

## \subsection{Appendix K - Ideation Transcripts}

### \subsubsection{Ideation Session 1}

00:00:02 Researcher

Just make sure it works.

00:00:06 Researcher

Can you hear me? OK. Is my microphone.

00:00:10 Researcher

Thank you.

00:00:12 Researcher

OK, great. Welcome.

00:00:16 Researcher

So welcome to this little session. So the first thing I need to get out of the way is consent statement and I'm just gonna essentially just read, read your rights and if you could just.

00:00:30 Researcher

It's a verbally consent to it then.

00:00:33 Researcher

That would be great when we.

00:00:34 Researcher

Have that on.

00:00:34 Researcher

The record so and I.

00:00:38 Researcher

Apologize for the formality of it, but your participation in this interview is voluntary. The purpose of the interview is to explore the possibilities of designing an interactive 3D open world environment for the representation of DCR graphs.

00:00:51 Researcher

We are expected to.

00:00:52 Researcher

Spend about 90 minutes on it.

00:00:54 Researcher

I will be recording.

00:00:55 Researcher

It on video and.

00:00:56 Researcher

Audio and you may of course request to.

00:00:59 Researcher

Not be recorded.

00:01:01 Researcher

The data will only be used for research purposes.

00:01:03 Researcher

Only I will have.

00:01:04 Researcher

Access to your personal information, although I will write a little summary of your qualifications for inclusion in research, you have the right to at any time withdraw from the interview without penalty, refused to respond to any of my questions, refused to answer.

00:01:20 Researcher

Anything that may be asked of you have any.

00:01:22 Researcher

Questions about the interview answered.

00:01:24 Researcher

Even well, except if answering the.

00:01:25 Researcher

Questions will affect the data I'm collecting.

00:01:28 Researcher

And you may request that at anytime, any data that you have supplied is destroyed. I will interview, I will include the transcribed interview as an appendix to the thesis, and this may be published for scientific purpose, but will not include any personally identifiable information.

00:01:48 Researcher

UMI will store the data that I collect securely and it will access to it will.

00:01:53 Researcher

Be restricted to me.

00:01:55 Researcher

Please verbalize your consent.

00:02:00 Ideator-02

I consent.

00:02:01 Researcher

Good man.

00:02:05 Researcher

And do you consent as well, Ideator-03?

00:02:07 Researcher

Yes, yes, excellent. OK, great. So let's see, I just need to.

00:02:16 Researcher

Ask you to hop into this link. I'm dropping into the chat.

00:02:45 Ideator-02

There we.

00:02:46 Researcher

Go you've just received.

00:02:47 Researcher

The link to a figma file.

00:02:50 Researcher

Please click.

00:03:00 Researcher

OK.

00:03:05 Researcher

This is going to be a crash course in DCR graphs which is a process modeling notation language for modeling declarative declarative language for modeling dynamic processes.

00:03:17 Speaker 4

UM.

00:03:20 Researcher

So if you zoom in on the basics.

00:03:27 Researcher

These are graph.

00:03:29 Researcher

Nodes are called activities and the edges between the activities are called rules or relations and these relations by these activities together, and they govern when an activity is allowed to execute and when they should not.

00:03:42 Researcher

Execute and I say should or not can, because in a declared language like this.

00:03:49 Researcher

At activity can by default execute at anytime. There's no kind of linearity between it between the activities.

00:03:59 Researcher

The only limit there is between them is these execution rules that we set in place. So it's essentially about creating these dynamic processes with certain restraints rather than creating like a rigid step by step process. So it's very good for modeling kind of real life dynamic situations. And as you can see.

00:04:19 Researcher

The relations can be 1 to one, many to 11 to many two way and many to many.

00:04:29 Researcher

So if we look to the right, you see the rules of DCR graph.

00:04:35 Researcher

And there are five of them.

00:04:38 Researcher

In the this this basic iteration and the first is our include rule and it states that if an activity is executed.

00:04:48 Researcher

Then and B the.

00:04:51 Researcher

Another activity is excluded from the process.

00:04:54 Researcher

Then that. Then the activity will become included. I'll say that again that was.

00:04:59 Researcher

Kind of weird so.

00:05:01 Researcher

In the include process, if a is executed and B is excluded from the process, then B will become included into the process.

00:05:08 Researcher

And the inverse is that is, if a is executed and B is included.

00:05:17 Researcher

Then B will become excluded.

00:05:19 Researcher

Now the power of this function is that any rules that B might impose on other activities will become excluded from the process as well and become irrelevant.

00:05:33 Researcher

The next is the condition relation and that is kind of a temporal rule that states that if B will be disabled so it's included in the process, but it cannot execute if a.

00:05:51 Researcher

Is included and has not executed at least once.

00:05:56 Researcher

If A is executed, then B is enabled and can subsequently execute. So you use this to kind of govern a before happens before B happens, before C, etc, etc. If you need that, then we have the response relation.

00:06:14 Researcher

That states, if, uh, a has executed.

00:06:20 Researcher

And B is included in the process, then B becomes pending and then must execute at some point in the process. Otherwise the process will not be in an accepting state and the accepting state is kind of the closest thing you get to a process being.

00:06:40 Researcher

Not complete because the way the DCR functions is.

00:06:44 Researcher

That the process is never complete necessarily right because it's not linear. It doesn't. There's not necessarily a start point and an end point to the process.

00:06:56 Researcher

Because activities can continually execute if you.

00:06:59 Researcher

Need them to but.

00:07:00 Researcher

If it is a if an activity is pending, then it's.

00:07:07 Researcher

The process in is in I. I guess you had called in an illegal state it it makes sense because you don't want to have. You don't want a pending process that's hanging.

00:07:18 Researcher

So this is the way that you can dictate that something needs to happen. Otherwise your process is invalid and you can then further that by adding these milestone relation which just states that if B is pending and included then C becomes disabled so you can dictate.

00:07:40 Researcher

If a happens.

00:07:43 Researcher

Then B must.

00:07:44 Researcher

Happen before the process can continue to C.

00:07:52 Researcher

If you if a is that the customer.

00:07:54 Researcher

Orders a voter.

00:07:56 Researcher

Then B is that the customer.

00:07:59 Researcher

Receives his burger before the before the customer is required to pay for the burger, right ABC.

00:08:11 Researcher

And of course.

00:08:12 Researcher

If you need me to elaborate anything, please stop me and.

00:08:15 Researcher

Ask your questions.

00:08:18 Researcher

This can be a little tricky the first time around.

00:08:20 Ideator-02

So just to so, it's a way to.

00:08:23 Ideator-02

Talk about for example, dependencies, which would typically set up in the.

00:08:29 Ideator-02

In the map right, saying this depends on this to finish.

00:08:32 Ideator-02

Is that correct?

00:08:33 Researcher

Yeah. Yeah, exactly right. So so you you can you can dictate that?

00:08:39 Researcher

Yeah. Essentially, yeah. That you you see, see you in this, Ideator-03. But The thing is that C only depends on B finishing. If B has become pending right because of the way that DCR works, C can happen, but.

00:08:56 Researcher

Unless you you place another restriction on it, right? But as it's set up here, a happens. If a happens, then B must happen and before B happens, C cannot.

00:09:06 Ideator-02

Happen. Right, right. Thanks.

00:09:10 Researcher

So these these conditions can be toggled. I don't.

00:09:14 Researcher

Know if that's.

00:09:18 Researcher

That's the neat thing about these these rules. You essentially the way that DCL works, you combine the rules to kind of model the kind of process that you want it to reflect, so you can do this toggling effect. So if let's say.

00:09:31 Researcher

That A and.

00:09:31 Researcher

B. Have include and exclude relation to C, right? So a includes C&B excludes C.

00:09:38 Researcher

And C in turn has a conditional.

00:09:40 Researcher

Relation to D.

00:09:43 Researcher

And D is sorry, C is is not executed right? So if C is included.

00:09:50 Researcher

The condition rule states that D cannot execute before C is executed.

00:09:55 Researcher

Remember that from before.

00:09:57 Researcher

But if you then execute.

00:10:01 Researcher

Activity B.

00:10:03 Researcher

Which excludes C from the process. Then the restriction that C places on D becomes null and would right cuz C is removed from the process and thus the rule that C enforces on DE kind of disappears and D is then allowed to.

00:10:22 Researcher

It becomes enabled and can execute.

00:10:26 Researcher

And if A is then included again, then the D, then C, then the rule applies again and D can becomes disabled again.

00:10:38 Researcher

The same can be done with the response effect, where if you have a response relation between D and.

00:10:44 Researcher

C And you have a these two toggling activities, the include and exclude. Then if D has executed and thus C is in a pending state.

00:10:57 Researcher

And the process is in a is in a non accepting state.

00:11:04 Researcher

Then if you exclude C from the process, then that pending state.

00:11:11 Researcher

Kind of disappears and the process then is accepting again.

00:11:19 Researcher

If you then Reinclude C and it still hasn't executed, then the the process becomes not accepting again.

00:11:38 Researcher

So essentially any rule that originates any, any, any active, any activity that has an active rule originating from it can be the influence of that activity can be disabled at any time by excluding the activity.

00:12:02 Researcher



So let's say just school example, let's say that you have a customer. Let's say the D is that.

00:12:13 Researcher

D is that the customer has has.

00:12:18 Researcher

Ordered his burger.

00:12:20 Researcher

And C is that the customer receives his burger.

00:12:23 Researcher

Right. That's a pending activity, right? If the customer then suddenly runs out of the restaurant.

00:12:33 Researcher

And is never seen again.

00:12:35 Researcher

That pending, then, then that pending.

00:12:40 Researcher

That pending activity is kind of irrelevant, right? Because the customer is left. So there's no reason for that pending activity hang around, right? So an exclude activity could be customer runs out of the restaurant.

00:12:53 Researcher

That activity happens. C is disabled. The pending state of C disappears and no longer has an influence on the process, and the process can move along.

00:13:05 Ideator-02

OK.

00:13:08 Researcher

And that then can be extended by the toggling of the milestone effect that is essentially.

00:13:16 Researcher

Again, that's the the example that I just ran by you, right. So.

00:13:22 Researcher

If if C has a.

00:13:23 Researcher

Milestone relation to E here.

00:13:28 Researcher

Remember that dictates that if C is pending, then E cannot happen until C has.

00:13:34 Researcher

Happened, right so that.

00:13:35 Researcher

The appending activity actually has two consequences. One is that the process is not accepting.

00:13:44 Researcher

In in in kind of a hanging state and E is that. Sorry and the other.

00:13:54 Researcher

Influences that any milestone relations that C has to other activities kind of locks those activities from executing. So if C is an appending state and is then excluded then that rule the milestone rule is then put out of Commission and then.

00:14:13 Researcher

Is that allowed to happen?

00:14:20 Ideator-02

That makes sense.

00:14:22 Researcher

OK.

00:14:25 Ideator-02

So the following.

00:14:25 Ideator-02

Example you just made that would mean, for example, that milestone.

00:14:28 Ideator-02

Or point E could.

00:14:29 Ideator-02

Be that payment is accepted, right? But.

00:14:33 Ideator-02

He ran away.

00:14:34 Ideator-02

So payment won't happen. So we were getting in the internal state of nothing going on.

00:14:40 Researcher

Let's see cause I guess the no, I'd say cause because payment would be something.

00:14:45 Researcher

That happened, right?

00:14:47 Researcher

It it would, it would be more cause and so it would be more like something that would that would not be able to happen while the customer is not has had his order fulfilled, right. So maybe it would be that you while there's an open order you can't close, you can't close the store.

00:15:05 Researcher

Right. You can't. You can't close the store until the last customer has been served. If the last customer has run away.

00:15:13 Researcher

Well, you can close the store.

00:15:15 Ideator-02

Right. Yeah, OK, yeah. But it's a matter of the timeline of events. And to understand when the milestone is being, yeah, good.

00:15:24 Researcher

So uh, and just finally just some helpful patterns.

00:15:28 Researcher

That I've that this is just like something I came up with which would be.

00:15:36 Researcher

Will be helpful.

00:15:37 Researcher

When you do my little teaching exercise so.

00:15:42 Speaker 4

If you do, if you.

00:15:46 Researcher

Have an activity exclude itself. Remember what I said that by default an activity can happen as much as.

00:15:53 Researcher

It wants. There's no.

00:15:55 Researcher

There's no limit to how often an activity can execute by default, but if you then have an exclude relation from the activity to itself, that means that if the activity.

00:16:06 Researcher

Happens. It excludes itself from the.

00:16:10 Researcher

From the process.

00:16:11 Researcher

Right. So that's how you could model like a single execution activity simply by having it happening, it excludes itself.

00:16:21 Researcher

You can then include it again by creating another activity which has an include relation to it.

00:16:29 Researcher

So this model, this, this, this pattern says well if a executes it excludes itself and thus cannot execute again.

00:16:39 Researcher

But if B executes, B will include A and a can then execute. If a then happens again, it excludes itself. And yeah, that so.

00:16:51 Researcher

You can then kind of mirror that.

00:16:54 Researcher

By having.

00:16:55 Researcher

Two activities.

00:16:57 Researcher

That by happening or executing will exclude themselves.

00:17:02 Researcher

But then you draw an include relation. Sorry tells me you draw an include relation.

00:17:11 Researcher

Between them. So what happens here is that if a happens, A will exclude itself, but it will also include B.

00:17:20 Researcher

If B then happens, it includes itself, but it will include a, so it's a switch, right? You alternate between and activity being enabled or sorry, include it and exclude it.

00:17:35 Researcher

So you can model switch by this.

00:17:39 Researcher

And you can then be extra fancy by.

00:17:44 Researcher

Wiring up a third activity and drawing and exclude and include relation. So this way not only does the switch toggle itself on Jesus Christ.

00:17:58 Researcher

Target itself on and off.

00:18:00 Researcher

But if when a toggles when a kind of executes, it excludes itself, it includes B, but it also includes C, but when B happens it excludes itself. It includes a, but it excludes B, so you can think of this top pattern as kind of a switch and this guy.

00:18:20 Researcher

Down here is a light bulb.

00:18:23 Researcher

Right. So, so these guys totally have the run and off and the side effect is that?

00:18:27 Researcher

They toggle and.

00:18:29 Researcher

1/3 activity kind of on and off.

00:18:35 Researcher

So that's how you can. Yeah, that's just a little example of how these various various activities and rules can be combined to to model behavior. In this case light switch or.

00:18:54 Researcher

Is everyone with me so far?

00:18:57 Researcher

If if you want me to run by one of the rules again, I will be.

00:19:01 Researcher

More than happy to do so.

00:19:03 Ideator-03

Maybe the last part of the of the sea won't. You were actually, I don't know this part that include and exclude exclude.

00:19:11 Researcher

Sure, sure.

00:19:15 Researcher

Think of this top bit as you know, one of those a light switch. Essentially right. The light switch can be in in only one of two positions at the same time, right? It can be flipped up or it can be flipped down.

00:19:29 Researcher

Right. And by flipping the light switch up, it no longer is in the down position?

00:19:36 Researcher

By flipping the light switch.

00:19:37 Researcher

Down it no longer is in the up position.

00:19:40 Researcher

That's what we're we're modeling here, right if.

00:19:42 Researcher

I flip up a.

00:19:45 Researcher

Then A is no longer in the A position.

00:19:48 Researcher

OK.

00:19:48 Researcher

It is in the.

00:19:49 Researcher

B position.

00:19:50 Researcher

Right, A excludes itself but includes B.

00:19:54 Researcher

B. If I if I if I execute this activity which is the akin to flipping the light switch down again.

00:20:03 Researcher

The B is excluded, IE the the light switch is no longer in the B position, but it includes a instead, which means that now it's the light switch is in the position, right? So it's this kind of mutually excluding switch between two different states.

00:20:23 Researcher

Either a is. That is is is executable or B is executable.

00:20:28 Researcher

Now what I've then done here is I've whenever a executes and switched kind of flips control over to B, it also includes the C activity and C so C becomes executable and you can think of this.

00:20:47 Researcher

As a light bulb.

00:20:48 Researcher

Which switches on.

00:20:52 Researcher

And when B then executes, it handles control back to a, but it also excludes C, so it effectively switches the light off.

00:21:12 Researcher

Instead of thinking of it, maybe instead of thinking of it as include and exclude, just think on off.

00:21:19 Ideator-02

Is what I'm thinking my head is enable disable.

00:21:21 Researcher

I'm sorry. What? What?

00:21:22 Researcher

Do you think?

00:21:25 Researcher

Well, The thing is.

00:21:25 Researcher

Note to enable and disable, they're actually two different. An activity can be both enabled and this I'm I'm rambling, sorry and activity can be.

00:21:37 Researcher

Either enabled, disabled or excluded excluded. Remember there's two different. Yeah, it it's two different things in in, in in this notation, if it's excluded, it is, it becomes complete it.

00:21:52 Researcher

Disappears from the universe and all its. Any rules that it might have been.

00:21:56 Researcher

Closed upon other activities. They are gone. If you disable it.

00:22:02 Researcher

It simply means that it can't execute, but any rules that it has to other it imposes on other activities are still in effect.

00:22:11 Researcher

Mm-hmm. So that's that's a a very kind of important distinction. It it it cause it it it.

00:22:20 Researcher

Yeah, it.

00:22:23 Speaker 6

It's a good. Yeah, you.

00:22:24 Researcher

Know it you.

00:22:24 Researcher

Know it it it it differs the IT has different effects on the rest of the of the process of the system.

00:22:34 Ideator-03

OK. And this case is on and off. And then just like disappear and appear just like.

00:22:39 Researcher

Yeah, yeah. Think of, think of it as. Yeah. Yeah. It's. It's either in if it's. If it's excluded, it kind of disappears in the system. And if it is included, it's back in the system.

00:22:50 Researcher

It's not super important, it's just just a way of showing.

00:22:55 Researcher

A way that you can model behavior in the process, but I think we should probably move.

00:23:01 Researcher

On cuz we.

00:23:02 Researcher

Are running on time holy \*\*\*\*.

00:23:06 Researcher

OK, so I want you to look down here.

00:23:18 Researcher

What I've done.

00:23:19 Researcher

Here is a little little exercise.

00:23:23 Researcher

We have here a pile.

00:23:25 Researcher



Of activities.

00:23:28 Researcher

Underneath them, we have a pile of rules. The rules that we've just talked about, the milestone rule, the condition rule, the response rule, the include rule, the exclude rule.

00:23:42 Researcher

We also have the.

00:23:44 Ideator-03

It's harmful.

00:23:45 Researcher

Self exclude and self response and we have the these are the states, the states of that the activity can be it can be pending or it can be executed.

00:23:56 Researcher

You're not going to need these in the first, just what you're going to need is the activities and the rules and possibly the this disabled state. This is as.

00:24:08 Researcher

You can.

00:24:09 Researcher

This is a semi transparent piece of paper that you can place on activity to signal that it is disabled.

00:24:19 Researcher

On April.

00:24:21 Researcher

So what I want you to do in a minute is essentially model the process that I'm going to tell you about.

00:24:29 Researcher

And what you essentially just do is you have your solutions based relay. You just drag the activity over.

00:24:35 Ideator-03

Can I do that?

00:24:37 Researcher

You should be able to, can you?

00:24:39 Ideator-02

Right now I don't know if we need to log in or if you need to enable anyone.

00:24:44 Ideator-02

Who's in here can access it's it's the same.

00:24:46 Speaker 4

I ohh damn it, I get it. I should have. Uh, yeah, I I when I shared it, I toggled that you could edit.

00:24:56 Ideator-02

Try it again, sometimes I've.

00:25:01 Ideator-02

And the share option.

00:25:03 Speaker 4

Anyone who blink?

00:25:15 Ideator-02

And then I think sometimes it wants us to log in, let.

00:25:17 Ideator-02

Me. Just try something. I have a my account already, OK.

00:25:22 Researcher

If uh, if it all kind of goes sideways, then you guys can just tell me, uh, we'll, I'll, I'll do the the dragging and you guys just tell me.

00:25:29 Researcher

What you want me to do?

00:25:29 Ideator-02

It helps.

00:25:30 Ideator-02

Log in.

00:25:32 Researcher

It helps to.

00:25:32 Ideator-02

Log in? Yeah. I don't know if you have a user.

00:25:36 Researcher

Do you have like my account right?

00:25:41 Speaker 3

Checking picture OK OK.

00:25:48 Researcher

Again, OK.

00:25:51 Ideator-03

Complete OK.

00:25:54 Researcher

Let's see.

00:25:58 Speaker 3

Ohh come on.

00:26:15 Ideator-03

OK, let's see. It's like OK, done.

00:26:20 Ideator-02

Awesome. Yeah. So, OK, we can continue, so.

00:26:26 Researcher

OK. Oh, so I've just realized that the transcription is transcribing in Danish.

00:26:35 Researcher

And it is a fever dream.

00:26:43 Researcher

Yeah. Update please.

Ideator-02 26:48

At least you got the video so you can transcribe it afterwards.

Researcher 26:53

OK, so it says.

OK.

So that 1504, I said, are there any drinks?

Is there one?

OK.

Thanks teams.

Really, Microsoft doing that?

That AI thing?

Love it.

Ideator-02 27:11

Just wants to help man.

Just wants to help you.

Researcher 27:13

Yeah, it's your friendly neighborhood robot.

OK, let's let's so can you guys drag found out?

Ideator-02 27:21

Yes.

Researcher 27:22

Awesome.

Great.

