK EBERHARDT: No, no. No. You've got a single platform. It's what you've been developing on.

ANDREW GRANT: Yeah.

AUDIENCE: OK. It's this.

RIK EBERHARDT: It's that. If that's what you've been developing on.

ANDREW GRANT: At this point I would say, yeah. Whatever's-- we actually want to grade it on a computer rather than a tablet.

RIK EBERHARDT: Yeah.

AUDIENCE: OK, good.

RIK EBERHARDT: That's exactly right. Yeah.

AUDIENCE: [INAUDIBLE].

RIK EBERHARDT: The tablet was if it was a challenge that you wanted to take on.

AUDIENCE: OK, good.

RIK EBERHARDT: The client was like so, what's the--

AUDIENCE: I totally misunderstood that.

RIK EBERHARDT: So the after class life of this game and the other Cholera game is they are being presented to UNICEF as a possible funder for games of that nature.

AUDIENCE: OK.

RIK EBERHARDT: So it's like, you want to make-- like UNICEF wants to make games about Cholera for Ghana, and you're saying, here are what those games might look like. Here are prototypes.

AUDIENCE: OK.

RIK EBERHARDT: These are not the games we're going to ship to you. And if they were going to be the games-- so when we're setting one of these games, we're going to be saying, imagine this is a tablet-style game.

AUDIENCE: OK.

RIK EBERHARDT: And the other thing is if you are graduating and wanted to work on this project, and [INAUDIBLE] had funding for that project, they might hire the students who worked on these games to make that project.

ANDREW GRANT: Sure.

RIK EBERHARDT: That's very much a talk-in-January kind of thing.

AUDIENCE: Right.

RIK EBERHARDT: Yeah.

ANDREW GRANT: And so generally speaking, if that takes a big worry of the UI off your shoulders, awesome. But regardless, if you have an unknown like that-- like, as the new UI. Is that a big question mark? I'd make sure you schedule it, prioritize it higher. It sounds like you have your game play under control, which is awesome. But you want to make sure that whatever unknowns you have are scheduled sooner so that if they go horribly awry, you have time to adapt to that problem.

RIK EBERHARDT: And my last one is going to be, you've already cut a lot. Can you cut more? When you meet on

Monday and you say, are you in trouble? Like, all right. You've proved you can cut a bunch of stuff. You could possibly cut a little bit more out of it too-- assuming it's the kind of cutting that doesn't create new work.

ANDREW GRANT: Right. But I would start with that-- where the heck are we, if you don't know.

RIK EBERHARDT: Yeah.

AUDIENCE: OK.

ANDREW GRANT: And probably all eight of you don't know where you are, so it's worth getting all eight of you to know where you are.

AUDIENCE: I can't even-- I see such-- I see resulted-- I didn't even realize [INAUDIBLE] until I forgot it.

ANDREW GRANT: [LAUGH]

And that's why the last project is so tough, actually.

RIK EBERHARDT: It doesn't fit the school year very well.

ANDREW GRANT: Yeah. Unfortunately it's a shorter term than we'd like to have, but, yeah. Eight people's a lot to keep organized, even with full time.

AUDIENCE: We only have seven. Don't worry. There's no eighth person.

ANDREW GRANT: [LAUGH]

RIK EBERHARDT: OK, cool.