So UM.

So yeah, so I'm just, I would like you to quickly move with me to the right to the box that says directions.

This is the process that you will be modeling.

Ideator-03, could I have your attention please?

Ideator-03 27:45

Yeah, sorry.

Researcher 27:49

Thank you.

Alright, so directions.

Now I'm just going to read it out for you for the benefit of the transcription.

So this is the process we're going to model.

It is the weekend and you're home alone when you become hungry.

Let's model that I've written out the process of natural language.

Ideator-02 28:00

Ohh.

Researcher 28:04

I have also helped you a bit by segmenting it into activities and I have also outlined some of the logical consequences of activities being executed so the process begins with you having become hungry.

You therefore have to make a sandwich, but you cannot make a sandwich before you have been shopping, but you do not have to go shopping if you have food delivered.

Once you have made the sandwich, you can eat it.

If you eat the sandwich, you can no longer eat the sandwich when you make a sandwich, you must do the dishes.

Ideator-02 28:40

No.

Researcher 28:40

But if you have a dishwasher, you do not have to do the dishes.

You never have to do the dishes.

Ideator-02 28:47

Awesome.

Researcher 28:47

You are welcome to relax on the couch, but not if you have to do the dishes.

Ideator-02 28:53

Ambitious.

Ideator-03 28:54

Yeah.

Researcher 28:54

If the kids come home, you can no longer relax.

The kids cannot come home.

That is a bit metaphysical, I know, but it's, you know, it's so the second modeling and the kids can leave home if the kids leave home, you can again relax.

The kids cannot leave home.

The kids can come home, so we are running a bit low on time.

So why don't you guys take?

Ohh, let's try to let's do this quick and dirty.

Let's say start with 10 minutes and umm.

Then, if you haven't finished, I'll spend 55 minutes.

Kind of poking you along.

So what I need you to do is, uh, I've also kind of been nice and the activities are more or less in the order that I read them in.

So that's a little bit for you that you might want to drag out the rules in the same order as you drag out the activities.

Also you can rotate the rules and if you double click inside the text, you can also rotate the text.

And please discuss in plenum, UM, what have you think?

How you think it should work?

Ideator-02 30:08

OK.

Ideator-03 30:08

Wait, what?

And which order just?

Researcher 30:13

So this the what what I want you to do is I want you to model the.

I want you to pay attention to essentially the nouns and the verbs in the sentences I've written out, right?

So we'll let me, let me just.

OK, I'll get you started.

So the process begins with you.

Having become hungry, right.

So that's the initial activity right there.

You therefore have to make a sandwich now.

The words have to what does that entail?

What entails that?

Once you become hungry, making a sandwich has to happen.

We've all been there.

So which rule dictates kind of that and activity is compelled to happen immediately after, uh, what?

Another activity that would be the.

Ideator-02 31:01

Condition.

Researcher 31:01

Response exactly right, Ideator-02.

Ideator-02 31:04

Ohh grammar.

Researcher 31:05

So so making, so becoming hungry required.

Yeah, requires you making a sandwich, right?

You have to make the damn sandwich.

Ideator-02 31:17

Yes, that's that's up for debate.

Researcher 31:20

You could also you could all say that you could.

I mean it.

I mean, there's also merit to what you said that it the condition relationship applies, right?

Because maybe you can't make a sandwich until you're.

Unless you're hungry.

Maybe like on a diet, right?

No snacking, but the way that I've written it out is that you become hungry.

Ideator-02 31:37

OK.

Researcher 31:41

Thus, you have to make a sandwich so response relationship exists between being hungry and having to make a sandwich right and making a sandwich is a response required response to being hungry.

Ideator-02 31:44

OK.

Hungry.

Alright, that's how it went.

Researcher 31:59

So the next one is you cannot make a sandwich before you have been shopping.

Ideator-02 32:01

Uh.

Yeah, so that.

Researcher 32:04

So we have the shopping relationship.



Sorry, the shopping activity here, right, and the wording is that you cannot make the sandwich, you cannot do a before you have done B.

Ideator-03 32:09

Yeah.

Ideator-02 32:12

Cannot.

Ideator-03 32:14

You can.

Researcher 32:18

So there is a.

Again, there's a temporal uh relationship or temporal rule rule in effect here, but this time it's a has to happen before B.

Ideator-03 32:29

I mean, that's the condition.

Researcher 32:31

Exactly A is a condition of B happening.

A has to happen for B, right?

So it does make sense that.

Going shopping is a condition for making a sandwich.

You can make a sandwich out of nothing.

Ideator-03 32:47

Umm.

Ideator-02 32:49

So which way do I turn the arrow?

Researcher 32:50

Nothing.

Uh, well, it's it.

It it's it goes from the.

I've tried to word it right so that the IT it kind of the wording on the error.

Kind of fits with the the directional relationship, right?

Ideator-03 33:03

But this is not the.

Researcher 33:05

That being hungry requires the response of making a sandwich and going shopping is a condition of making a sandwich is making a sandwich and condition of going shopping.

Ideator-03 33:06

Go.

And there's.

Researcher 33:17

Exactly.

Going shopping is a condition for making sandwich OK.

Ideator-02 33:19

The yeah.

Thank you.

Ideator-03 33:20

Umm.

Researcher 33:24

OK, so So what is the next one?

Ideator-03 33:24

The same.

Ideator-02 33:27

But if we.

Researcher 33:27

Ohh this is this is an exception, isn't it?

You don't have to go shopping if you have food delivered, right?

Ideator-02 33:30

But.

Researcher 33:33

So what we need is we need use a rule that can eliminate a condition and the effects of a condition from the process.

Which rule did we have that enabled us to eliminate the effects of an activity exclude exactly?

Ideator-02 33:48

Exclude.

Ideator-03 33:49

That's cool.

Ideator-02 33:51

It's something right?

Researcher 33:53

Good man.

Ideator-03 33:56

But yeah, done.

Researcher 33:58

OK.

Ideator-02 33:58

Yeah.

So this one includes this one, right?

Ideator-03 34:00

Then.

Ideator-02 34:02

But I guess we would still need a relationship from groceries delivered to making a sandwich, right?

Because if this one is excluded, then will this ever reads this?

Researcher 34:09

Uh.

Umm.

Well, remember the first thing I said?

This is not a imperative process modeling language.

It doesn't work by tokens, right?

You're thinking of tokens.

Ideator-02 34:24

Hmm.

Researcher 34:25

You're thinking with that.

Of a like a BPMN diagram, where a token moves along a process, right?

That if this happens, then it has to bounce some way, have to be able to bounce the token up to this process.

Ideator-02 34:34

Yeah.

Researcher 34:39

But remember what I said that's there are no restrictions on when an activity can execute unless you place that activity.

Ideator-03 34:42

3.

Researcher 34:47

Sorry, unless you place that restriction on the activity right?

Ideator-02 34:50

Right. OK.

Researcher 34:50

So by removing the restriction, you enable the activity to happen at any time during the process, so that's what we're doing as soon as you eliminate the go shopping activity, you eliminate the condition rule and making a sandwich becomes free and can happen unrestricted.

Ideator-02 34:59

OK.

Researcher 35:14

You can just make those sandwiches as much as you want.

Ideator-02 35:16

Yeah, that makes sense because we got the food delivery delivered, cause this is of course happening since we excluded this one.

So this is this is happening but we exclude this one.

Researcher 35:27

Yeah, exactly.

The the the activity happened right and the effect of the activity happening implicitly means that you can make the sandwich even those are not a direct connection, right?

Ideator-02 35:28

I was like, OK, yeah.

Ideator-03 35:32

It's like.

Ideator-02 35:35

Yeah.

Researcher 35:37

Just because again, think real world, right?

Ideator-02 35:38

Yeah.

You know.

Researcher 35:42

If your wife goes shopping or husband, I'm not making judgments if any.

If your spouse goes shopping.

She doesn't have to tell you that she's been shopping.

You can just open the the fridge and holy ship.

There's it's full of food, right?

So the this activity had a indirect impact on your ability to make the sandwich even though you didn't know the activity happened.

It enabled you to make the sandwich, and that's the beauty of this declarative language.

Ideator-03 36:12

Yeah.

Researcher 36:13

You don't have to draw arrows left and right to say, oh, listen connected to this, it just you remove a restriction and stuff becomes enabled just like in real life.

It's really cool.

Ideator-03 36:27

Umm.

Researcher 36:28

Sorry I'm.

I'm I'm the I'm.

I'm undermining the the rigor of my own research by making you biased towards DCR graph.

I'll stop talking.

Ideator-02 36:36

No, no, it's fine.

Ideator-03 36:39

It's nice.

Ideator-02 36:39

OK.

Ideator-03 36:43

Here.

Researcher 36:43

No, you're at point.

You've just gone through activity 4, so once you have eaten the sandwich or sorry, once you've made the sandwich, you can eat it right?

Ideator-02 36:47

So we.

Researcher 36:52

So this is again is a kind of a relationship that allows you to do something a allows you to do B once A is happened. So.

Ideator-03 37:04

OK.

Ideator-02 37:04

The includes.

Researcher 37:07

It could be it could be a.

Ideator-02 37:09

Is it?

Ideator-03 37:10

Umm.

Researcher 37:11

I think it's it's.

It's a matter of interpretation.

Yeah, you can.



Ideator-02 37:15

And I guess.

Researcher 37:16

You can choose includes.

Let's let's try that.

See what happens.

Ideator-02 37:18

But I guess it could also be milestone, right?

Ideator-03 37:18

Or.

Or require.

Yeah, Monstein might be.

Researcher 37:24

Remember that milestone is kind of only works in tandem with the response rule, and we're we haven't used the response rule.

Ideator-02 37:25

To understand.

Ah.

Ideator-03 37:33

Under corresponds.

Ideator-02 37:35

Yes, excluding's included in B's pinning and miss execution providers.

That's this one.

I guess this one we have, we have a response here, right?

So I guess.

Ideator-03 37:47

I I suppose.

Researcher 37:48

Ah, yeah, I guess, yeah.

OK.

Yeah, fair enough.

I mean you.

Yeah, you could use the milestone ruler right?

Because, yeah, making the sandwiches disabled until, sorry, eating the sandwich is disabled until you have made the sandwich and making the sandwich is pending when you become hungry.

Ideator-02 38:04

And.

Ideator-03 38:09

Mm-hmm.

Researcher 38:09

Yeah.

Yeah, you can do that.

Ideator-02 38:11

Yes.

Ideator-03 38:12

OK.

Researcher 38:13

I actually think that's better than my solution.

So well, don't you?

Umm, yeah.

Ideator-02 38:17

That's it.

I'm out.

Researcher 38:17

Yeah, Mike, drop.

Ideator-02 38:17

I did it.

Ideator-03 38:20

No.

Researcher 38:20

Okie dokie, Sarah.

OK, so now if you eat your sandwich, you can no longer eat your sandwich.

Ideator-02 38:29

I know this one.

Ideator-03 38:32

If you.

Researcher 38:35

There you go.

OK.

Ideator-02 38:39

Right.

Ideator-03 38:39

Umm.

Researcher 38:40

That makes sense.

Ideator-02 38:40

So we explore and so when it's it's run, you can only do it once, so it excludes itself, right?

Researcher 38:45

Yeah, yeah.

Yeah, exactly.

And the way that we've set it up here, you can only make the this.

This modeling implies that you can only make one sandwich, right?

Because there's no way to reinclude the sandwich.

Ideator-03 38:55

They are.

Researcher 38:58

You could drag another if you wanted to imply that you can actually make more sandwich and eat more sandwiches.

You could then also draw like an includes.

Like an includes line from make sandwich to eat sandwich.

But again, that's that.

Ideator-02 39:15

OK.

Ideator-03 39:18

But in certain point will be, yeah.

Researcher 39:20

Yeah.

Yeah.

So, but you know that's, that's that all kind of depends on what kind of process you're modeling, right?

Ideator-02 39:27

Yeah.

Researcher 39:27

It doesn't matter in this context, so let's just move along.

Umm Sir, when you make your sandwich, you must do the dishes.

Ideator-02 39:31

Alright.

Ideator-03 39:34

And then the next.

Ideator-02 39:38

You have a must must.

Researcher 39:38

Must right?

Ideator-03 39:39

Yeah, there must.

Researcher 39:41

Umm.

Exactly.

Again, your spouse will be angry if you don't, so you better do it.

So what role do we have that kind of compels?

Ideator-03 39:46

Is that?

Researcher 39:49

That if an activity happens, then another activity must happen at some point in the future.

Ideator-03 39:57

It's, uh, require response mean.

Ideator-02 39:57

Said.

Researcher 40:00

Exactly.

It requires the response.

Making a sandwich requires the response that you do the damn dishes for once. Well done.

Ideator-02 40:09

OK.

Researcher 40:09

OK.

That's exactly right.

Ideator-02 40:11

Let me just make ahead experiment.

What?

So if we turn it around, it means that when you watch, when you do the dishes, you have to eat a sandwich, right? OK.

Researcher 40:20

Exactly.

And I guess if that makes sense in your house, then that's good for you, brother.

Ideator-03 40:29

Sure. Yes.

Researcher 40:29

OK.

So, but we have again we have another exception here.

If you have a dishwasher, you never have to do this at dishes.

Wow.

So what we do, what we have here is something that eliminates a.

Ideator-02 40:48

Ah, that's the way I think.

Ideator-03 40:48

It's clear.

Researcher 40:50

I'm I feel like I'm dropping too many hits.

You know what?

I'm just gonna for the rest of the exercise, I'm going to take a step back and let you guys figure it out.

Ideator-02 40:57

Yeah, because I always think thinking could have been another one, but I guess it makes sense that we say exclude because of course you want dishwasher.

Ideator-03 40:58

Good.

The.

Ideator-02 41:04

We can exclude washing up, right?

Ideator-03 41:06

Yeah, exactly.

Ideator-02 41:07

You know umm. But I was thinking I'm just trying to think through how else it would work.

Ideator-03 41:09

Then.

Ideator-02 41:12

So if we said it was a milestone, that would mean if we want that can be done because that's turned around, that would mean once you do the washing up then you can use this washer.

Ideator-03 41:23

No, but you.

Ideator-02 41:25

That doesn't make sense, yeah.

Ideator-03 41:27



I don't know if for me just this this one is makes sense.

Ideator-02 41:31

I guess this one supposed to point up here excluding, right?

Ideator-03 41:35

Yeah, it was a condition.

Ideator-02 41:38

Yeah.

Ideator-03 41:40

Yeah.

Ideator-02 41:40

All right.

Yeah.

So if you have this was that you exclude washing up that kind of makes sense.

When you say it out loud, right?

Ideator-03 41:47

Hmm.

Ideator-02 41:47

Unless you want to punish someone.

But that's a different situation, right?

Or if it's a specific pan or wooden utensil anyway.

Researcher 41:56

That's that's true if you make like a fried fried sandwich, then you can't wash up the pan on the dishwasher cuz it'll break the pan.

Ideator-03 41:57

Right.

Ideator-02 42:02

No.

Indication could but.

Researcher 42:06

But.

Ideator-03 42:07

Sure you.

Researcher 42:09

So OK, so we have moved through the dishwasher.

Ideator-02 42:10

Ohh.

Ideator-03 42:12

Now.

Researcher 42:13

Now you are welcome to relax.

Ideator-03 42:16

Yeah, we're all going, right.

Ideator-02 42:16

OK.

So yeah.

Ideator-03 42:18

And then it's like a milestones before I guess.

Ideator-02 42:27

Yeah, you.

So milestone again if P is pending and included in T is disabled, this is pending.

Ideator-03 42:37

Of the fish, yeah.

Is 1's pounding and then finally spinach.

Researcher 42:47

Well, let let me ask you this.

Ideator-03 42:48

The.

Researcher 42:49

Does this?

Does the sentence indicate in it that it's there's the try that again, there's a sentence indicate that relaxing at this point.

Is in any way kind of dependent on any of the other activities?

Ideator-02 43:03

No, not not yet.

Ideator-03 43:03

Ohh, I'd like no no.

Researcher 43:06

Hmm so.

So yeah, maybe just.

Ideator-02 43:13

Yeah.

So we can put this in a guess.

So this is relaxing, right?

And then, but not if you have to do the dishes.

Researcher 43:16

Yeah, that.

Ideator-02 43:18

So I guess we'll have to move this a bit.

So we have space.

Right.

Ideator-03 43:22

Also avoid it.

Researcher 43:24

Yes.

And now we have the yeah.

So.

So yeah, what does the what does that sentence?

Ideator-02 43:32

But not if you have to do this, but I guess that washing up or doing the dishes.

Researcher 43:32

You cannot relax if you have to do the dishes.

Ideator-03 43:39

Does I mean you also can leave it for later and then just relax.

Wouldn't think in the videos.

Researcher 43:47

You might want to refer back to some of the rules and patterns that I I laid out for you.

Ideator-02 43:47

But.

Researcher 43:52

That might be if you have any trouble that might give you a hint.

Ideator-03 44:00

You're welcome to relax, but not is it OK?

Ideator-02 44:07

Still, inclusion activity will allow the activity to activate once per inclusion.

OK, so as opposed you could say that.

If we.

Ideator-03 44:31

What do you?

Researcher 44:34

What kind of what kind of activity leads into what?

What kind of activity?

Kind of leads into washing up.

Ideator-02 44:44

Eating a sandwich.

Researcher 44:46

Umm.

And what rule is is eating a sandwich imposing on Washington?

Ideator-02 44:53

And and what?

Researcher 44:54

What kind of rule is is eating a sandwich imposing on on the washing up activity?

Ideator-02 44:58

Pushing up requires a response.

Researcher 45:01

So right.

So if if the wash up activity doesn't doesn't happen, what state is it in?

Do you remember that?

Ideator-02 45:11

Then it won't.

Ideator-03 45:12

Then.

Ideator-02 45:12

It won't actually picture, right?

Researcher 45:15

The what?

What? When?

When?

Uh.

When like the response rule is triggered on an activity, do you remember what we call it that the activity is in what state?

Ideator-03 45:28

What?

Researcher 45:30

It's, uh, it's it's played out under the rules.

The response rules it's described there to the top.

Ideator-02 45:38

Yeah, I know.

Pending.

Researcher 45:42

Ohh pending interesting do we have any other activities that kind of interact with the that is this kind of dependent on pending sorry any other rules that kind of work well with pending activities.

Ideator-03 45:47

What's that?

Ideator-02 45:54

If he is pending and included and she is disabled.

Ideator-03 45:55

Under.

Researcher 45:59

Oh, that's interesting. So.

Ideator-02 46:00

Umm.

Researcher 46:02

And what was the what were we describing again?

Ideator-03 46:02

I mean.

I mean it's.

Researcher 46:06

What's the activity I'm describing?

Ideator-03 46:14

Umm.

But through.

Researcher 46:21

OK, that's interesting.

So to Ideator-02 explain to me the uh, yeah.

Ideator-03 46:26

Why?

Researcher 46:28

Well, Ideator-02 explained to Ideator-03.

So how the eating the sandwich and the requires of the response to do the dishes and the milestone before it laxing how does that?



How does that work mechanically?

Ideator-02 46:41

So.

And that's the thing about it again.

So what I'm saying is that washing up is pending.

So once we have eaten, we will be washing up and when we have up then we will.

Ideator-03 46:54

OK.

Able to remote OK.

Researcher 47:01

So what if?

Ideator-02 47:02

It's not relaxing.

Researcher 47:02

What if, if you, if you eat the sandwich and trigger the response rule on washing up but you don't wash up, right?

We agreed that washing up is in the pending state, right.

Ideator-03 47:11

Yeah.

It's the pen and say yes.

Researcher 47:15

And yeah.

Yeah.

And and what and when activity is in the pending state and it has a milestone rule on another activity.

Can that activity be executed?

If washing up is pending.

Ideator-02 47:32

I would say yes, but I guess I'm wrong.

Researcher 47:36

Well, let's let's go back to the rules definition.

Look up.

So we agree that pending is something that happens to an activity when.

Uh.

Another activity that has like imposes a response rule on it activates right?

So there's a response rule between the sandwich eating and the washing up right that makes sense.

Ideator-02 47:50

Yeah.

Researcher 47:57

Like, just like as a language, kind of like a natural language description.

When you eat a sandwich, you have to respond by washing up and until you respond that washing up is just sitting there collecting flies.

Ideator-03 48:07

Yeah.

Umm.

Researcher 48:19

In a word, pending right?

Ideator-03 48:21

Mm-hmm.

Researcher 48:22

And if we look on the description of the milestone rule, what does that say if B is pending and included then?

What?

Ideator-02 48:33

Is saved the opposite.

Researcher 48:33

What happens to see?

Ideator-02 48:35

Yeah.

OK, fine.

Researcher 48:36

See is.

Ideator-02 48:37

Thank you.

Yeah, this single gold.

Researcher 48:40

Used disabled, right?

Can you can you activate?

Can you execute a disabled activity?

Ideator-02 48:50

No.

Ideator-03 48:52

No.

Researcher 48:53

And what is are we trying to model that?

You're welcome to relax, but not if you have to do the dishes. I.e.

Ideator-02 49:01

Yeah.

Researcher 49:02

If if your dish is, if your dishwashing is pending, you cannot relax.

Ideator-03 49:02

Right, right.

Until God, it's, you know.

Researcher 49:09

I the relax activity is disabled.

Ideator-03 49:13

Hmm.

And then is it disabled?

Ideator-02 49:23

So we need to enable.

Ideator-03 49:24

So.

Researcher 49:25

I you did, you did the exact you did the right thing.

You.

You you've actually removed the.

The correct response from the yeah.

Ideator-02 49:32

What then?

I'm super confused.

Ideator-03 49:35

Yeah, not already, yeah.

Ideator-02 49:37

Well, that just made me even more confused because based on what I'm reading here is that if's pending end included like the washing obvious, then C is disabled.

Researcher 49:41

Umm.

Yeah.

Ideator-03 49:45

Yeah.

Researcher 49:47

Yeah.

Ideator-03 49:48

Then they disable.

Ideator-02 49:49

Ah, but then, of course, then we fulfill their response.

Which then?

Uh isn't so it's no longer pending is executing.

Thus sea gets enabled.

Researcher 50:02

Yes.

So in natural language the the rule this is the tricky part I I this is this is what we're trying to make a little easier on people because this this this is what kind of makes your brain do some results, right?

Ideator-02 50:17

Umm.

Researcher 50:18

It is the response milestone kind of relation, right?

So it it's essentially it means a requires a response from B and until B is executed until you've done B, you cannot do C that's what that's what the response milestone relationship is.

Ideator-03 50:32

It's OK.

Ideator-02 50:36

But then I would say from if you want to make it into international language, I would turn it around and instead say while a is waiting for once a is, you know, doing what needs to be done for B.

Researcher 50:40

Yeah.

Ideator-02 50:51

Then we get C enabled.

Researcher 50:55

That's essentially what you're modeling, but I think you're flipping the activities around like what's the, what's the?

Ideator-02 51:00

Probably.

Researcher 51:03

But trying to instead of saying ABC trying to try using natural language to describe what you and repeat what you just said.

Ideator-02 51:09

Yeah.

So what I would say here is that after I've eaten finished eating my sandwich, I will be washing up and.

Researcher 51:15

Umm are you?

Ideator-03 51:17

And.

Researcher 51:17

Will you be watching that?

Would you have to wash up?

Ideator-02 51:19

Or the difference I have to wash up or my dishwasher will do the washing.

Ideator-03 51:22

I have to push back.

Ideator-02 51:24

And then I that means I can then relax.

Ideator-03 51:26

Then I cannot be relaxed until.

Ideator-02 51:29

Muted myself.

So here we go.

I I don't want you.

This is how it is mute.

No, no.

And I think it's a matter of saying is, I don't.

I don't want to say isn't until then I cannot relax.

I would say once it's done, I can relax.

That's at least I would.

Researcher 51:45

Well.

Ideator-02 51:47

But then as we are and then take.

Researcher 51:48

Well, again that's that's that's that's fair enough, I mean, but it it's saying the same thing, right it's you have you have you have an activity which has yet to be executed that's what pending means right pending is something that you have to do but you haven't done it yet and until you resolve that pending activity.

Ideator-02 51:52

Yeah. Yes.

Umm.

Yeah, yeah, yeah, yeah.



Yeah.

Ideator-03 52:04

Yeah.

Ideator-02 52:07

Uh-huh.

Researcher 52:08

You cannot move on you the you cannot move on to the milestone, right?

Think of again.

Ideator-02 52:14

Yeah.

Researcher 52:15

It's it's.

It's like if you take on a job, you have to.

If you say I have to make a game for a certain social media platform, which I'll have been named.

You have to.

Make the game before you can deliver get paid right?

Ideator-02 52:37

Get paid.

No. Yeah.

Researcher 52:39

So the ABC relationship, the A requires response from B which is the milestone for C is uh take on a job requires the response of actually performing the job and performing the job needs to be done before you get paid.

Ideator-03 52:39

Yeah.

Ideator-02 52:51

Umm.

Umm.

I actually think now that we're talking about it some more, it makes more sense.

Ideator-03 53:01

Yeah.

Researcher 53:02

Awesome.

Well, send that on to DCR solutions and and let them know they're gonna done a good job.

Ideator-02 53:09

Well, yes, but it took it took a bit of talking, but now I think I'm.

Researcher 53:11

It it.

Is it?

It does require reworking of the brain, right?

Especially the the the idea that that you know.

Ideator-03 53:19

So can avoid it.

And then yeah, never.

Ideator-02 53:25

So what are you saying here?

Researcher 53:25

And you.

Ideator-02 53:26

Is that as long as this, it's not happening.

This will never happen, right?

Researcher 53:33

Exactly.

It's blocked.

Ideator-02 53:34

Yeah.

Researcher 53:34

It's it's uh.

Ideator-02 53:35

And and then we say then how?

How does this happen?

Well, we say this is required before this can happen, right?

Researcher 53:41

Not really.

Ideator-03 53:41

Yes.

Researcher 53:42

There's nothing here that says that it's required to make a sandwich before you do the dishes.

What it says is that if you eat the sandwich, you make a mess, and that requires a response from.

Ideator-02 53:53

Yeah.

OK.

So yeah, how it's so it's required output from or output.

That's very technical.

We're looking at right, but yeah, something goes on here, which then triggers.

Ideator-03 54:04

Yeah, you need to refer to the act.

Ideator-02 54:04

This happening.

Researcher 54:06

No, no, no, no, no.

I think it's still you're still because what you're describing is a condition essentially, right?

Ideator-02 54:09

OK.

Yeah, yeah, yeah, yes.

Researcher 54:12

It's it's.

Well, no, it's not really condition.

No, no, I'm not making sense it it I.

No, you're right.

It it doesn't trigger it happening but it triggers a state change on that activity right?

Ideator-02 54:27

Yeah.

Researcher 54:27

It's like a little light bulb goes on on top of the activities and say, hey, you got to do this, you've got to do this.

Ideator-03 54:30

Umm.

Ideator-02 54:31

Because.

Yeah.

Researcher 54:35

Otherwise you'll never be able to relax.

Ideator-02 54:37

Yeah.

Ideator-03 54:38

Umm.

Ideator-02 54:39

So it's not a condition like you have over here, because that's something else and that's we haven't used it yet really.

We have done down here, right, OK.

Researcher 54:48

Yeah, we have a condition here, right where you cannot.

Uh, you and the difference here is the the difference here is that you can wash up any damn time you want.

Ideator-02 54:52

That's a blocker.

Researcher 54:57

You can spend your entire day washing up.

Ideator-02 54:57

Hmm.

Researcher 55:00

No one's gonna stop you, but if you eat, you make and eat a sandwich.

Brother, you have to wash up at least once.

Ideator-02 55:06

Yeah.

Researcher 55:08

And the difference here is that you here you can't make a sandwich.

You cannot make the sandwich unless you have until you have been shopping at least once.

Ideator-03 55:21

Better.

Ideator-02 55:21

Yes.

Researcher 55:22

And that that's another kind of quirk of again, of of the DCR is that it's not again there's not, there's no token moving from here to here.

Once you've executed the go shopping function activity, you can make as many sandwiches as you like.

It's simply just unlocks the activity and you are allowed to execute that activity again and again and again and again.

Ideator-02 55:44

Yeah.

Researcher 55:45

And again and again.

Because you have apparently bought like infinite sandwich materials when you went shopping.

Ideator-02 55:55

Yeah.

And that enables us to eat a sandwich.

Researcher 55:58

Yes, right.

Because we have the the milestone here is connected with the require response from right.

Ideator-02 56:01

Yeah.

Umm.

Researcher 56:06

It's actually something interesting happens here right?

The, umm, the becoming hungry?

Ideator-03 56:14

Yeah.

Researcher 56:15

Action imposes a response requirement from making the sandwich, but the go shopping rule implies a condition relationship on the same activity, right?

So what this means is, well, if you become hungry, you have to make a sandwich.

But you can't make the sandwich until you've been shopping, right?

Ideator-02 56:38

Hmm.

Researcher 56:39

So you have two ingoing rules that affect the same activity, but they have different impacts on it, right?

One is is again requires you to act and the other prohibits you from acting until you've done something else.

Ideator-02 56:55

So I thought experiment would also be that we could add additional conditions that could be you need plates if you are that kind of household which then owner requires you to use plates to eat right then that would edition.

Researcher 57:06

Yeah.

Ideator-02 57:07

But otherwise OK, yeah, alright.

Researcher 57:09

Yeah, exactly.

Yeah.

Yeah.

And so, yeah, and and you can you can model it as as as like as cuz and that's why this is kind of gets a little messy if you have very strict strict linear processes because you have to then start making restrictions like across various activities, right?

Because you will have to make sure that this doesn't execute before this, and this is so you wanna use this for activities that really don't care in which order you necessarily execute the activities.

Ideator-02 57:29



Ohh yes.

Researcher 57:40

Umm.

But except in certain certain cases, right.

Ideator-02 57:43

Yeah.

Researcher 57:46

So here that once you've you know, you know, once you've done the dishes, you can sleep as much as you like.

You can you can.

You can make even more sandwiches.

You can make sandwiches and wash up.

Relax, relax.

Go shopping again.

You can bounce around as crazy as you like.

The only thing.

Ideator-02 58:05

Yes, actually this one works infinitely.

You can do this as much as you want, but then suddenly you become hungry and then this whole shebang starts.

Researcher 58:13

Yeah.

Yeah, exactly.

Ideator-02 58:14

OK.

All right.

Researcher 58:16

So we are dangerous running low on like that.

We literally haven't done any work yet.

We are still in the teaching phase, so maybe I'll just do the last bit as a worked example so.

Umm, what we have here?

If the kids can.

Ideator-03 58:37

If the kid.

Researcher 58:38

If the kids come home, you can no longer relax.

The kids cannot come home.

The kids can leave home if the kids leave home.

You cannot.

You can again relaxed the kids cannot leave home.

The kids can come.

What?

I'm gonna kind of drop a major hint.

What I'm describing here is the on off process.

Sort of the on off pattern that I described up here.

Just going to make.

Ideator-02 59:02

Was just about to do that.

Researcher 59:04

Yeah, I'm just gonna drag Jesus.

Ideator-03 59:07

That's.

Researcher 59:08

Come up.

There we go.

Just gonna put this down here so you can you hopefully you can then create a cognitive link between this abstract drawing and this concrete modeling.

Yeah.

There you go.

That's exactly what we're doing.

Ideator-03 59:27

Includes.

Researcher 59:28

Yeah, yeah, yeah.

Place it exactly.

Ideator-03 59:52

But I'll.

Researcher 59:53

There you go.

Ideator-02 59:57

Almost there.

Researcher 59:58

Ohh that's.

And that's UX OK.

Ideator-03 1:00:05

OK.

Researcher 1:00:05

So.

Yes.

Ideator-02 1:00:11

There we go.

Researcher 1:00:12

There we go. Yeah.

Ideator-02 1:00:12

OK, buddy communicated right.

Researcher 1:00:20

Beautiful, right?

So the that's the pattern, right?

The kids go out.

That enables them to come home again if the kids come home.

That enables them to go out again.

Obviously, once they've gone out, they can't go out again, cause you know, physics and if they are home, well that excludes your possible that your ability to relax and if they go out, you can again relax as long as you don't have pending dishes.

Ideator-03 1:00:31

Right.

Like.

Ideator-02 1:00:43

Yeah.

Researcher 1:00:50

Lovely.

Ideator-02 1:00:52

I get it.

Researcher 1:00:52

You have found our Princess Mario.

OK.

Ideator-03 1:01:01

OK.

Researcher 1:01:01

That took a while, didn't it?

UM, which is. Yeah.

Ideator-02 1:01:04

Now we get it, we think.

Researcher 1:01:06

Yeah, so.

Ideator-03 1:01:08

Let's see.

Researcher 1:01:09

So we may have to.

I may have to to call upon you again at some point in the future because we have only done like 1/3 of what I had planned for today, but we'll we'll see what we can do.

So what I'd like to do now is to kind of get you in a mindset.

Just need to edit and copy link.

And I'm gonna drop another link in the chat.

Ideator-02 1:01:44

Oh dear.

Ideator-03 1:01:44

You.

Researcher 1:02:02

OK so.

OK.

So what I'd like to do now is to try to get you away from arrows and boxes, right?

So what we've done is we've kind of, we've been working within the standard bounds of process notation, which is not what we want to do in this project.

We wanna break away from that.

UM, so I would like you to try to brainstorm.

How umm you and the world at large experience these kind of rules and concepts that we've talked about.

How do you experience uh?

One to one activities.

How do you how do you experience one to many activities?

How do you how do you experience the sense of having to respond to an activity UM now?

Ideator-03 1:03:14

I mean, it's super.

Researcher 1:03:15

Since we're since we're working in a in a in kind of a digital experience, we'll discard certain aspects of the human experience, right?

So we're not gonna discuss smell.

We're not gonna discuss like tactile sensation, but I do.

Would like you to kind of consider.

These, these these kind of rules in the sense of three dimensional movement, what you can see with your eyes, what you can hear with your ears.

What you can feel and what you can think.

So, UM.

Like an example of a response experiences I hear, one of my kids crying and.

So yeah, what do I feel from that?

Well, I feel that now I have to respond in some way, right.

So we have a response like here.

Kids crying response is walk over and see what's up.

Or, uh, if I can't see her from where I am, I'm going to have to.

The response activity would be to walk around trying to kind of feel find my kids, so let's spend well.

We only have 17 minutes, so let's try to spend.

Umm, start with 10 minutes and brainstorm.

UM, the rules of the DCR graph and how the world signals these rules to how you might experience them and how you might respond to them. Umm.

Ideator-02 1:04:59

So what do we write down exact?

Ideator-03 1:05:00

It's really I'm.

I'm I'm confused specially because I don't know actually how to think about this in the 3D model and then in order also to think about I don't know my real life.

I don't know how actually, how do I mix it?

Ideator-02 1:05:18

OK.

So and I guess so far and I I maybe, I agree, just to check if it so for example for one to many, could that be that I am teaching a class that would be a one to many relationship right?

Ideator-03 1:05:29

OK.

Researcher 1:05:32

Hmm.

Ideator-02 1:05:33

Because I am talking to them, but I don't know how much you want me to write down in this case.

I could be off by teaching because that could be.

Researcher 1:05:39

It's more of a it's it's, it's this is more of an exercise just to get you into a get your mind space away from.

Ideator-02 1:05:44

Yeah.

Researcher 1:05:46

From a 2D kind of graph representation of an activity diagram and into just the just like a real life situation, just try to think UM like how how do you experience these rules in real life?

Ideator-02 1:05:54

Real life.

Yeah.

Researcher 1:06:03

How do you how would you like think up like?

Yeah.

Scenarios where you.

You feel a need to respond to something and think how does how how through which kind of.



Sensory inputs do the does the does the world signal to you or your own body signal to you that you need to respond to something or that?

There is a condition external condition imposed on you or that.

You need to finish something before you can do something else.

It's just a again, it's just a mental exercise to to try to to.

Try to relate these these rules into to something real life.

Yeah.

Something that just you know, that you.

Yeah, to you.

Ideator-03 1:07:01

Everything was easier with a sandwich.

Researcher 1:07:06

There, there will be no marks.

It's simply just a little kind of brain clearing exercise.

Ideator-02 1:07:10

You're, you said no tactile right.

Researcher 1:07:14

Yeah, because, uh, because ultimately we we want to try to stay in in something that will be relevant later.

And since we are not dealing with, this will culminate in some ideation for three you something that could be computer model in digital space so.

But again, this is brainstorm.

Anything goes, just any, any, any kind of personal experience or.

Ideator-03 1:07:38

I mean.

Researcher 1:07:43

Real world rules or any, anything that you can relate to any of the terms that we've the concepts and rules that we've we've discussed so far.

Ideator-03 1:07:59

I need to stop thinking about job.

OK.

Like.

And in.

Ideator-02 1:08:38

And I guess see when you get that job until next time to sort this through and tell us if we were right or not.

Researcher 1:08:45

I don't think there is a right and wrong in this particular exercise.

Ideator-02 1:08:48

I would.

Researcher 1:08:50

This is just to get away from again.

Ideator-03 1:08:50

It.

Researcher 1:08:52

It's just a way to get away from from pointing arrows and stuff right?

Ideator-02 1:08:53

Yeah, yeah, yeah.

Researcher 1:08:56

Cuz I wanna.

I want you to to approach the next portion with fresh eyes.

I don't want you to be tainted by the, you know, by business as usual.

Ideator-03 1:09:05

I mean.

I mean I need to check your examples OK.

Ideator-02 1:09:12

I don't know if mine are good examples, I'm just thinking out loud here.

Ideator-03 1:09:14

Yeah.

Researcher 1:09:14

Hey, again, it's I don't care if they're good.

I just want you to to, to, to dude, to do something real, man.

Ideator-02 1:09:20

Yeah, yeah, yeah, yeah.

Yes.

Ideator-03 1:09:29

I'm in.

Umm.

Ideator-02 1:10:39

Can you guys hear me sit and whisper for myself?

Researcher 1:10:42

No.

Ideator-02 1:10:43

That's crazy.

This is hard actually to really get that.

Going.

Researcher 1:12:07

You're doing fine.

Ideator-02 1:12:10

You need to me.

Researcher 1:12:12

Then again, just this is a brainstorm.

Just anything.

Ideator-02 1:12:15

And yeah.

Researcher 1:12:15

Get it out.

There we can always sort away the yeah.

No, the crazy talk later.

Ideator-03 1:12:23

I was thinking about it the whole day.

Researcher 1:12:27

I'm sorry.

Ideator-03 1:12:28

I didn't thinking that I will thinking about my life the whole day.

What kind of activities I am doing further to respond?

Researcher 1:12:34

Yeah.

Ideator-03 1:12:39

Because it's not conscious.

Ideator-02 1:12:43

No.

Two way.

Ideator-03 1:12:48

Thank.

Umm.

Ideator-02 1:13:19

Ooh.

Ideator-03 1:13:50

Hmm.

Umm.

Mean hmm.

No.

Whatever it is.

Umm.

Ideator-02 1:14:39

Ohh you said.

No. Tactile.

Damn it, I keep getting back to that.

I'm thinking may need to mean you could that be like walking through a crowd?

You know, a very tight crowd cause then you push all that and they push you and everyone is pushing each other.

But I don't know if that's a bit of a stretch.

Researcher 1:14:54

I mean, walking through a crowd can have a visual and auditory.

Uh influence signing doesn't have to be tactile.

You can see you can hear.

You can feel you can think.

Ideator-02 1:15:06

That is true.

No, not the last part.

On the 1st 2.

Ideator-03 1:15:22

Now it's.

Researcher 1:15:30

Let's just do another minute and then see what we've got.

Ideator-02 1:15:43

Then I'll start the time.

Researcher 1:15:46

I am the timer.

Ideator-02 1:15:47

Oh my God.

Ideator-03 1:15:50

No.

Researcher 1:16:19

No.

OK, let's just finish the one you're doing and then we'll have a look see.

Ideator-03 1:16:51

Umm.

Researcher 1:16:54

OK.

It's ready.

Well, don't worry about it.

It's again, it's just another exercise.

It's not gonna be on the test.

Ohh, before we move on we have 4 minutes till the end of the scheduled meeting.

Do you guys have like an additional 30 minutes to spare or should we just end it at the correct time in the north?

We'll pick it up at some other point.

How you get how you guys for time.

Ideator-02 1:17:26

I'm good.

Researcher 1:17:28

You're good.

What about you, Ideator-03?

Do you have an extra spare 30 minutes or should you rather entered it or?

Ideator-03 1:17:36

For 10 minutes.

Researcher 1:17:36

It's 15 minutes.

OK, that's fine.

Thank you.

OK, so.

OK, so include opening a window to listen to the rain outside.

Yeah, again, Windows closed.

You cannot receive the.

You know you can't listen.

Windows open you can you can listen.

You can initiate the you listen to the rain activity.

Exclude you.

Ideator-02 1:18:05

I couldn't make the reverse here.

Close the window to stop hearing the rain.

Researcher 1:18:10

Yeah, that's true.

Ideator-02 1:18:12

But for me?

Researcher 1:18:12

Exclude closing your eyes to exclude your vision exactly you. You shut up.

Ideator-03 1:18:16

You.



Researcher 1:18:19

You shut something out.

Ideator-02 1:18:20

Yeah.

Researcher 1:18:21

Condition use a credit card to get groceries in a cashless shop, right?

Ideator-02 1:18:28

Bye.

Researcher 1:18:29

So again, Dubai.

So yes, so you you have to use your card to before you can by the groceries.

Ideator-02 1:18:46

Yeah.

Researcher 1:18:47

So response seeing something move in the peripheral vision.

That's it.

Yeah.

And so that's interesting you.

So you something out here is signaling to you.

Hey, stuff going on, you might wanna do something about that.

Ideator-02 1:18:56

Yeah.

Yeah, look at me.

Researcher 1:18:59

That's interesting, especially in the context of the limited vision that we have with our eyes, but also you have on a computer screen, right?

So an activity might want your attention out here, but it's without outside the field that you view.

So an interesting thought experiment could be how would this activity signal to you umm, does it do it sound colors?

Ideator-02 1:19:21

Exactly.

Researcher 1:19:26

Text.

Uh, et cetera, et cetera.

Umm, here are sound that breaks the current.

The current menotomy right.

So something kind of grabbed your attention.

Ideator-02 1:19:38

Yeah, explosions.

If you are, I don't know, in Israel, I don't know something like that.

Researcher 1:19:42

That's tasteless, but true.

Ideator-02 1:19:45

Yeah, yeah, yeah. Current.

Researcher 1:19:47

So, OK, so enjoying this whiskey?

Having finished work in chores for the day.

Yeah.

Yeah.

So yeah, so these are all this is kind of an activity, right?

So how would the you know?

How would the?

How would the universe signal to you that you you can't have your whiskey before you've enjoyed?

You've you've performed your tasks, your work for the day it.

Ideator-02 1:20:20

And then Charles could be a lot of different activities like cleaning up, vacuuming, change the toilet paper.

Researcher 1:20:23

Yeah.

Ideator-02 1:20:26

I don't know.

Whatever it can be, refill, I guess.

Researcher 1:20:29

Give instructions 1 to one given instructions that someone else has to follow. Right?

So it tells you something.

This tells you you tell it?

Ideator-02 1:20:38

Umm.

Researcher 1:20:39

Umm, yeah, maybe too many teaching.

Ideator-03 1:20:42

They will include going to the gym like I was thinking about the.

That well, the idea is actually well, the idea was actually to create some examples, but related with our I don't know tiles like.

Sites or like perception around the world that like like what happened with my eyes or how my eyes react depend of any activity.

I don't know.

It's just thinking about how my body reacts with.

Researcher 1:21:19

Yeah, that's the trick, right?

How?

How to try to yeah.

To think, how do you how does your body know that stuff is going on and it's, you know, it's difficult, but this again, this is just this is just an exercise and I think you've been doing very good, many, many being a concert listening to music and people around you.

Yeah.

So many different kind of many different input happening across you.

Ideator-02 1:21:44

Input all of that.

Researcher 1:21:49

Two way.

Yeah, having a conversation?

Something else.

Umm.

Ideator-02 1:21:53

I guess that's the two Lakers.

Something comes out and something comes in.

And I say something.

Then you will respond to, yeah.

Researcher 1:22:02

So milestone go to the gym after I finish my daily tasks.

Guys having developed models specific times.

Yeah.

OK.

Would you?

Until you done your job.

Condition tidy up house when there is a perceived lack of order in the colors.

Yeah.

So that's interesting.

So visually, something is, uh, is, is uh, it's.

Yeah, there's like visual interference in, you know, in in your world.

Right, something is not right.

So you.

You you need to do something about that.

Ideator-02 1:22:48

I was actually just thinking now that I'm currently fixing my kitchen and then, you know the the the cupboards, they need to be aligned perfectly and if they're not then it triggers me to go and do something about it.

Researcher 1:22:53

Yeah.

Hmm.

Ideator-02 1:23:00

That's it.

Researcher 1:23:01

There you go.

Ideator-02 1:23:01

So that's relatable with the colors.

Researcher 1:23:05

OK.

OK, now.

Ideator-03 1:23:09

OK.

Researcher 1:23:09

On to the actual work which we will finish in 13 minutes.

No copy link.

I'm gonna drop the final link into the chat.

And this is the interesting part.

Ideator-03 1:23:29

OK.

Researcher 1:23:35

There you go.

OK, so this is the actual domain of the thesis project.

Umm, it has to do with something very exciting, which is shift planning and public the public sector.

Ideator-02 1:24:19

This.

Researcher 1:24:19

So don't worry if it looks a bit complex because we're not gonna.

We're gonna break it down into atoms and and work on those, and we probably won't be able to do that many, but we'll do what we can.

So the quick rundown of the activity is of the process is that if a staffer calls in sick, uh starts.

Here we are required to answer the call.

Obviously, umm, we can obviously cannot answer the call before someone actually calls.

Ideator-03 1:24:42

Mm-hmm.

Researcher 1:24:47

So here we have the interesting that you know you this activity has to happen for this activity, but this activity has to happen when this activity happens, right?

So it's both a condition and it requires a response.

Ideator-02 1:24:56

Umm.

Researcher 1:25:00

UM, we then need to assign a shift planner and calling staff.

Umm.

And before we can call in staff, we have to assign a shift plan.

The process cannot end before we have called in the staffer.

If money is tight.

Then we have to get managerial approval.

Umm.

On the staff are being called it, uh.

If money is not tied, then we don't.

And if an on site staffer can work overtime, then we don't need to call in staff.

So this is essentially the same patterns as the the ones that we modeled during the sandwich experiment.

It's just in a different context.

Ideator-02 1:25:54

Umm.

Ideator-03 1:25:55

Hmm.

Researcher 1:25:55

Same exact patterns.

This is the the pattern we use when the kids came home and this is the again, the milestone response pattern.

Uh, we used when we wanted to relax after eating our sandwich, but before.

Ideator-03 1:26:07

Umm.

Researcher 1:26:14

Squashing up and this is the dishwasher, so the same exact same exact rule, same exact patterns, but in a different domain, right?

Ideator-02 1:26:24

Umm.

Researcher 1:26:26

Umm, So what?

The artifact is gonna do is.

It's gonna take this DCR process model right and it's gonna try to do away with all these boxes and arrows and we want to create a small 3D open world which communicates the rules of the DCR graph to the user but in a manner which is intuitive and natural.

So there's not arrows pointing left and right.

There's no like necessarily simples.

What they can't be symbols, but there's we want to get away from this.

We want to get away from boxes.

I wanna get with some arrows and we want to create something that is intuitive to the user.

That's why I wanted to kind of bring you guys into the real world.

Right.



Because we all have, you know, we know when we have response, we know that we have the condition we want to try to communicate this to the the user.

So.

So yeah. Umm.

This is uh, this is this is your guy show, right?

Ideator-03 1:27:24

No.

Researcher 1:27:28

So we'll be setting the use case and this domain, but we want to make the communication as universally understood as possible.

So we wanna try to make domain agnostic but.

Ultimately it's it's it's up to you guys.

So you can write, you can draw, UM, speak out loud please and.

Umm.

What we I think what we want.

I want.

We'll let you to do is we'll just do one rule at a time and we probably won't be able to do more than a couple, but well, let's see if I can get you in at a later date.

We'll try to do some more, but so let's try to talk.

How could we?

How could we model an activity being a condition of another activity in the space in this 3D World space in an office?

Ideator-02 1:28:23

Without boxes.

Researcher 1:28:24

Without boxes, yeah.

Ideator-02 1:28:27

So we literally have to think outside the box.

Researcher 1:28:29

You literally have to think outside the box.

Yeah.

And we have a lot of, I mean we have a lot of stuff to play with, you know that's why we have anything that compete perceived in a 3D realm.

We again we have site, we have sound we have.

Ideator-02 1:28:45

OK.

Researcher 1:28:48

Uh.

We have a movement.

We have time.

We have text.

Ideator-02 1:29:01

OK, so we thought experiments.

Let's go.

So what if we modeled it 1 to one in the 3D environment where we can actually see the different parts that's relevant?

So for example, when the phone calls, it's a phone that shows up and it goes ring and then you can because you have two ears, you can know the sound is from over here.

There it is, right?

Ideator-03 1:29:17

And then.

Ideator-02 1:29:18

That could be.

I know you wanted generic model, but I think from experience always starting with the specific model.

Then we branch out to generic.

Researcher 1:29:26

Sounds good to me.

That's why they pay you the big bucks back, yes.

Ideator-02 1:29:28

And that's at least what I have seen happening a lot.

It's much easier easier.

Researcher 1:29:32

No, it makes sense.

And then again we can, we can make it specific and then?

We can always make it abstract and at a later date by through polymorphism and inheritance, when we actually do the coding.

Ideator-02 1:29:43

Yeah.

Ideator-03 1:29:44

Yeah.

Ideator-02 1:29:46

Sure.

Researcher 1:29:47

But yeah, so let's keep it within this domain.

Donuts baby.

Ideator-02 1:29:51

Yeah, I'm just thinking, I'm just thinking loud, so I.

Researcher 1:29:55

Yeah.

No, that's what I want you to do.

I want you to think loud because I'm recording.

Ideator-02 1:29:59

This is my backup brainstorming bag.

I'm just gonna start getting some sugar, alright?

Researcher 1:30:03

Is that like, alright, alright, I thought that was like a literal bag of sugar. I.

Ideator-02 1:30:11

This will make my thumb you know and go open up no candy.

Umm.

Ideator-03 1:30:22

Should be here.

The whole line.

Ideator-02 1:30:28

I mean.

If we are interactive, we can stop playing around with movement, right, because?

Researcher 1:30:37

Umm.

Ideator-02 1:30:39

Stop showing up when it's relevant.

So if I want to see a process, there will be something at the beginning.

Then in this case, for example, you said yourself the staff member calls in sick, so I could imagine this could be fun, but I don't know if it's a good idea that you know if phone is calling and then you actually go, then you you pick up the phone in a virtual environment and then you can see once it picked up then suddenly and you answered then you can see.

OK, here's the shift planner suddenly showing up as well and starting to to make sounds.

Researcher 1:31:14

Umm.

Ideator-02 1:31:17

But you know, if there's a condition, maybe it could be like I don't know, red and and shaking and someone just called on my door.

So just a second guys.

Researcher 1:31:29

OK.

Do you have editing rights in this Ideator-03?

Ideator-03 1:31:35

What?

Researcher 1:31:36

Can you doodle and stuff?

Ideator-03 1:31:38

But what happened to me is actually a bit different.

I don't know, but I mean it's because also I feel I feel like it's related with culture and then.

Certainly.

And in my case I have to ask order to know if somebody sick.

For example, uh, that's another example, but usually I it's a it's a matter of perception.

Researcher 1:31:57

Umm.

Ideator-03 1:32:04

In my case, like as a boss also all the time they have to check, uh, their voices, how they sounds.

Uh, actually, how it's actually been the process.

If you feel like something is like actually not going well because of time, maybe they are actually wasting more time than before.

Researcher 1:32:20

Umm.

Ideator-03 1:32:26

And then I have to ask, because people don't say it's sick in this case, like umm.

Ideator-02 1:32:36

I'm back.

Sorry about that.

Researcher 1:32:38

Yeah, cool.

Umm. So.

So yeah, so remember the the condition relation is that A has to happen before B, right?

So the and as as as an example that.

The staff member calls in sick and that has has to happen before we answer the call.

Obviously, right, you can't.

This activity has to happen.

For instance, you can't just pick up the phone, say hello UM.

Right.

So.

So yeah, so your idea, could you recap your idea before something about answering the phone?

Yep.

Ideator-02 1:33:16

Me.

Yes, George, just thinking, something like, you know, the actual thing is going on in my in my space and when you know the phone starts, call starts ringing, you can see it.

Researcher 1:33:26

Umm.

Ideator-02 1:33:31

You can hear it something like that.

It's it will crave your attention because that's the flow that you want to begin with.

They maybe shouldn't anyways.

Then you I don't know.

You can interact with it and you could say, OK, I'm gonna pick up the phone, right?

That means I answered the call.

Now, what happens then?

Then we have to look at all the conditions.

And what is then required?

So when I answer the call, then suddenly the shift planner will show up, right and the and and be like OK, you need to do something over here in order to make sure we can call in staff.

Now call in staff is a separate thing over here where we can suddenly see.

OK.

Is there's enough budget?

Is a is money OK or not just you know thumbs up, thumbs down and then I can, you know, skip between the two and three. OK.

Is it OK?

Then how is it?

If it's not OK, then how is it so you can actually switch between these conditions?

I guess it is, but it's not really conditions it.

Yeah, it is.

Conditions from the informed manager, then so in manager, will have to be there.

I'm just trying to imagine it.

If it's, you know.

Researcher 1:34:32

I I think you may be getting a little ahead of yourself.

I think it's it's much easier for you if you if you kind of compartmentalize.

Ideator-02 1:34:35

Yeah.

Yeah.

Researcher 1:34:40

Uh, that so, like right now you you want to signal that, cuz?

Ideator-03 1:34:46

But then you require a response and then you also need to check out you know the resources and in order to know which which of the possibilities you have for an answer.

Ideator-02 1:34:57

Yeah.

Yeah, because the issue is it's all connected, right?

Ideator-03 1:35:02

Mm-hmm.

Ideator-02 1:35:03

Which is, which is what makes it difficult to to to know.

Researcher 1:35:05

Umm.



Ideator-02 1:35:07

And the question is, should we show the actions you can do in each of these events, or should we just describe the event right?

Umm.

And I think.

I was going to model this for someone else.

I would at least put in some.

Some options for the actions inside of an event to make sure that people understand if they're going to it depends on who be using this right, who will be.

Researcher 1:35:42

Umm.

Ideator-02 1:35:43

We'll be using this afterwards.

Is people going to read it or people are going to?

You said you would see because there's a difference between modeling a workflow at a company you know for how a specific virtual element goes with the pipeline, or if someone has to build it afterwards.

You know technically umm.

And I have to figure out then what makes sense here.

Unless you have an idea.

Researcher 1:36:11

Well, the the idea is is is to.

Because, I mean, if you're, if you're already a.

Domain expert you probably don't need this graph necessarily.

Ideator-02 1:36:23

Yeah.

Well.

Researcher 1:36:28

It if if you already know how stuff works, you know it.

I I guess you you will make the you you don't meet you.

You don't need like a 3D real like virtual representation, right?

You can do fine with the graph if you already know what the process is, then this should be pretty accessible, and if you know DCR graph but don't necessarily know the process then this graford also be perfectly accessible right?

Ideator-02 1:36:54

Yeah.

Researcher 1:36:55

Because you you read this language, but if you are a new, if you are a, uh, someone within the domain who is not an expert necessarily and you don't know DCR graph.

Yes.

Umm, what we want to do is we want to try to lighten the cognitive load of learning the process by abstracting away the.

Ideator-02 1:37:11

But.

Researcher 1:37:24

Visual language of DCR graph and replacing it with a visual language which is more intuitive.

Ideator-02 1:37:29

Umm.

Ideator-03 1:37:29

Umm.

Researcher 1:37:30

Uh.

It might also be that you're a domain expert, but you need to upskill, right?

So like some new, some new.

Some new processes have been added to an existing process and you have to learn them that way.

It would also make sense to go into this 3D environment and play around with like an environment that you recognize, but all like stuff is different, right?

And then you explore the.

Environment and then you kind of learn, Oh well, if I do this activity then it turns out that I have to do this activity, but I can't do that activity before I have to do this activity.

Ideator-02 1:38:08

Umm.

Researcher 1:38:10

Oh, OK.

Well, I see that probably means that there's this new process in place and you kind of Intuit how this is and if you're a total noob, then you go into this 3D World and you start from scratch, basically trying to explore these processes and kind of, you know, you know, immerse yourself in the process without having to learn the, the, the ends and out of DCR graph as you know it was it was difficult, right.

It was kind of hard going to understand the the, you know, the.

Ideator-02 1:38:41

Umm.

Researcher 1:38:41

Yeah, the the mechanisms by.

Ideator-03 1:38:45

Umm.

Researcher 1:38:47

You know, just by by reading the graph.

So.

So that's who we're building this for.

It's it's, it's it's it's workers and it's domain workers who aren't necessarily experts in either the domain or the process modeling or domain experts.

But who needs that need to upscale without having to learn these DCR right?

Ideator-02 1:39:09

Yeah.

So they need to understand the processes, but they don't understand the alright specific TCR we have.

Seeing OK.

Ideator-03 1:39:18

Yep.

Researcher 1:39:18

Exactly.

So that's why we were trying to.

Kind of apply the rules of DCR graph with real life.

You know that's.

Ideator-02 1:39:38

OK.

Ideator-03 1:39:41

The natural. OK. Yeah.

Ideator-02 1:39:41

So looks good.

Go ahead, Ron, and give you an idea.

Ideator-03 1:39:45

No, I I've been thinking about the natural response because, well, there are just conditionals.

But how is actually the the natural response of all of those conditionals?

And.

Ideator-02 1:40:00

Yeah.

I also think it's this is very difficult to do right.

Especially if you're used to working in a different way than try to change it because my head's like ohh condition.

That's typically, you know, represented with the door, you know, the door opens when something has been achieved, right?

Researcher 1:40:18

We can do, Doris.

Ideator-02 1:40:18

Ohh what you can do dollars.

Researcher 1:40:21

We can do doors, we can, we can.

We can do doors, we can do doors, we can do locks, we can do little icons, we can do, we can do lots of stuff.

Ideator-02 1:40:30

Yeah, because what I'm thinking actually now, now that I think more and more, I don't know why I was in the phone thing then I was in the VR world, but it doesn't have to be.

I guess you can just be some kind of 3D representation, so it's basically almost like a video game, right? Ohh.

Researcher 1:40:43

It is basically like a video I want to.

Ideator-03 1:40:43

Yeah.

Researcher 1:40:44

I want I want.

Essentially, I want you to imagine that you're in the exciting world of 3D office and.

Ideator-03 1:40:55

With a lot of.

Researcher 1:40:55

And we want to to try to to like, how would you?

Intuitively, know that.

If that do and doing and again you don't have to marry, get married to the exact.

Umm, the exact kind of activities as I've described them here it it can we can abstract again.

Ideator-03 1:41:21

OK.

Researcher 1:41:24

We can abstract it away to, to to just like generic like office impressions.

Ideator-03 1:41:30

Because I think.

Because what I think is actually not everybody.

It's involved in the, I don't know work environment.

If you think about, I don't know, like people that is involved in this PR, it's there's some, but not all people.

And then what is actually all people do is like the most.

Common is actually a family life.

Even individual life, I mean that's I think that should start point it might.

Researcher 1:42:01

No, sorry.

Ideator-03 1:42:01

And 100.

Researcher 1:42:03

That's why you're here for your humble opinion.

Ideator-03 1:42:09

And.

I don't know also conditional also those conditional.

Also you can see that, uh, I don't know reaction around the park or street also have been thinking, what else? Umm.

Ideator-02 1:42:28

I think, yeah.

So when we just talked about this now and making these technical aspects into something video gaming, again something about regimes have played which is actually doing this in a different way.

Ideator-03 1:42:38

Yeah.

Researcher 1:42:41

Umm.

Ideator-02 1:42:43

I'm just adding a screenshot of one of my all time favorite games, which has been too much time in called factorial, which is basically understanding.

Researcher 1:42:49

Umm.

Ideator-02 1:42:51

You know, if this then you need to do this so you can do this and complicated way.

Researcher 1:42:54

Umm.

Ideator-02 1:42:56

And the way they're using these actually includes it's kind of by conveyor belts going towards something, then where something picks it up and puts it in.

This is very much specific for their contact, which is billing stuff, you know, but I think it's an interesting notion to say, alright, So what is what is the thing?

Researcher 1:43:09

Umm.

Ideator-02 1:43:16

I think it's just still be specific.

How do we know it's a condition off?

And how do we know it requires money from?

So if you answer a call, we could be interesting to make.

Error is just so easy to go to right colour the arrow.

Can we changed that so it's a thumbs up thumbs down representation?

Still, 2D could be 3 doesn't matter.

You're thinking loud right now.

Researcher 1:43:42

Umm.

Ideator-02 1:43:43

Uh, for those specifics.



Taking something, putting it somewhere else.

This opens up for this.

Could be represented with types and water flowing through.

That's more of a one to one because that's works in pretty much the exact same way.

And over the piping going on so.

Researcher 1:44:10

What I think is important to remember is that these relations can kind of crisscross very much, right? So.

Ideator-02 1:44:19

Yeah, yeah, yeah.

Researcher 1:44:20

Umm.

So we so that's that's one of the reasons why we want to get away from arrows like or at least connections hard, unbroken connections between activities in the 3D realm.

Right.

Because if you have screen elements in various places around you in a 3D environment and they are connected by physical unbroken arrows, right, that's gonna look like, you know, like a spider's web of arrows. Right.

Arrows, right, so we need to signal somehow.

We need to detach.

Detach the arrows, detach the physical connections by but but still communicate the connection between activities and between elements.

Ideator-02 1:45:09

Yeah.

We wanted to play indicate 2 things without using arrows.

Researcher 1:45:16

Well.

Ideator-03 1:45:18

That is what actually was thinking.

Yeah.

And I was I I was also thinking about it, I don't know.

Ideator-02 1:45:27

Yeah.

Ideator-03 1:45:30

And I E the goal of building a building.

A huge building, but even if I have so many activities for building.

The company so many errors like from design to the point of construction, it's there are two different things.

And then when you start building, you can see the errors.

There's appear and there are no some, just not the perception.

It's just the reality.

How?

How do you avoid errors?

How would you?

Ideator-02 1:46:12

I mean, I guess you could be.

For example, for a telephone call, right?

The staff member calls in sick and then you enter the.

Then it's part of, you know, enter call and so on.

And so that could be a telephone wire, which you know where you can see something moves.

But then we're back at suddenly having this representation that we're not, that we don't want to do right, that it's not time based, it's something that happens.

I can happen at the same time, which makes it even more difficult, right to understand what?

Ideator-03 1:46:45

Umm.

Ideator-02 1:46:45

How is that connecting could still make a wire between those two that you have a staff member in the bed grabbing a phone.

You see the telephone wire to the phone at the office, and when he calls, it'll light up.

So you know, OK, he does something.

Then the cable is lighting up or something, you know, and then start moving and you have some some noise.

With the, the phone is ringing right then.

Sudden, that's very much a one to one representation of real world with this happening.

But then there's a, you know, direct understanding that this is happening that then this over here needs to to be done right.

And then when you answer it, you can see the phone is moving up.

That has been called then something else, because I mean, there will always be a time.

A element, when we're talking about workflows, I think that's on available to some degree, but it doesn't have to be everything right.

There will be.

There will always be something this then this right?

Researcher 1:47:55

Umm.

Ideator-03 1:47:56

Mm-hmm.

Ideator-02 1:47:57

It won't happen all at the same time, although it can be very, very close to it.

Researcher 1:48:01

Yeah, well, that's that's an interesting like question.

If if we maybe try to move away from the the phone because there's there's a lot of, like connotations there, but what if we look at like the assign shift planner as a condition of calling in the staff?

Ideator-02 1:48:17

Yeah.

Researcher 1:48:18

There's no so.

So these are two kind of human centric activities and what we want to kind of communicate to the user is that you cannot call in the staff before you have assigned the shift planner.

So we need to signal the connection between these two activities, but we also need to signal that this action cannot be fore performed before this action is being performed.

Ideator-02 1:48:47

Umm.

I think in.

So if I were to signing this for a game or somewhere else, right?

Researcher 1:49:03

Umm.

Ideator-02 1:49:03

What I would do is I would make the call in staff, yeah, grayed out.

Disabled literally disabled until you know something has happened with the assigned shift planner.

Researcher 1:49:10

Umm.

OK.

Ideator-02 1:49:21

I'm not sure about which actions need to be done in there, but once that has been correct then it will light the path and then enable the call in staff.

You know, if other conditions were met, right?

Researcher 1:49:30

Hmm.

OK.

So you you would create some kind of visual like attention grabbing kind of screen elements says.

Ideator-02 1:49:37

Yes.

Researcher 1:49:40

Ohh, you've just done this.

Something interesting happened over there.

Why don't you check that out, OK?

Ideator-02 1:49:44

Yes, exactly.

Yeah, yeah, yeah.

Yeah, exactly.

That could has also talked about could be with sound or you know and then something moving over there to take your attention over there.

Researcher 1:49:52

Hmm.

Ideator-02 1:49:55

That's this is done now.

Researcher 1:49:55

Umm.

Ideator-02 1:49:56

Oh, then then you will know you will pan over here automatically.

Researcher 1:49:59

Yeah.

Ideator-02 1:49:59

Or maybe, depending on interaction, you will be taking over this you know.

OK, I need to look at this now and then.

Maybe it explodes in a enabled you know, achievement unlocked.

Researcher 1:50:07

Umm.

Ideator-02 1:50:11

Now we can do this.

Researcher 1:50:12

What's that's OK?

And what if I try to like click the?

Yeah.

What if I try to activate the call in staff activity?

Now it's grayed out, but I'm not very good at taking hits, so I try to click it.

Ideator-02 1:50:26

Then I would everything that is and condition of would then take its attention.

Researcher 1:50:26

Does anything happen?

Umm.

Ideator-02 1:50:37

Maybe would shake, maybe it would have a sound.

Researcher 1:50:38

Yep.

Ideator-02 1:50:40

You know, maybe they would even have different sounds or I when I have none of them, none.

Researcher 1:50:40

Umm.

Ideator-02 1:50:46

None of the conditions met then.

You know, going to be like a company of noise then.

So we can always play around with that, or maybe it should be one of one at a time.

This take a look at this and maybe you should take a look at this, but I'm helping you know sound effects and and to movement to understand that this is connected.

Also be you if you want to interact with it it makes like a sound or mirror like nothing much happens here.

Ideator-03 1:51:02

All.

Ideator-02 1:51:09

So you know and then these other things start showing up and maybe lights up to you know, I need to do something over here to take people's attention, right.

Researcher 1:51:15

Umm.

Ideator-03 1:51:17

But usually what I what I what I do?

That's my real life.

Researcher 1:51:20

Umm Yep.

Ideator-03 1:51:23

I use shadows and light at the same time like I mean it.

Researcher 1:51:26

Yep. Umm.

Ideator-03 1:51:29

That's that's makes sense.

Like you create the effect of focus on something like.

You really wanted, but also that you don't really want it.

Researcher 1:51:34

Yep.

Ideator-02 1:51:34

Umm.

Ideator-03 1:51:36

Also, you put it in dark or also if you want to feel it more scary also, that's more use dark colors like also the green.

Researcher 1:51:39

Umm.

Umm.

Ideator-03 1:51:46



Also you can be possible, but it's like it's a kind of the the main effect of the perception.

Researcher 1:51:48

Yep.

Ideator-03 1:51:54

Umm.

Smog also that the plug.

What else that's relevant for me like?

Researcher 1:52:07

Umm.

Ideator-03 1:52:07

Yeah, I don't know.

Ideator-02 1:52:08

I think yeah, exactly.

Researcher 1:52:10

OK so.

Ideator-02 1:52:10

And actually that's getting me very much inspired to something, a reason to play that actually describes this very good.

I think it's a Disney has a some game.

I don't remember where it is that some areas, if the conditions aren't met, yet there'll be a cloud and will be dark and look super spooky.

Researcher 1:52:22

Hmm.

Ideator-02 1:52:26

But once conditions are met, it'll clear up and be sunny, you know, and all that.

And then you feel, oh, I want to go over there now.

Because now it's more welcoming and warm.

Researcher 1:52:34

Ohk.

OK.

So interesting. Yeah.

So you appeal to the the the sense of the statics and you you you kind of you try to repel someone from interacting with something that's that's you can't interact with but once they can, you're inviting compelling them to cool.

Ideator-02 1:52:40

Yes.

Yeah.

Yeah, come over here and look.

Now it's it's it's.

It's nice to be here, right?

Researcher 1:52:55

OK, cool.

Ideator-02 1:52:58

And.

Researcher 1:52:59

All right.

So yeah, OK.

Ideator-02 1:53:00

So that could be some of those triggers.

Ohh yeah fix you can use for that.

Researcher 1:53:06

OK, what about response now?

Ideator-03 1:53:07

No.

Researcher 1:53:09

We've talked about conditions, we've talked.

You can't do this before you do this, but what if it's the other way around?

What?

It's what if it's you just this thing.

Now this thing is is in.

This is in a state and need your attention.

Ideator-02 1:53:28

So what I would do in a 3D game is that or I don't know, I mean it's 3D game reading game.

Researcher 1:53:36

Ohh before sorry.

Ideator-02 1:53:37

I would, yeah.

Researcher 1:53:38

Sorry, before, before we continue, Ideator-03, if you wanna log off, that is a OK.

Ideator-03 1:53:41

Yeah.

Researcher 1:53:42

Because you have already given like 15 more minutes than you agreed to.

So 30 more minutes?

I asked you for so if you want to bounce, that is so cool.

I want to thank you for participating.

UM, is that it? OK.

Ideator-03 1:53:59

Again, no, thank you very much.

It was, I think, yes.

I'm running out of time.

Researcher 1:54:03

OK, dude.

Ideator-03 1:54:04

You can but.

Researcher 1:54:04

Uh, I'll I'll send you an email if if, if we have more opportunities to talk, that would be great.

But otherwise I want to thank you for your time.

Ideator-03 1:54:12

OK.

Thank you very much.

Ideator-02 1:54:14

Nice to meet you.

Ideator-03 1:54:15

Nice to meet you.

Researcher 1:54:16

Alright, take care. Bye.

Ideator-02 1:54:19

Aye.

OK.

Researcher 1:54:23

See your I don't know view school muski looking at us for the distance from the right to go and have a look for the when in in Merry Christmas to you got to do some mechanics dude.

Ideator-03 forlod mødet

Researcher 1:54:37

Who is in visual to? To yeah.

Ideator-02 1:54:38

Yeah.

When the color they have.

Researcher 1:54:42

Wanna call civil?

At least and email associated and forth in search.

Tim Mayor think Aniston was great.

You give you give something up?

Yes.

And I'm speaking in doodle.

So can we.

CME has noticed that. Umm.

Ideator-02 1:54:58

As good as he does sleep to break this spending noon, namely.

Researcher 1:55:01

You complete me like to spending with your time, but he's glad first then far mostly commute.

Ideator-02 1:55:05

And that's it.

When you Arsene is not to do the newbies there.

Researcher 1:55:09

You can put him?

I asked him bro, I got.

I got the geeds man.

Ideator-02 1:55:12

Wow, thank you.

Researcher 1:55:13

So Yep, and the bouncer.

So you have.

Ideator-02 1:55:16

It's a.

Researcher 1:55:17

Well, I'm.

She's gonna sparkle as a organization session.

That's right.

A scan like so far happy up to the.

At some level.

Ideator-02 1:55:28

And same time next week, December.

Researcher 1:55:32

OK.

Yeah.

What if I'm not?

Susan's actually did, but the husband of this this is.

Ideator-02 1:55:36

The 600.

Sees 2. Hi.

\subsubsection{Ideation Session 2}

Researcher 0:04

Sorry, tall sculptural.

Give you a second about spoken language angles, OK.

No game face.

Uh, yes.

Hello, welcome to the second round of ideation.

Ideator-02 0:22

Thank you.

Researcher 0:22

We were cut short.

Uh, last time, just when things were getting good.

Just to recap.

Umm, what we are doing here is we are trying to uh.

Create.

A tool for novice users or novice knowledge experts?

Who may be introduced to a new process for the first time, and we wish to ease their cognitive load by abstracting away the more formal, umm, uh graph structure of DCR graph and.

Placing it in a 3D open world, possibly gamified environment O.

What you're here to do is to assist me in creating some ideas about how we could take these rules and activities and present them in the IT.

OK.

And present them in a.

Ideator-02 1:39

Sorry.

Researcher 1:41

In a more intuitive fashion and I believe, uh.

Should I recap the we should probably recap the the rules.

Are only five of them that we need to discuss right now.

Ideator-02 1:55

Umm.

Researcher 1:55

UM, the rules are as follows.

There is the include rule which states that if an activity A is executed and activity B is currently excluded from the process, then B will become included in the process and then it rules that B might impose on other activities will thus become valid.

Conversely, if A is executed and B is included, then B will become excluded from the process and all rules originated from B will become invalid.

There is the condition rule which states that B is disabled if A is included in the process and has not executed at least once.

Now B, unless otherwise stated, is still included in the process.

That is simply disabled.

Of course, B could both be excluded from the process and disabled at the same time if another rule or circumstance has imposed that.

So these are are, are, are two states that can exist simultaneously.



Ideator-02 3:10

Umm.

Researcher 3:11

There is the response relation which states that if a has executed and B is included in the process, then B becomes pending and must execute at some point in the process or it will not be in the process will not be in a state which is accepting.

I the the process is left hanging and can't be seen as as completable.

And finally, there is the milestone, which is sort of an extension of the response relation where if B is pending and included, then C will be disabled and what that essentially means is that if a happens, then B must happen before C can happen.

Also, the way this uh DCR graph is different from the more imperative.

Graphs that you may be.

Familiar with an activity can happen at anytime, unless it is somehow constrained by a rule.

So there need not be a any, any, any type of.

Arrow pointing from one activity to another.

Uh, before that activity can happen.

Ideator-02 4:46

Umm.

Researcher 4:47

They can happen as much as they want.

They can happen when they want, unless they are somehow restricted by a rule, and that's why we this should be quite interesting to model in a 3D environment, because in a 3D environment you can run around, do what you want unless something constrains you.

So I believe the last time we discussed the uh possibilities of the UM modelling a a condition.

By some kind of negative effect in that you bought your signal, you signals to the player that this is an.

Activity which cannot be performed.

And an attempt to perform the activity would then result in a some kind of highlighting of the condition activity by site, by color or sound or movement or combination of all three.

Ideator-02 5:56

Umm.

Researcher 5:57

And conversely, we also talked about the response.

Rule, which was sort of the other way around, that if you perform an action on a if if a an activity is executed and that activity has a response relation to another activity, then similarly you try to.

UM, catch the users attention by way of uh sound or color?

Or some kind of uh animation on the screen.

Now, while we're on that subject, it might be interesting to discuss what what possibilities exist for for implementing this.

These signals in like a 3D possibly open world either.

First perspective or third perspective, depending on what you find the most compelling for this scenario, how could we?

How could we do this?

How could we do this?

How can we let's say that?

Well, let's say let's try 2 scenarios.

One scenario is the.

The uh, the the activity that we're trying to, UM, draw the users attention to is on screen it is, it is visible to the user.

Ideator-02 7:19

Umm.

Researcher 7:20

How might we then draw his, his or her attention to that activity?

And let's try to be a little agnostic here and said it doesn't really.

Right now we're not discussing like what, why there were drawing their attention.

It might be a condition, it might be response, but we want their attention and the activity is on screen.

Ideator-02 7:38

Yeah.

Researcher 7:40

How would you?

How could we do that?

Ideator-02 7:43

And I would.

I would go back to what we already discussed based on what we know from at least the UX field of research that we know that.

Movement and sound are two ways to catch people's attention.

And that's I want to boil with history.

But you know when we're old, when?

Back when we were in the jungle and stuff like that, that's what we train our brains to be aware of in kind of movement, any kind of sound that is outside of the expected outside of you know, what you were, what you were used to.

So that would be the kind of thing I would imagine I would be using for for these types of scenarios.

If I want to get people to get people's attention, I would do some movement, maybe add some sound.

Either of both can get applied to this, and I think that's something that can be used agnostically for anything really that craves attention.

Researcher 8:34

Mm-hmm.

OK, suitcase.

So, UM, are there any other alternatives?

Uh shapes colors, UM animation.

Ideator-02 8:52

I mean.

Researcher 8:54

Well, I guess movement is animation.

Ideator-02 8:56

Yeah, as a movement is very broad term, right, because it could be there's so much in that could be just, you know she so change changing its shape or moving around and all of those things.

It's all in between, right?

But some kind of movement and I guess the.

So movement can also have, you know, personality.

It can be very aggressive, it can be calm and we can use that for, you know, for how severe the information is to communicate.

Researcher 9:18

Umm. Mm-hmm.

Ideator-02 9:25

If it's super important, something you have to do something about right now, it should take all the attention.

Just creates and you can't really avoid it to be very aggressive very much in your face.

And that's why I would also add sound effects.

Maybe movements on top of movement animations, for example.

You know, umm, an alarm. The light.

Not only does it move, it also makes a sound, but also makes the light suddenly move not only itself, you know, an entire room seems to be moving.

It's impossible to miss that, right?

So it's a lot of aggressive attention and it gets by moving and making sound.

Whereas if it's more of a com setting just like ohh you should be aware of this, it could just be you know, small movement.

You can even if you if it's not important to look at very often, they can just be very slow movement, because if it's very slow, we will not.

It will not draw as much as attention as you know, as fast movement or animation.

So what have you, right?

So as a full design space that you can play around with depending on call urgent, it's probably the right word.

How urgent the information is to react to at least.

Researcher 10:34

Umm.

Interesting.

We have different rules.

We have the include exclude the condition, the response in the milestone rule, all of them are subject to at some properly at some point there will be subject to needing the users attention.

Ideator-02 10:47

Yeah.

Hmm.

Researcher 10:57

Can we communicate?

How the the difference between the rules?

By what we've just discussed, say that you you would to giving given only the the tools that you've just laid out for me, how could we differentiate between?

Ideator-02 11:08

Let's see.

Yeah.

Researcher 11:24

A and include communication and exclude communication, it condition or response.

In a milestone communication.

Ideator-02 11:32

And there was actually just thinking that because, you know, I was just thinking, oh, yeah, if you include something, it's kind of a positive thing, but that's not necessarily true.

It's that depends on the workflow, right that you want to, so you can't just wait and green and those UM, it depends on what you want, what, what the outcome you've is of this, right.

Researcher 11:42

Umm.

Exactly.

Very.

Uh, very context sensitive.

Ideator-02 11:51

But I guess you could say that at least the umm.

The condition I think are.

Let's start with the milestone actually, because milestone seem small like an.

I wouldn't say exactly an outcome, but it it feels like an outcome right based on something that has happened so.

Researcher 12:13

Yeah, but I I think it's in the wood milestone, right?

Ideator-02 12:13

At least.

Yeah, yeah, yeah, yeah.

Researcher 12:16

It's signals like boom, like a an important part in the process. Uh.

Ideator-02 12:22

Yeah.

So we don't want to gamify that.

I would use it as you know, a a quest has been completed.

If we're going to take a direct one to one while playing could be, you know, it becomes green or you know it lights up and with big check mark that appears alright.

This is done now.

Of course, that would be if it only happens sometimes.

If you have a process that is ongoing at all times and this is all times being confirmed or something that's happening, it's it might.

Researcher 12:47

Hmm, it might.

It might.

Ideator-02 12:49

So we need to figure out and how do we continuously communicate that everything is OK?

Uh.

Which could then instead of something happening all like showing up it's a constant state of light coming out of it.

And you know the production is going on here.

It's just the lights.

The lights are on.

You could see.

And it can be in a steady state, if that's what you want it to be.

But as soon as the milestone is no longer reached and I this is under the assumption that we want to reach a milestone as much as possible, right?

If it's not reached, if the response suddenly doesn't trigger as we wanted it to, then perhaps the milestone can start, you know, shut down to keep some kind of metaphor and the factory shuts down.

The light turns off, it stops moving.

There's no longer coming smoke out of the chimney and those kind, that kind of idea, right?

So we can use movement to say for example, OK, everything's going on.

Maybe it's just in a small floaty state, and if it breaks down we put some great dark colors on it.

Stops moving, so we know this is no longer active.

That's why I think a lot, at least when we start communicating with these, with looking at it often active and not active or activated, deactivated or something, at least some terms were used in, in, in the UX often for for easily communicating what is actually something that is ongoing and what isn't right.

So for the milestone, you could say maybe if we turn it around, I'm just thinking loud here that the default is that stuff is just working as it should.

Then if it doesn't, it is not being.

It's nothing is going on if the response isn't working.

Uh isn't getting triggered as we wanted it to.

The condition is not met.

Then we turn it off.

So then it could be like it's it's shaking.

That could be the movement.

It's shaking or it's just, you know.

The caller has is fading out, so we can easily, you know, see what is active, what is not active.

Ohh everything is working as it should cause it's a workflow.

I would assume stuff is working, that's default.

You know the garden with with light and colors when stuff doesn't make it grey and boring.

Researcher 15:14

What you that's interesting.

You, you you happen upon that because I may.

Maybe we should make a little detour because we're we're talking about signaling the state and the state of the activities, so.

Why don't we start with?

The state of an activity being UM.

Having activated versus having not activated because that's, that's the.

As a thing has either happened or it hasn't happened, so if we we think of if we think of our game space as Virgin territory where no, we're an activity has yet to occur, right.

Ideator-02 15:54

Yeah.

Researcher 16:04

So think of an activity and it has not happened yet and not maybe it would be helpful if we didn't think of it in any particular context.

We don't think of it as being a milestone or response or whatever.

We simply want to signal this thing has yet to happen, but might happened can happen versus cannot happen.



We can get to that later, but a thing that has not happened but can happen, how could we signal that using the tools at our disposal in this environment?

Ideator-02 16:42

I I don't know why, but I'm I'm thinking of making it look the activity person need to figure out how to represent the activity right?

Researcher 16:50

That's the.

That's another thing.

It's it's.

How should it?

How should how should we?

Yeah.

How how should the activity be take take shape?

Is it a?

Ideator-02 16:59

But I guess we can, I mean an activity we can always put in make a box to begin with always with the boxes cause that's simple.

But I was thinking so it sounds like what you're what you're actually asking for for this specific is to say, how do we kind of show that an activity is dormant, right?

Researcher 17:18

Yeah.

Yes, or at least has again, hasn't hasn't been, uh, performed yet because there there's the thing about DCR is is that.

Ideator-02 17:26

Yeah.

Researcher 17:31

The.

A.

An activity can be in the state of having been performed and having not been performed, but once you perform it, there's nothing stopping you from performing it again.

So you need to somehow signal the change of state from being non performed to being performed, but then again signal that it can then go from being performed to being performed again, right?

And I think maybe it would be beneficial to try to think.

Context agnostic.

Uh, I mean, we're we're working in, in this prototype, we'll be working in a in an office environment.

Ideator-02 18:09

Yeah.

Researcher 18:14

So if we're going to be working with.

Kind of immersive graphics you might.

I don't know how immersive it in office environment can be, but you know you get my point.

You know, there might be be tables and office people and stuff, right?

Ideator-02 18:28

Yeah, yeah, yeah.

Researcher 18:32

And then I guess the ultimate goal is that you can switch out the top layer of the visual layer and change it depending on the context.

So if we have this boring office environment with an underlying boring, you know what I mean?

You have an office environment.

Ideator-02 18:49

Yeah, yeah, yeah.

Researcher 18:50

You have an underlying process built upon this DCR architecture.

You could essentially switch out the top layer, the visual layer and the same rules.

Uh.

Still apply this like a, but the context is different right?

Ideator-02 19:05

Umm.

Researcher 19:08

So now this activity milestone activity is no longer representing papers being filed.

Ideator-02 19:08

Sure.

Researcher 19:16

It is representing uh and there was the end of the school day, right?

Ideator-02 19:21

Hmm.

Researcher 19:23

So if if we're trying to work with a set of a signal set, you know that can be used across multiple.

Ideator-02 19:32

You know.

Researcher 19:37

Environments it it might be beneficial to think of it as as being as as environment agnostic as possible, but still being applicable to the environment.

That approach is built in.

Ideator-02 19:48

Yeah.

Yes, it makes sense.

Researcher 19:49

If that makes sense.

Uh, but you're the you're the UX guy, so I will at any time defer to your judgment.

I am merely a humble researcher, not here to influence you in any way, shape or form.

Ideator-02 20:00

That's great for that.

Researcher 20:02

You're you're the boss.

Ideator-02 20:02

No. Yeah.

So I think I think what's at least what's important when I when I do this kind of thing is I I try to to talk about what is this is where semantics gets important, right?

Because if it includes, if it excludes and the condition, what would be a day to day verb that we can, you know, replace it with if we were to do that because you could say DCR is of course is a very technical way of discussing or talking about relations in between activities, right.

If we could find a.

Different.

Not necessarily different, but at least some kind of you know.

I'm missing words right now, but I'm thinking like let's say for example that.

Includes.

It's kind of, you know, that means it enables or it opens up the floodgates or, you know, this kind of this kind of way of talking about it and suddenly we can also be more graphical about and people can be more related, can easily relate to it, right when they see it for example include exclude that could possibly be a, you know, a traffic light, green light, red light, yellow light, right ohm if it's green light it means that this includes over here this this is ready to continue if it's red light is because it's stopped for some reason maybe it's been excluded.

Researcher 21:24

Umm.

Ideator-02 21:36

I don't know.

It could be something like that.

Uh.

Yellow light?

Possibly because it's waiting for something.

You know, for something to happen, maybe it's waiting for a response.

Something like that.

So so, you know, it's my work is very much about metaphors that people can relate to, and maybe that could be also an approach to this.

Researcher 21:56

No metaphor is is good.

Metaphor is is this is all about easing communication.

It's it's all about taking and I'm not saying that we we we can't work in in terms of iconography and graphics, right?

Ideator-02 22:02

Yeah.

Researcher 22:12

Because I mean, ultimately it's just a matter of switching out some assets.

Ideator-02 22:16

Sure, sure.

Sure, that's only a step, right?

Researcher 22:17

So, OK.

Ideator-02 22:18

So, so so the the specific graphics once we get to that part, that's a detail.  
It's more important than a freaking out.

Researcher 22:23

Umm.

Ideator-02 22:24

What is?

What are we actually talking about here?

Do we understand what we're trying to communicate?

What it is that something is a condition of something else, for example, or.

This will only run once this condition has been met, right?

That that's one of the things we need to to figure out.

Researcher 22:37

Exactly.

Ideator-02 22:39

How do we then display?

Researcher 22:39

Right.

Ideator-02 22:41

There's a condition before we do this.

That means it's a it's in a waiting, it's waiting for something, right?

Researcher 22:48

Yeah, exactly.

Ideator-02 22:50

One of those, one of the ways to, of course easily to communicated waiting is a hand like stop or a weight or something like that.

So you can use iconography in that way to to communicate this right?

Umm.

Or a pause button which we also know from from using it.

Everyone knows play.

Pause.

That's something we can relate to, right?

Or even a stop if it's excluding something, we stop it possibly.

And I think that's that might be a way to to help us here.

No, but then we're talking about iconography.

So what is the essence of this?

It's that people recognize it.

How can we put that into the 3D environment in a way that then makes more sense, right?

So keep trying to to focus on the principles, right and not the the specific design.

Does that make sense?

I mean, if we know the principles, understand principles, we can do everything around it.

The rest is just details, so if you want to communicate that when this happens over here, this starts happening.

That's includes, right?

Researcher 24:02

Umm.

Yeah.

Yeah, that's it's it's a very, it's, yeah, it's it's another thing is we need to consider again I think maybe we're getting a little bit of ourselves, but in that include and response are both activities or rules that point towards something, right?

Ideator-02 24:22

Yeah.

Researcher 24:23

I do this.

This becomes included.

I do this.

This must happen O it in both cases it the kind of the the attention flows from A to B, but the context is very different.

Ideator-02 24:30

Yeah.

Researcher 24:40

Here we're singling you couldn't do this before.

Now you can.

Here, we're signaling.

Uh, yeah, you could do this before, but now you have to do it.

Ideator-02 24:53

Yes, that's part of then sudden, no, emergency is not the right word, but it's like it direct.

So that's more of a.

Researcher 25:07

It's the difference between a door opening and a door opening, and you're seeing a fire on the other side, right?

Ideator-02 25:11

Yeah yeah.

Researcher 25:15

Or I guess a door always having been opened, but now there's a fire on the other side that needs your attention.



Ideator-02 25:22

Yeah.

Researcher 25:22

Or it could be both.

You could at the door could open and there could be on fire.

Then you have both a dual include and response.

Umm, uh, signal.

That's another thing we need to discuss is how you how do these?

How do they stack right?

How do you how do you signal multiple rules?

But again, we're getting rid of ourselves.

Ideator-02 25:41

Yeah.

Researcher 25:43

We're still, we're still in discussing how do you signal?

A.

An activity transitioning from being untouched to being touched, so to speak.

Ideator-02 25:58

Yeah, but I think and this is also super interesting because then that's.

Because that's also kind of, you know, part of the results right now is figure seeing that, OK, this is extremely difficult at least for me to think in these terms because it's so foreign for me.

I'll keep trying.

So we want to.

You know that.

Researcher 26:23

Well, please go ahead and think in game terms.

Ideator-02 26:23

In review.

Researcher 26:26

You know it is it is.

Ideator-02 26:26

Yeah, yeah, yeah, yeah.

Researcher 26:28

It doesn't have to be gamified, but games is all about signaling the change of States and the.

Ideator-02 26:33

Just.

Researcher 26:36

Expansion of options.

Ideator-02 26:37

Mm-hmm.

Researcher 26:38

It's just the challenges to differentiate similar concepts like the difference between how do we differentiate that a milestone is has been deactivated, uh, or rather, how do we signal that an activity has been deactivated because of a milestone relation versus how do we signal that it has been deactivated because of the condition relation versus how do we signal that it's been excluded?

It's three very similar situations, but the context is different, right?

UM and then DCR graph like in in in you know in in the graph language you you wouldn't you create a little icon right?

But that's what we're trying to get away from.

It's going to have to find different ways of signaling it. Umm.

Ideator-02 27:25

Yeah.

Yeah, yeah, yeah, yeah.

And the thing So what?

I'm just thinking now that the difference between those two, at least if we try and look at it from a video game perspective, could be that one thing is already explained.

This one thing is.

I'm going to draw.

It's much easier with that drawing, and I'll do it in the ideation one.

Researcher 27:46

Yes.

Ideator-02 27:50

So just bear with me.

Researcher 27:52

Yes, please.

Ideator-02 27:56

So.

As you can see where I am.

Researcher 28:08

Yeah, I've got you.

Ideator-02 28:10

So please, what I'm what I'm thinking now.

This is just too deep, but this can easily be transformed into the 3D.

Researcher 28:16

Umm.

Ideator-02 28:16

So one way of doing it could be by.

It's just top of their head.

Like what I would say is that as long as.

The resources are flowing.

That means.

Computer, right?

Or instead, the resources can be flowing, but maybe.

This one for some reason does not apply and I guess we have a.

Once right?

Because if this doesn't, then I guess this doesn't either, right?

Is that how it goes for response?

But it can still because it, but it's still included all the included in a part of it, right?

Researcher 29:08

No, a response is.

Is is if activity A has happened then activity B must happen. Uh.

Ideator-02 29:16

Yes.

So in this case it hasn't happened yet, but it is the response.

Relationship we're showing, right?

This hasn't happened, so this doesn't happen, but if this is, this is include so like.

Researcher 29:33

No, I mean, big Beacon still happen.

Nothing is is blocking beef from happening.

It's just that if activity a happens, then activity B must happen right? So?

Ideator-02 29:46

Yeah.

OK.

So what was I thinking instead?

Researcher 29:58

But I think it might be beneficial again to think in as atomic a way as possible, not trying to combine, uh, rules and states just yet come up.

I think we should come up with with representations for the individual.

Uh.

Kind of rules and then we can see if they stack at a later point.

So not not think well, what if a is included but B is deactivated and there exists the response relationship between them?

That seems a little complicated.

I think it would be much better to to try to focus just on.

You have to activities.

One has executed, one has not executed but can execute.

How do you symbolize that in the tool set that you have like available?

How do you symbolize the state of an activity just in relation to?

Ideator-02 31:02

Yeah, but instead of an activity cannot be, you know, it's not in a vacuum, but it's always related to something else, isn't it?

Researcher 31:09

Yeah, yeah, yeah.

Not always, but it usually will.

Yes, usually there will be kind of, but the the the thing about the I think DCR is is that there are so many different combinations that it would be on the possibility to try to model them all which is why I think it would be beneficial to start with with modelling the the atoms of the atomized situation and then then then build from there.

Ideator-02 31:43

And then let's take a look at the states also because that's important.

Right.

Researcher 31:50

Oh yes.

Ideator-02 31:53

So the activating your, deactivating your pending, now we're showing and this is kind of like you should.

You should consider this as a I'll even go ask full color.

Dark colors.

Researcher 32:10

Just to to ask semantics here.

When you say activated deactivated, I would I think you would be better off saying enable disabled because activated is different from being enabled.

Activated is is that it has happened or occurred at some point and that?

Ideator-02 32:23

That's.

Yeah.

OK.

So we OK, so it's enabled, it's disabled, it's pending and can be activated, it can be deactivated.

Researcher 32:37

UM, no, I I I guess.

I think we should call it executed, right?

So it's uh, it uh, a an activity can have been executed or it can be version so to speak untouched.

Umm, so that's that's those are two states that activity can exist in.

Ideator-02 33:03

OK.

Researcher 33:04

It can also exist simultaneously.

It can have been.

It can be enabled or disabled.

Right.

Which means that it's included in the process, but you cannot touch it, so to speak.

And then you have executed.

Ideator-02 33:21

It's.

Researcher 33:23

Sorry, then you have included not included which is whether it is a part of the process or not a part of the process.

So you have this kind of matrix of of of states that can exist more or less at the same time.

Ideator-02 33:37

Yeah.

What about pending?

Researcher 33:40

Uh.

Pending is uhm, pending is isn't is an additional state?

That's that says you need to execute this at some point in time.

It doesn't say anything about whether the the activity is, uh, included, Rex excluded, or whether it already has uh happened or is has yet to happen.

It it simply just a notification that at some point in time this thing needs to happen irrespective of of it's it's it's other kind of states.

Ideator-02 34:20

OK.

Yeah, that doesn't make it much easier.

Yeah.

So including not included those, that's where we have these rules.

Who talked about earlier, right?

That's direct include and exclude.

Researcher 34:34

Exactly.

Ideator-02 34:35

It's going to be.

Researcher 34:36

Yeah.

So you have included excluded.

Those are two sides.

Uh.

Ideator-02 34:40

Yeah.

Researcher 34:40

Enabled disabled, yes.

Executed untouched and then yeah, pending and then to further put Gray hairs in your head.

Disabled can be triggered by either the condition uh rule having been unfulfilled.

I the activity is disabled because a condition that allows it to be enabled has not yet happened.

Or it can have been dynamically disabled because of, uh, the milestone relation, right?

Because an activity has happened which has put another activity in the pending state and that activity has a milestone relation with you and thus you are disabled.

So that yeah, so essentially just the disabled you you might we might need to differentiate between is it disabled because of the condition or disabled because of an unmet milestone.



Ideator-02 35:46

The question is if that is important to throwing itself, or if that's part of what people who are using this system will be able to discern by the relations once we start making those right.

Researcher 36:00

Because the yeah, because in both in both situations, attention needs to be drawn to the either the pending activity or the condition activity.

Ideator-02 36:13

Yeah.

Researcher 36:13

In both cases, it just means that this thing has to happen for you.

For the other thing to be become enabled.

Ideator-02 36:20

Exactly.

Researcher 36:20

Uh, of course.

Context might be interesting because ultimately you were trying to communicate a process here, right?

And the the person trying to learn this process, it might be important for them to be able to differentiate between the condition and the milestone because once they're out on the front lines doing the job, whatever the job might be, they they will.

Ideator-02 36:31

Yeah.

Researcher 36:46

They may need to know the, you know, the context, right is this.

Ideator-02 36:51

Yeah.

Researcher 36:52

Can I not do this thing because a uh of, of of that thing over there having been unmet or that thing over there being pending because of a third thing that has happened? Umm.

Ohh, just FYI we are 45 minutes into the the interview and we will have somewhere between. 15 to 45 minutes before I have to terminate.

Ideator-02 37:38

Yeah, just trying to to, to.

But for me personally I have until very late.

So so you just you just you make sure we are on track, you're trying to play around with what we have, right?

Researcher 37:49

Yeah.

Yeah.

Yeah, it's just just.

Yeah, yeah, yeah.

It's just that we don't play one on too much.

Uh.

Because at some point we we we have to deliver.

Ideator-02 38:00

Yes, but my question is if this what we're doing now is relevant for that deliverable.

Researcher 38:05

I think it is.

Ideator-02 38:07

Good.

Researcher 38:07

That's because, yeah, yeah, yeah.

Ideator-02 38:11

OK.

So so this is some I'm trying to make it as abstract as possible so it can be applied to whatever the actual artifact will be once we get there.

Researcher 38:23

Umm.

Ideator-02 38:24

Uh, but it's more of a container, or at least some behavior we can put on these activities to display this right?

So if it's pending right now, I'm thinking it's pulsing, you know, take attention over here because, you know, we need to figure out why is this pending?

Researcher 38:34

Umm.

Ideator-02 38:39

Why isn't this actually, you know?

Researcher 38:41

Umm.

Ideator-02 38:43

Yes, it would be executed, right?

Umm.

Colors is the easy one.

Now, as we discussed earlier, we don't know if it's good or bad that stuff is enabled or disabled when we are in this workflow the way we want to do it, would I be able to interact with this or is it ask whoever is going to use this.

Is it?

Want is it read only?

I can actually interact with it.

Have you thought that far yet?

Researcher 39:19

The Enable and disable context or or in general.

Ideator-02 39:22

No.

In general, when I open this right and I want to walk around.

Researcher 39:25

Yeah.

Are you allowed to perform activities or are you?

Ideator-02 39:30

When I'm in 3D World, can and then say try and execute this activity and see what happens.

Researcher 39:31

Yes.

Yes.

Any it it there may be roles that you you you may have kind of user restrictions but they're always be someone or some entity that can that will be able to execute these activities for you it might be you might be robot it might be your boss but but yeah so some circumstances will be able to to perform all activities.

Ideator-02 39:50

OK.

Sure.

Yes, I mean in the working setting, whatever.

For example, in the office environment, someone will be executing these activities, but what?

Researcher 40:10

Umm.

Yep.

Ohh will I be able to?

Ohh.

So no, the user will not be able to model it.

The model will exist.

And be immutable so they can only perform activities.

Ideator-02 40:22

OK.

OK.

Yeah.

All right.

So that means if I want to indicate.

How on earth do we do with that?

Because that means it has to be outside of time basically, right?

Researcher 40:49

There there is in the more advanced DCR graphs the time element you you can you can constrain rules further by putting a time limit on it.

Say that.

The activity that this activity has triggered must, uh, you must wait 30 seconds before executing it.

At this point in time, I'm not sure whether that will be part of the prototype.

Probably not, because it's there's a lot to model in the basic iteration of of DCR graph.

Ideator-02 41:22

Yeah.

Researcher 41:23

UM, so I think right now let's we can add time as a dimension little later date if that becomes relevant.

Ideator-02 41:25

OK.

Researcher 41:32

But right now I would say no.

If the thing causes another thing to happen that is instantaneous.

Ideator-02 41:39

Yeah.

I'm just using some assets from somewhere else, don't mind me.

Researcher 41:48

Umm.

Ideator-02 41:48

Ohh I just want this one you.

There's one can be doing something like this, right?

Lighting up if something is working.

Researcher 42:01

Umm.

Ideator-02 42:02

Let's say it's.

Enabled.

What's up?

And there's no light if it's disabled, right?

So that's it.

Researcher 42:15

Umm.

Ideator-02 42:33

The list could we have these pairs, right?

So you can take one and the other one and the other right.

So this one includes this one, this one.

You can almost hear my brain working, yes.

Researcher 43:23

Ohh I thought that was my computer fan.

No, it's just your head.

Ideator-02 43:29

So I think for me, no damn it.

I'm just thinking included excluded right so.

So included means.

When this one executes this activity.

Researcher 43:44

Umm.

Ideator-02 43:46

That means this one executes this well due to be executes OK.

Researcher 43:51

It maybe think of it this way, when a activity is disabled, it's still part of your world.

It's still in space rules that it emanate from.

It are still active, so if I E.

If I have a an activity and another activity and this activity is a condition of this activity.

But this activity is disabled.

That rule is still in effect and this cannot under any circumstance execute on this until this is executed.

Ideator-02 44:31

Sure.

Yeah.

Researcher 44:37

However, if this is excluded, it disappears from the world and instead and all rules that might have been applied to it of God.

So that's the fundamental difference between exclusion and disabled.

It's.

It's here that's not here.

Ideator-02 45:04

In that case.

Ah.

This we could do something like that instead.

No, because it doesn't exist, but we still need to show that it's there for obvious reasons, or when you're reading this diagram on the way we have get this diagram right, we end up with.

You need to know it's there.

It's not.

We can't just, you know, remove it from whatever looking because they're like, why is there a hole in the middle of the diagram?

What's going on, right?

I mean, so it's still is it has to exist in our in our diagram, but we need to tell that that's not how it works, right?

Researcher 45:55

Continuing that, let let frame of thought, how could you?



Because it's it's it's a pretty.

It changes the dynamics of the model when some when the A when an activity is excluded.

So how could you signal to the user that rules that this activity imposed on other activities have now been kind of put out of play?

So yeah, so you click so an activity is excluded, it goes into wireframe mode and suddenly another activity becomes enabled, where previously it was disabled because of condition.

Ideator-02 46:23

I think.

Researcher 46:37

How do you then signal that to the user?

And how do you signal the relation?

Like one thing is that that that a thing suddenly becomes.

Uh.

Enabled because of another thing you just did.

But how do you underscore this thing happened because you just did this thing.

To ease understanding of the context.

Ideator-02 47:09

And then we're back at the thing where you know this, I think in order to make this easier to understand for people, it cannot just be a.

A snapshot or what have you of the process is right.

At least it will help people if something was ongoing.

Researcher 47:23

And.

Ideator-02 47:25

So you can see these transformations happening where you can say whatever.

Try this out.

Try this out.

You can see ohh if this is excluded then everything it's that is that it has a relation to will be excluded as well because you know it it won't be able to run if it's relying on this one right?

So you know switching it on and off to easily comprehend what is going on with with the workflows as at least what I'm thinking right now, does that make sense?

Researcher 47:54

Just.

Yeah, just to understand, I mean the.

It's it excluding something usually has a.

A positive effect on others because in excluding something disables rules.

I think that's usually how it works.

I'm not not sure if there's a context where if you exclude something, it will have a destructive effect on another thing.

Ideator-02 48:14

Yeah, but.

No, no, no, not necessarily destructive effect, but it might.

It changes something, right?

Researcher 48:27

Yes it.

Ideator-02 48:27

For example here with the stuff I did, balance and stuff, but but it exceeded.

We know once that activity has been run, it excludes itself.

That means then it includes the other one, and so on.

And so now this relationship to understand that, you know when this happens, this over here happens.

That's what we're saying, right?

Researcher 48:48

Yeah, yeah.

Ideator-02 48:49

So once you have a complicated relationship going on with a lot of these things, I I think it would be beneficial as someone who is trying to read these maps that I can switch it on and off so I can understand the relationships.

Researcher 48:53

Yeah.

Umm.

Ideator-02 49:01

Ohh when this happens I can see something happens.

Ohh when this happens I can see something happening.

Researcher 49:05

Umm, so it's kind of a pre execution.

Ideator-02 49:09

Yeah.

So you're not.

Yeah, so so it's more for me to read this right.

Researcher 49:12

Hmm yeah.

Ideator-02 49:13

When I'm looking at the diagram so I so I can comprehend what's going on, so I set this activity as excluded because this happens with the at some point in time, right?

Researcher 49:17

Hmm.

Ideator-02 49:25

So I can see alright, that's what's going on.

So so I can easily understand that OK, for example, the staff budget balance is now showing up in bribe whatever colors we we play around with and over here, then suddenly it becomes a wire frame and dark.

So you know it's a one you can only be either or they can never exist at the same time.

Within these relations we have right or when the stuff better budget is balanced.

I can say.

All right, let's let's run this one then we see it go Stark.

Uh, but then this one gets, you know, highlighted instead, because then I can.

Then I can understand it by reading.

OK, that's the I can understand.

I can read the relationship because I can see the one to one this week.

You know, kind of understanding of what's going on ohm, I don't know if it's if I'm just misunderstanding, but I think it's might be something that can help, right?

Researcher 50:11

Umm.

Ideator-02 50:22

Because if we are in a 3D environment where we can, we can just do stuff.

Why?

Why not allow it right?

To do these things, just a thought we thinking.

Researcher 50:32

Yeah.

So, but let's say that you have a like a single use.

Activity right pressing this will will exclude it from the process.

Ideator-02 50:41

Yeah.

Researcher 50:46

Uh, are you, like, advocating that you should be able to see what it does before you actually kind of commit to it's to executing it like?

Or did I misunderstand that?

Ideator-02 51:00

Yes.

Researcher 51:03

OK.

Short and sweet, baby.

OK.

Ideator-02 51:08

No.

So so my point is that I think at least from my own experience modeling workflows.

Researcher 51:18

Yep.

Ideator-02 51:19

Once you have conditions and restrictions that are, you know it's all entangled, you want to be able to isolate different parts and understand you know if if we cover it right or not.

Until you got the full picture, when you have, when you have the full picture, if you want to read it, I would still like to say OK, so for example, this part where they create where they create parts of of of that goes into a bigger construction.

Researcher 51:33

OK.

Ideator-02 51:50

Can't say whether this example is from ohh.

I want to be able to understand this process alone and see then what are the conditions for this to happen, right?

Researcher 51:58

Umm.

Ideator-02 52:02

And so it's just an idea, because if you want to model the relationships here where we can see if this excludes and this is condition off and this is the milestone I want to, I think I'd like to be able to, you know, put it together and then say, OK, how does this actually work?

But maybe I'm mistaken on this.

It's just, yeah, because it's so damn hard.

But if we.

Researcher 52:32

Maybe refer to the sandwich kind of scenario instead for for like for rule comprehension, it might be a little easier for you to digest, so to speak.

Ideator-02 52:36

I don't.

Yeah, yeah.

Yeah.

Yeah.

That's trying to do it like this.

Just going to cover these because they all look different now.

I'm going to pull it in there.

Hello sandwich I need you in here.

That would mean that we have pending mixed sandwich.

Flashing.

From another activity, that is, I don't know what it is.

I guess it's just executed.

I don't know what we would say.

You become hungry Aus.

No, because that's what's been.

Yeah.

So that's the problem.

Now, with how we did it, right, So what does the rule say?

Researcher 53:45

Well, you become hungry.

Doesn't have any incoming rules, right?

So that's a question.

That's a, let's say, untouched versus executed.

That's the only kind of thing that's relevant there, right?

You have, uh, like guys standing around rests on him whom he becomes hungry, right?

Ideator-02 53:57

Yeah.

Researcher 54:03

So he switches from his.

His activity is activated.

UM.

Ideator-02 54:21

So we do something like this, right?

You become hungry.

This one is pulsing.

So you know, something is up with this one.

What is going on?

Why are you pulsing?

We aren't getting any because we haven't made the relationships yet, but right now we're just looking at the activities, right, Ohm and it's also condition of.

Researcher 54:29

Yeah.

Umm.

Ideator-02 54:40

So that makes perfect sense.

It's still pulsing, pulsating or whatever the real term is.

It's not important right now, but we have go shopping that we might with right.

I think the model in right, yeah, we did.

So that would be.

Umm, this is still hardness.

It's very hard to do.

And the decision go and you just close this one, but if this doesn't happen then it will go like this so.

Then.

Groceries delivered.

That one is yes.

Until now.

In.

Are we going to follow?

You know what we have been talking about before?

I only have the.

Point.

Umm.

Then I'm not sure that we're doing it right for comprehension.

Because in this way.

This is pending to.

This takes attention right now that something's going on here, right?



Researcher 56:34

Yeah.

Ideator-02 56:35

Uh, so we're looking at this and we have to understand why are you pausing?

Pausing.

Why is this going on?

Researcher 56:45

Right.

And it went on because you manually executed the you become hungry function, right?

So you did a thing.

It resulted in the pulsation.

Ideator-02 56:56

Yeah.

Researcher 56:56

So like you could, you might, you know, be able to intuit.

Oh well, I just pressed this button and then this becomes start pulsing, but that actually leads me to another question.

Ideator-02 57:05

Umm.

Researcher 57:06

What if make sandwiches off screen and you can't see it pulsating?

So it would be probably be beneficial to have some kind of visual indicator.

You can always do like a sound like a thing.

Something.

Ideator-02 57:20

Sure, sure, sure, sure, sure.

Researcher 57:21

But what if I'm in a work in office environment and I've been asked by my manager to turn down the volume?

Then I don't have the benefit of sound.

I only have my eyes, so some kind of visual link between executing you becoming hungry and make sandwich begins pulsating.

Possibly directional somehow?

I'm not arrows because arrows are gonna be cluttering up the screen if we if well if not constant arrows.

Anyway, right.

So we we don't want like a constant like mishmash of arrows going left and right and center or so it's that's what we're trying to get away from, right.

But some kind of directional signal between you having executed, becoming hungry and make sandwich starts pulsating possibly have screen.

Ideator-02 58:08

Yeah.

Let's I have to pick this up.

Researcher 58:18

Yes.

Yep. OK.

Ideator-02 58:19

Sorry, just.

I'm back.

Sorry about that.

Researcher 59:52

Well, no, no business business calls.

Ideator-02 59:55

That's a very important call I've been waiting for for five days now, so.

Researcher 1:00:00

Oh, I'm glad it happened on air.

Ideator-02 1:00:02

Thing.

Researcher 1:00:04

So to speak.

Ideator-02 1:00:04

So yeah, sorry about that Simon.

Researcher 1:00:07

No, no, no, no.

Ideator-02 1:00:07

Ohh so of course my first thought was if this is your field of vision in the game, right?

This is what you see.

It doesn't matter if it's a third person thing or first person.

We can always look at that.

Then suddenly, there's something over here as is.

Ohh you should check it out.

Researcher 1:00:23

Umm.

Ideator-02 1:00:23

That's something you see in game, so if you start, you know panning, then all of it, then at some point in time this might move over here, you know, and then turn down and you can see, oh, this is what's going on, right?

Researcher 1:00:34

Umm.

Ideator-02 1:00:35

That's a classic way of doing it, so this is maybe even this disappears and instead you have like UM, the pulsating thingy going on again, right?

Researcher 1:00:37

Right.

Ideator-02 1:00:45

To to really take your attention.

Researcher 1:00:46

Umm.

Ideator-02 1:00:51

We can also look at more.

I mean, of course I'm looking at this from a from a gaming perspective because I think they do a lot of great things there.

You know, some games at the top have this compass kind of thing.

Umm, where?

You know, if it's something over here that's suddenly takes your attention, might even be read because this is super important for you to take a look at, right.

Uh.

And then when you start looking around, this will move through no until it gets at least into the field of vision.

Then you can see it appear in in where you're looking at, right?

Uh, that could also be a way of doing.

I think both approaches initially applied to to what we're trying to do here.

Uh, some reason it just deleted that.

The thing I made but I wouldn't take long to manual one and I don't know if this is what you mean.

Researcher 1:01:41

For the for the benefit of the transcription or expert drew a little speech balloon with an exclamation mark inside it.

Ideator-02 1:01:52

Sorry about that.

Yes, that's exactly what I did.

So really start using utilizing some of these things we see in video games, right?

So either compass at the top of the screen where this is red dot and when you look around the camera then the red dot moves or whatever call you want.

Researcher 1:02:04

Umm.

Ideator-02 1:02:11

You can also stop moving and jumping around to take your attention.

You could even at a sound effect when it shows up like bling.

So you know that there's something to pay attention to.

Researcher 1:02:18

OK.

Ideator-02 1:02:21

It starts moving, so you get this one to one relation between what you're seeing.

What you're here, you know.

Then when you stop moving around, this little red indicates that moving until whatever it is that needs to take attention gets into a field ambition, right?

And then that is the one that then takes over your this day craving of your attention.

Researcher 1:02:41

Umm, while we're on the subject, so make sandwiches pulsating.

You turn toward it.

You go ooh.

Pulsating.

And you press it, nothing happens because a condition of making a sandwich is going shopping.

Ideator-02 1:02:53

Yeah.

Yeah.

Researcher 1:03:00

How do we signal that we have a condition and it's possibly offscreen?

Ideator-02 1:03:03

Yes.

Yes, and is possibly off screen, but I think what is important here to show is that the we need to represent the condition somehow in the activity that has this condition requirement before I can do anything right.

Researcher 1:03:19

Umm.

Ideator-02 1:03:19

For example.

Ah, well, I like to draw.

Let's let's keep growing.

That's fun.

Researcher 1:03:24

And a drawing, yes.

Ideator-02 1:03:25

So let's say that so I just keep drawing here for the sake of transcription.

Sorry about that.

That we have an activity here called make sandwich.

Umm.

There is we need to show there is something you need to be aware of, right?

Researcher 1:03:47

Umm.

Ideator-02 1:03:49

So one way of doing this.

I don't know if this works, it's it's very it's very simple.

It's actually have a uh and mark on top that says Ohh there's something going on here.

We know this from a lot of RPG's, so this works really well to draw attention, either as a.

A.

What is this called name?

Full stop.

Researcher 1:04:10

Exclamation mark.

Ideator-02 1:04:11

Exclamation mark.

Or it can be a question mark even.

And we might even be able to put it into, you know, something else.

Some part of it, but having something that looks out of place but it's still related to it can drive attention.

So when you maybe when you when you click it or tab it or touch it or push it or whatever we do, once we get to interactions, it could.

Depending on how you do this, you could maybe have the camera pen to the activity.

Of where this needs to be done, whether you know the conditions are.

Researcher 1:04:55

Umm.

So in our context here, the sandwiches still pulsating and the question mark indicates an unmet condition.

Ideator-02 1:05:03

Yep.

Researcher 1:05:04

OK.

Ideator-02 1:05:05

Yes, exactly.

Yeah.

So we need to make it continue. Pulsing, pulsating.

Thank you for this.

It looks very good.

Researcher 1:05:15

Umm.

Looks like an elec.

Very good.

Ideator-02 1:05:22

Whatever.

So you know, OK, this is Paul pulsating and there's something we need to be aware of.

So we tap it and then if it goes over to the get shoving boy.

Go shopping routine.



Just writing here between the two activities it says pans, so in.

So instead of having an arrow, we actually move the camera, in this case, right?

Researcher 1:05:57

Umm.

Ideator-02 1:05:57

So, you know.

Oh, OK, that's something here.

Then that needs to be done, but I don't think that will be enough.

The panning alone because if you go here, you still need to understand the relationship with Mike Sandwich.

Researcher 1:06:09

Umm.

Ideator-02 1:06:11

Now an obvious way of doing this is making a path between those two in our world to vary, but that's very much related to an arrow, so I don't know.

Researcher 1:06:23

Well, we're not.

Uh, I don't hate arrows.

Arrows are fine, it's it's more.

I don't want to make them a permanent fixture.

I want where we're trying to.

Ideator-02 1:06:34

No.

Researcher 1:06:36

Reduce clutter.

Umm, because clutter can lead to confusion.

Ideator-02 1:06:44

Yeah, and.

Researcher 1:06:45

UM, so by all means, if you think in the arrow or lit path, or, uh, a line of dancing fairies, uh would be beneficial.

Then have at it.

Ideator-02 1:07:00

Perhaps we should even, because we can then talk about the umm, what do you call it, how the path looks right because we could play around with the fact that if it's stripped, it means it's not complete, right?

Researcher 1:07:22

Umm.

Ideator-02 1:07:24

Umm, so we are at a place now where we can even play around with saying alright once it is done, it'll become once it goes shopping condition has been met then it will become a complete path because it is.

This requires paints. Ohh.

All that pass between what do you call it?

Conditions. Paths.

Researcher 1:07:51

Yeah, this is a condition situation.

Ideator-02 1:07:52

Because conditions.

Researcher 1:07:55

What if there are like a ton of conditions and we want to, let's say that like one active.

Let's insane situation.

One activity has like 20 conditions leading into it.

Ideator-02 1:08:08

From different activities.

Researcher 1:08:08

Uh.

Yeah, like, yeah, 20 things that need to be done before you can do this thing with that, that that would.

Ideator-02 1:08:14

Yeah.

Researcher 1:08:21

How would that affect the the visual kind of situation?

Ideator-02 1:08:26

I we couldn't.

Researcher 1:08:26

If we're going and how could you, could we mitigate any any any kind of you know just distracting screen elements?

Ideator-02 1:08:37

I don't think you can, but then we can embrace it instead and make it a feature of it.

Right.

Researcher 1:08:43

OK.

Ideator-02 1:08:43

And and I know it sounds sounds silly but but seriously, so they don't have to say, alright, we can't avoid it cause there will be so much complexity we need to we need to indicate how can we do that?

Researcher 1:08:51

Umm.

Ideator-02 1:08:55

I don't know if this is a good idea to talk about the.

I'm thinking a highway with lanes inside, and each lane represents a condition.

Researcher 1:09:00

Umm.

Umm.

Ideator-02 1:09:04

So instead of having a million different ones going there, right?

Further transcription I am now for to show what I mean.

I am making a lot of paths to the specific.

Researcher 1:09:15

I'll I'll screenshot it don't.

Ideator-02 1:09:16

OK, good.

So I think this is 1 easy way to make it look very chaotic, right?

And and difficult to understand what's going on, but perhaps we could, we could streamline and then having a brought up path though it's not, it's not a path, it's a highway.

Researcher 1:09:33

Umm.

Ideator-02 1:09:36

Uh.

And of course, depending on how broad it is, then you know it's it's more and more complex, more and more conditions are to it.

Researcher 1:09:44

OK.

Ideator-02 1:09:46

Right now I'm just.

I'm just spitballing here, I haven't thought this through, but maybe you can try it out and see if that makes sense. Umm.

And and so on and so on and so on.

Right.

If it has more than one.

Because then when you start, when you then move around in a 3D environment, you can maybe just tap the lane and then you'll pan correctly to whatever activity is related to it, right?

Uh, because we are in a 3D World, we can do a lot of stuff here where we can play around with it.

And yeah, so that's.

Researcher 1:10:36

OK, so you're trying to then kind of group all the, all the other, all all the condition activities in in like the same direction and then have the highways kind of go off?

Ideator-02 1:10:49

Yeah, maybe it should be one road and then it's it's a car that is going to actually not.

Not sure.

Researcher 1:10:56

OK, UM the the panning idea. UM.

Do well.

Are there any negative connotations to that?

I'm thinking taking away control of from the the player might that.

Ideator-02 1:11:18

That depends on.

Researcher 1:11:18

I have you have any any experience with that?

How how people react to it to to suddenly the the camera veering off into a uh.

Ideator-02 1:11:21

Yes.

We must never happen automatically.

It has to be a user action.

Researcher 1:11:30

OK.

Ideator-02 1:11:31

That's the number one rule.

It's OK.

Thanks away if you if you engage it.

I can also recommend that it should then if you pan to whatever activity it's it's, it should also be easy to return to where you came from.

Researcher 1:11:43

Umm OK, so how would you you enable the user to do either of those things?

Ideator-02 1:11:50

I would put a big fat button that says go to and another one in that says return.

Researcher 1:11:57

Look.

Ideator-02 1:11:59

If I was doing it.

Researcher 1:12:01

Umm.

Ideator-02 1:12:05

Because that's a matter of navigating the space and not part of understanding well.

It's part of understanding, but it's not directly related to understanding.

It's like when we are in figma, right?

And you hold the space bar down and then you move around the mouse.

Researcher 1:12:18

Umm.

Ideator-02 1:12:18

It's navigating the tool.

Researcher 1:12:20

Umm.

Ideator-02 1:12:21

Let's see that as a different thing from reading.

Yeah, whatever's in the scene that makes.

Researcher 1:12:26

Umm.

Is there a way to uh.

How can we can we make a instead like some alternatives to the button?

UM, just so we we like if we don't have, let's try it.

Let's say we try to make it language agnostic and we have a person who doesn't read English or Chinese or whatever the language is in plain and.

Ideator-02 1:12:45

Mm-hmm.

Researcher 1:12:52

And can we signal to the user?

OK, you just tried to do this thing.

There's a condition to be met before that I'm going to take control of the camera and, umm, point it in the direction of that condition upon your request.

And without a well, without a well, without necessarily like a button that describes what's gonna happen is, is there a way we can signal to the user that it an interaction is possible on screen related to what you just wanted to try without necessarily making it like language explicit?

Ideator-02 1:13:10

Without iconography.

Then we need to make it extremely anthropomorphic, right?

Otherwise, you wouldn't understand what's going on.

Researcher 1:13:41

Umm.

Ideator-02 1:13:44

If I'm not saying this is a good idea, but if we're keeping the higher world.

Researcher 1:13:48

Ohh I want good ideas.

Ideator-02 1:13:49



We would, if we were keeping the highway Rd metaphor, we would of course be a car.

You know you can, or maybe it's a train.

Researcher 1:13:54

Yeah.

Ideator-02 1:13:56

It's much easier cause trains can really go somewhere else.

It has a start and A and end.

Maybe it's, you know, go somewhere else, but then if you tap the train, you'll get along on the right, which is the planning.

And then you can tap it again and you get back.

You know that idea?

Probably.

I'm not sure.

If I would do that, I think still the interface wouldn't fall or for navigating is something different from reading the.

Uh, the diagrams I can understand why we don't.

If we want to, you know, remove make these different activities and the relationships make them without iconography and make them, you know, like you want to.

Uh represented by whatever else we have the shapes and colors and movement and sound, but I think actually navigating this 3D space itself, I think we should be relying on unknown interactions.

Researcher 1:15:00

Umm.

Ideator-02 1:15:00

And then I think it's very hard to avoid using iconography and the main reason I'm saying is saying this is because you don't want players to use their umm, they're the mental capacity on learning to use the tool you want them to.

Researcher 1:15:05

Umm.

Ideator-02 1:15:16

Use it on the tool.

Researcher 1:15:17

Hmm.

Ideator-02 1:15:18

You know what I mean?

Researcher 1:15:19

Yeah. No.

Yeah, that's extraneous cognitive load you're describing there.

Ideator-02 1:15:23

Exactly Kindler that was, yeah.

Researcher 1:15:24

Ohh.

Uh, so, OK, so if we're sticking with iconography, then that that also, uh add some cognitive load because then you have to interpret the meaning of the icons.

Ideator-02 1:15:37

Sure.

Researcher 1:15:38

Uh, sue?

UM.

So that would how how would we use that then we need to come up with a set of icons that could like represent like again try to press a you have a pulsating thing that wants to be pressed,

you press it and it says oh, can't press this until condition is met and then you have to signal condition the location of said condition within this 3D3D space. Umm.

Ideator-02 1:16:10

Yeah.

Let's let's let's talk a little bit about that then, because let's say that we we, we we we we click the mix and which activity and then we know what's going on.

I mean, I think what you what we would like to do is to say they click make sandwich, then the roads appear.

Right to whatever condition.

Is there ohm only show up or you know and you can easily see where it's going?

Ohm.

Now.

You wouldn't meet the tap to pen if it's not very far away, right?

Then you can just follow the road that's being created.

Or maybe we should just make the road the condition show up as you pan along and it gets created in front of your in front of your face, because then you're not.

When you know that's the path you have to take, right?

Umm, we could even make it even more gamey by making the question mark or exclamation mark jump into the road.

Researcher 1:17:23

Umm so create an animation from the action.

Just tried to perform to the action that you need to perform.

Ideator-02 1:17:28

Yeah.

Yes.

Researcher 1:17:32

Umm.

Ideator-02 1:17:32

And then it would move up there and then you can see, oh, this is 1 used to be done and then maybe it goes back.

So you can follow it back. What?

Researcher 1:17:39

Would you if you do that animation, would you with the need to do like an AutoCAD or would that in itself galvanized the user to kind of follow the question mark or whatever?

Ideator-02 1:17:51

I mean, you could make it even more by giving it hands and then be like, come with me.

Researcher 1:17:56

Hmm.

Ideator-02 1:17:56

And depending on of course culture, either it's like this or like this.

Researcher 1:18:00

Ohh yeah, uh.

Ideator-02 1:18:00

As you know, Simon.

Researcher 1:18:02

Yep, for the benefit of transcription or expert is waving his hands up and down in an alternating fashion to indicate cultural differences.

Ideator-02 1:18:03

Ohh.

Researcher 1:18:12

Uh, with regards to hand waving.

Ideator-02 1:18:12

Thanks.

Exactly.

So I could also be aware of doing.

Researcher 1:18:18

Which is also very important point.

You know this for as far as possible, this should be again culture agnostic, right?

Because as you know, if we can, I mean it's that's extremely difficult right because you know like the color red means something different in China than it doesn't Denmark and white means death in Japan where it means.

You know the purity and and and in Western cultures, so umm.

Ideator-02 1:18:42

Yeah.

Researcher 1:18:48

But but yeah, but I think basic.

Ideator-02 1:18:48

Now I gotta.

Researcher 1:18:51

Sorry, I'm like I'm not supposed to think.

I'm just supposed to absorb?

Ideator-02 1:18:54

Well, no, no, no, it's good because we need sparring.

Otherwise I get we need to help each other right?

Researcher 1:18:58

Ohh yeah, yeah yeah, but I'm not supposed to influence your.

Your your your thought patterns that it's unfortunately at the I think it has a detrimental effect on the validity of the experiment.

If I get too involved, so I can't.

Unfortunately, I can only ask questions and then leave you to answer them.

Ideator-02 1:19:17

No.

That's fine.

Just got an idea here that instead of that maybe once just for the sake of clarity for the user, we might want to use different symbols instead.

Of course you know question Mark where he's because as we said before, there can be a theoretically unlimited number of conditions.

Researcher 1:19:35

Umm.

Mm-hmm.

Ideator-02 1:19:44

And when when you say I want to make sandwich each of these conditions, can, you know, have its own path.

Researcher 1:19:47

Umm.

Could you?

Ohh OK, so how would you then keep track of which conventions are met and which are not met?

So let's say that you have this.

Ideator-02 1:19:58

I will.

Researcher 1:20:00

You have them make sandwich and you need for some reason.

This model uh specifies that you need to buy tomatoes and eggs and lettuce and mayonnaise and bread and a knife and a plate.

Ideator-02 1:20:10

For me.

Researcher 1:20:12

And so so you have all these conditions that need to be met for you make a sandwich.

How would you keep track of which conditions are met and which conditions are not met?

Ideator-02 1:20:23

Go.

Oh, no, no.

I cannot give you damn it.

Researcher 1:20:28

Well, no, I mean it's it's, I mean, yeah, again, again, if you.

Yeah, I can ography I guess, but we can also, yeah.

You know, I'll shut up.

You, you, you, you brainstorm.

Ideator-02 1:20:39

What?

Or or?

Researcher 1:20:43

It's, I can argue with you is fine, but I would like to have like alternative ideas to so.

Ideator-02 1:20:47

Yeah.

And I think we could, umm, maybe it's a lane that's open and you know, once it has been met closed.

Or maybe the opposite depending on then what your usability to shows, right?

Researcher 1:21:04

Umm.

Ideator-02 1:21:04

So imagine that instead of.

So so there's a I don't know, adore.

I guess something obviously putting the square line next to the square is a good idea.

Uh, but you know.

So it's more of a tube really, I guess on the path, which is then close to because the conditions have been met and now it's getting too abstract.

Or no, that's a much easier solution, Simon.

Much, much easier to solution.

Done.

Green means done.

Think pretty much in all cultures, green is kind of like, yeah, yeah, yeah, yeah.

And then among usual color when it's not yet, I wouldn't put red because red is a, you know.

But then again, red means something is wrong.

So maybe you want it to be rich or you know.

Ohh I need condition one is not metal.

Why?

Why?

Why isn't it?

What?

What?

What's up with that?

Researcher 1:22:13

OK.



Ideator-02 1:22:17

Getting somewhere?

Researcher 1:22:19

Alright, so like colored roads to to to where you want to.

Ideator-02 1:22:25

Roads paths you need to.

Researcher 1:22:27

Whatever.

Ideator-02 1:22:27

I think I think when you somehow the relationship.

Researcher 1:22:29

But anyway, as some kind of color colored colored physical link between activities to indicate their status.

Ideator-02 1:22:40

I think that's the safe bit because if we let's an experiment, if we only rely on you tap this and then you pen to the one that's missing, right?

Researcher 1:22:49

Umm.

Ideator-02 1:22:52

It's easy to get lost.

Researcher 1:22:52

And there are and there are 20 that you have to keep track of.

Ideator-02 1:22:54

Yeah, it's a lot, right.

And maybe this one is even a condition for, you know, other thing.

The they go other condition for other things, right?

Researcher 1:22:59

Yeah, yeah, yeah, yeah.

Umm.

Ideator-02 1:23:02

And how do I know which one I'm talking about here, right?

Researcher 1:23:06

Umm.

Ideator-02 1:23:08

So.

So it's very easy to 1 to one simple example of a.

Once you know everything, just grow.

I think we need.

We need to keep that in mind, right?

Researcher 1:23:17

Should should the paths be illuminated like let's say the you.

Should they be illuminated from the beginning or only when you click the make sandwich?

So you try to click the make sandwich, do they?

Then illuminate.

Or are they illuminated at the moment the unmit condition is relevant?

Should it be illuminated constantly throughout the game?

And remember, there may be many intersecting paths to.

Consider.

Ideator-02 1:23:52

That's a good question.

That depends, I think, on.

Think what I would do is I would have a.

It should keep its color.

Umm, but when I E click the make sandwich it should somehow highlighted these conditions aren't met right?

Light them up.

Researcher 1:24:25

OK.

Ideator-02 1:24:26

Maybe even make them jump, you know?

Researcher 1:24:28

Umm.

Ideator-02 1:24:28

So like to take some attention to, you know, that's it.

That's that's the problem that you still need to go shopping in this example, right?

So it's so then we we talk about the colors because if this is too much in your face and you have a lot of conditions that are unmet, then everything just becomes noise.

Researcher 1:24:48

Yeah, exactly.

So.

Ideator-02 1:24:50

Still, I definitely.

Researcher 1:24:51

So how would you?

How would you keep focus on?

Yeah.

So.

So this.

Yes.

So.

So how would you keep focus on like the relevant activity?

Ideator-02 1:25:04

So.

Researcher 1:25:04

Uh.

Ideator-02 1:25:06

Yeah.

So first up, when I tap this one right and let's say we have other conditions that haven't been met.

Researcher 1:25:11

Umm.

Ideator-02 1:25:12

So now we have three conditions that haven't been made in two conditions that have been made right.

I think that those that have been met are, I mean you can just keep it in that bright color if it's met in there, confirm kind of color and doc, if it hasn't been missed, right.

And then when you tap the activity and you want to know the conditions, then we should highlight them and then as a as a user I can decide which one I want to follow.

No, not yet.

I think all of them shouldn't be highlighted because then we suddenly had, Oh my God talking about selections, right?

Researcher 1:25:49

Umm.

Ideator-02 1:25:50

Because if I tap this one and then these could highlight it's then that's what relevant to me right now.

And then the thing that's fair.

Then when I tap this one, then I'll have to see alright.

So why the conditions here are not mid?

What's going on?

Why is go shopping not done yet?

Or maybe then I tap it and then ohh now I went shopping and it turns into condition method, you know.

Researcher 1:26:11

So let's say.

So let's say shopping has its own set of conditions.

Let's say that has 20 conditions.

Ideator-02 1:26:17

Sure.

Researcher 1:26:18

What happens to the and and so then they illuminate?

What happens to the conditions emanating from make sandwich?

Do they then kind of fade out or do they remain in play, or has your as your attention moved now to umm to to go shopping or or do you need a reminder that well we we were doing this because we wanted to make a sandwich.

Ideator-02 1:26:29

Think.

Yes.

So I think it's very important that we need to show what's in and what's out, so to speak, right?

Researcher 1:26:48

Yes.

Ideator-02 1:26:48

UM, so we've got tap go shopping, then I get high.

Then it's because I want to investigate go shopping.

What is?

What's going on with this one?

So I want to highlight the conditions and I don't want to highlight what's about to call it output, but it's not.

Ohm, but it still has the path, you know to whatever is relevant for it.

It's not like the I don't see the path disappearing, but what we need to make sure then is that.

Is there are a lot of conditions?

Everyone getting the mixed right.

So what about this one then?

I guess this one will become a more, you know, relaxed color, that's true.

Researcher 1:27:32

And what about like condition 2-3 and four and five and six?

Do they remain play or do they fade out once this?

Since we're kind of focused on go shopping.

Ideator-02 1:27:40

So now I'm focusing and go shopping.

So everything else is just going back to being not in focus.

Researcher 1:27:46

OK, I will need to run off in a couple of seconds, but I just wanted to briefly if you could go back to look at the executed and untouched.

Ideator-02 1:27:47

Yeah.

Researcher 1:27:58

UM, you've you've you've made untouched dark color and executed full color.

Umm does the dark how do the dark colors signal that the?

How did that?

How do they invite the user to click that activity?

Ideator-02 1:28:15

It doesn't.

Researcher 1:28:17

Shouldn't it?

Ideator-02 1:28:18

Yes, it should.

Researcher 1:28:19

Or should it OK?

Ideator-02 1:28:20

It should.

So this is so I think we after also what we've just been talking about up here, I think untouched needs to be changed because untouched is something, it does, something we desire to do something about right, whereas something has been come executed.

Researcher 1:28:26

Umm.

Umm.

Ideator-02 1:28:36

We want to also have that different and what was that sound?

Researcher 1:28:40

I believe that that's my cue to exit UM, I have to bounce.

I will think about this.

What color it could be?

Uh, if you have it, actually, if if you have any final thoughts, please just talk into the camera.

It's recording.

I just have to nip out.

Please keep talking.

This is going.

Ideator-02 1:28:58

Yeah.

Researcher 1:29:00

I'll be right back.

Keep talking.

Ideator-02 1:29:01

Yeah, sure.

I'll keep.

Researcher 1:29:02

I've never.

Ideator-02 1:29:03



I'll keep talking.

So in this case, if something is executed as more of it, this has been done untouched is something that says Ohh you should be touching me.

We aren't seeing that loud these days most days, but it's it's hard, it's.

So maybe we should make it something you want to be interacting with and we could do that by making it move instead of just not moving.

Umm, so we could do that by having a jump up and down.

Could we make it jump up and down?

Or at least have something to make them binding.

You know colors, culture, action colors could be added to it.

Umm, so hello through.

I'm just thinking loud here that if something has been executed, can be executed again.

Researcher 1:30:05

Yep.

Ideator-02 1:30:06

Doesn't have to, but it can.

Researcher 1:30:07

Yeah.

Ideator-02 1:30:08

That means it's kind of it's been checked off as something that is has been running at least some point in time.

So I think actually this would be settling more into a relaxed state of towards.

Researcher 1:30:18

Why?

Ideator-02 1:30:23

Just putting in some, whereas untouched needs to shout.

Ohh, you need to to be clicking me.

By giving it in this case, I'm giving it a border color to show some kind of cultural action on it, right?

Researcher 1:30:36

OK, so like it's some kind of positive inviting but incomplete.

Ideator-02 1:30:39

Yes.

Researcher 1:30:40

Uh, OK, I OK.

Ideator-02 1:30:42

Second, you can touch me, it says.

Researcher 1:30:46

I think I'm gonna call it here.

Uh, and stop recording.

So I want to thank you.

Please hang around after I terminate and I will maybe speak again.

Hopefully, how's yeah.

Ideator-02 1:31:00

They're hoping that it tonic.

Thank you.

\subsubsection{Ideation Session 3}

Researcher 0:09

And I'm just going to make sure that's in English this time, yes.

Ideator-03 0:10

Let's say.

OK, great.

Researcher 0:16

Yeah, it was.

It was just weird mumbo jumbo.

The last time when I thought it was speaking Danish.

Okie dokie.

Umm on.

Ideator-03 0:25

Where do you come from?

Whether you came from.

Researcher 0:30

Do you mean my nationality?

Ideator-03 0:31

Yeah.

Researcher 0:32

Oh, I'm Danish.

But I have family in England and the United States, and I probably watched.

Ideator-03 0:36

OK.

Researcher 0:37

I watched too much television as a child, so I I you know, too many American TV shows and uh, so I've probably picked up a bit of an accent.

Ideator-03 0:50

OK. Yeah.

Researcher 0:51

OK, right.

So just to recap.

I guess we're gonna, I expect we're gonna go for an hour or so.

Ideator-03 0:55

Great.

Researcher 0:59

And so just to to recap, the last time we spoke, we talked about the DCR graph, which is it's a notation for modeling business processes and something called uh.

Why isn't it?

Uh, sorry, my computer was just being weird.

Which is a.

It's a notation or modeling business process in in something called the declarative in the declarative form where you don't dictate what the process can do.

Rather, you dictate what it can't do, and then you you essentially just umm Donuts and let it do what it wants.

So UM, that's not that important.

What is important is is just the the five constraints that makes this possible, and essentially it's it's rules that binds these events together and dictate when and when they cannot execute and the the purpose of this little project is to try to take these constraints because right now they're symbolized by arrows and symbols and what we want to do is we want to do away with the arrows and symbols and we want to speak to people on a more kind of basic human level and try to communicate these rules not through arrows and symbols, but rather through 3D space.

Ideator-03 2:23

Hmm.

Umm.

Researcher 2:45

And what can be communicated in a in a 3D space and that could be pretty much anything that you yourself know from your everyday life being alive on this planet.

Obviously we can't work with touch and we can't work with smell, but we can work with site.

We can work with hearing.

Uh, we can work with.

3D space depth and we can work with stuff like physics like gravity so.

Ideator-03 3:23

Robbery.

What do you mean?

Visual gravity, you mean?

Researcher 3:26

Exactly right.

So do you remember last time we were we were kind of exploring?

Well, how do you how could you know that something is?

Umm, that's something is is is has an unmet condition.

Something.

Well, if something has an unmet condition, it means that you you can do it.

You just can't do it right now.

You have to do something before you can do the thing exactly right?

Ideator-03 3:55

Before yeah.

Researcher 3:58

So an example.

Ideator-03 3:59

Or create some conditions before.

Yes, doing the task.

Researcher 4:02

Exactly right.

So one so one can.

So one activity could be that there are some cookies on the a shelf that my daughter can't reach.

Ideator-03 4:13

Yeah.

Researcher 4:14

So her reaching those cookies are kind of bound by a condition, and that condition could be move a, move a chair so she can get up and reach the cookies.

Right.

And and how does she perceive that these cookies are unattainable?

Ideator-03 4:28

Yeah.

Researcher 4:34

Well, they're too far up, right?

She can't reach him visually.

She she knows.

Ohh I can't reach those cookies, right?

They're too far up.

Ideator-03 4:43

Uh-huh.

Researcher 4:46

So.

So.

So it's that.

That's so it's.

It's that sort of the that's sort of space we're playing in, right?

It's it's trying to to find ways of communicating these rules through something that requires basically no other cultural.

Or or or scientific or linguistic understanding, except being being alive, obviously.

Ideator-03 5:10

Maybe that's what it's something something happened to me after our last conversation that for me, one of the questions that for me was actually a bit hard is like also designer on art is also I have to think about the users.

Researcher 5:17

Yep.

Ideator-03 5:27

I mean I need to understand the character.

Researcher 5:28

Right.

Ideator-03 5:30

What it's kind of the kind of people who is actually going around the culture, I mean, all those things can change the way of you can react.

Researcher 5:33

Umm.

Of course.

And uh and and I, I think you're absolutely right that it's it's it's gonna be practically impossible to completely like to speak to on a completely basic level.

So I mean, we will be this is a.

This is a process modeling language, so it will be used by people who work within processes.

Now these processes could be anything.

It could be uh, uh, a nurse at an emergency ward who needs to learn the process for triaging patients.

Or it could be a case worker in the social in the social office at your local municipality who needs to know the process for handling uh women who've been abused.

Or it could be the.

It could be a roster planner at an office who needs to know the process for.

So like correctly identifying which.

Union agreements will be relevant in in, in in planning the roster, right?

What?

What are you allowed to do and what do you allowed to do?

So it's very broad, but it's it's all kind of process based.

So it will be speaking to professionals.

Ideator-03 7:04

Mm-hmm.

Researcher 7:06

That in some some way perform some kind of process.

So likely educated people, at least bachelor level I expect, and people who not, who probably don't have any experience with process modeling, right?

At least not very more than a basic understanding, and that's why we want to get away from arrows and graphs and stuff, right?

We wanna remove that the necessity of knowing these things.

Right.

So we want to communicate and we won't.

We kind of want to communicate within their domain, so when we render this game, ideally we would be.

Rendering it in in like an environment that's familiar to them, right?

So if it's switches, if we're speaking to the nurse, all the activities may be represented by stuff from the, like her.

Her.

You know her hospital or if it's an accountant, it's gonna be stuff from the from an office environment.



The these this might not be implemented at the first time around, but that's the idea that we want to get as close as we can to these peoples everyday lives.

Ideator-03 8:07

Yeah.

Researcher 8:17

Uh, now what?

We probably won't be able to.

Kind of linked to the domain that they're working in are the the way we communicate the rules.

Right.

Because that's like the the way we signal to to, to a person that you can't do activity a before you've done activity B, because that's Morse.

Ideator-03 8:40

Umm.

Researcher 8:42

It's more signalled based, right?

It's more sending a signal to the user and that kind of needs to to be the same across all the implement all the different implementations, so that's that's more abstract.

Ideator-03 8:47

Umm.

Researcher 8:56

So so if we end up talking about how we, how we could render these activities like, oh, so we have an activity that's about answering a phone right, then we could wrap about well, how what objects around the office could you use to implement that?

Ideator-03 8:57

Yes, that is.

Researcher 9:15

But I think that's secondary to getting the the constraints, the rules kind of in place and that's that's our primary focus. Umm.

Ideator-03 9:20

Mm-hmm.

Researcher 9:28

And and if you have any other questions, fire away.

Ideator-03 9:28

'Cause.

No, not judge.

No, not judge.

Just like.

Researcher 9:34

OK so.

Ideator-03 9:36

I'm thinking.

Researcher 9:39

After our last session, uh Ideator-02 and I spent a little more time trying to to knock out some ideas, and that is in the ideation of.

That's the second uh file or the second link in the chat that I sent you.

Ideator-03 9:54

Yeah.

Researcher 9:56

That's kind of a black background and you see, yeah, there you go.

Ideator-03 9:58

Yes it is.

Researcher 10:01

And you can see that we we we kind of knocked out some ideas for the states there.

There, there's kind of two aspects that they were the rules that bind the state, the activities together, and that's there's the state of the activity.

Ideator-03 10:13

Mm-hmm.

Researcher 10:16

It's that signals to the user has where where in its lifecycle is.

Is this activity and you can see that Ideator-02 has defined some ideas here that if an activity is included, which means that it exists within the process.

It's could be filled out if it is excluded, it could be replaced by like a wire frame or something or opacity to to signal that it's it's.

Ideator-03 10:45

Mm-hmm.

Umm.

Hmm. Hmm.

Researcher 10:49

It's no longer there.

It might even become completely invisible.

It kind of it it because we're kind of well, we can get, we can get back to that because there there are two different ways that that an activity can be kind of removed from the process.

One is that it is excluded.

The other is that it is disabled, which is the one next to it, right?

I disabled activity also means that the the activity can't be executed but it is still a part of the process, which means that if the if the activity.

Ideator-03 11:25

It means disable it means like that you need to complete another task before being yeah.

Researcher 11:31

Exactly right.

Yes, it means that there's another condition that has not been executed and that condition is blocking it from executing it.

You from executing it.

Ideator-03 11:41

Mm-hmm.

Researcher 11:42

The difference between exclude and disabled is on one hand it's the manner and the reason for it being not being activatable one as you just said is because there's a pending.

Sorry, there's a like condition that hasn't been fulfilled and excluded.

Something has happened that is completely removed the activity from the process so so the reason for it happening is different but also the effect of it happening is different.

Ideator-03 12:06

Yeah.

Researcher 12:11

If it if the activity is excluded, any rules that it might be imposing on other activities are like also excluded from the process.

And if, but if it just disabled it's, it's still enforcing those rules.

So just imagine that there's difference between.

Let's say uh, let's say again, going back to my daughter's, there's a difference between my daughter sitting and holding her ears and going La La, la, la, la and not like wanting to talk to me.

I I can't.

I can't talk to her because she's going La La La La la, la, la, but she's still in the room, right?

She's still affecting her.

She's still affecting her environment by going La, La La, la, la, but I can't communicate with her.

Ideator-03 13:03

Mm-hmm.

Researcher 13:06

I can't interact with her if she's gone.

If she's left the room the same kind of thing applies.

I can't interact with her, but now she's completely gone from the room and her her influence is no longer felt right.

So.

So that's kind of the the effective difference between the excluded and disabled.

Ideator-03 13:27

Mm-hmm.

Researcher 13:28

Uh.

And so Ideator-02 thought that, well, uh, it could again be maybe if it's enabled, it could be glowing or or something.

There could be an instead of removing something from the activity when it's disabled.

Maybe you could add to the activity when it is, uh, enabled and and differentiate that way and then he we we talked about whether a an activity has been executed or has not been executed.

Because if you Remember Me saying an activity can be executed many many times, so it's it's not just one and done, it's just it's not like you do a thing and then you don't do that thing again for the entire process.

You can do the thing again and again and again and again.

Ideator-03 14:12

OK.

Researcher 14:15

And again, and that's what makes this different from the typical kind of linear business process modeling where you go first A, then B, then C, then D here we can go ACFAB, right?

Unless something stops us then.

Ideator-03 14:29

And how do we know that it's finish that it's finish?

Researcher 14:32

Umm well, that's the thing.

I mean, you can you can create a condition like in an activity that that states.

Now the process is finished but.

Umm, it's it's never really finished.

There's no there's no like final end state like there would be in a in a in in the in the linear process.

Right, you reach here.

Process is done so so.

So technically, the process never really ends until you abandon it.

The only the only state where the the the process is is is not kind of moving forward is if that you if you have an and finished pending activity the.

Ideator-03 15:16

And then in this case it could be disabled.

Researcher 15:20

Uh, it's the the pending activities are that some some?

So something is left hanging to use the vernacular it, it means that some activity has put another has something has happened, some activity has happened which has made another activity pending.

Ideator-03 15:32

Umm.

Researcher 15:41

And if an activity is pending, then the whole process kind of is in something called a non accepting state and that that essence that's the closest you can get to it in being kind of in a in a league in an illegal state, right?

Because if you know from like a linear process, as long as it I mean, as long as the process hasn't ended, it's technically in an illegal state. Right?

And then when it ends, then the process is done and this kind of declarative process it doesn't.

It never really ends, but if something is pending, then it's in a state where it's where it it the.

Yes, it's, it's is is illegal, right?

And that could be like in a situation where the if you if you operate a restaurant and a customer orders their food then then the activity customer receives food is pending right.

Ideator-03 16:31

Mm-hmm.

Researcher 16:38

And if you don't execute that process, then your restaurant is in big trouble, right?

Because the customer needs their food.

So that's the definition of of a pending activity.

Ideator-03 16:44

Mm-hmm.

Researcher 16:47

It's something that is up in the air and something that requires you to do something in the process.

Otherwise, you're kind of in violation of the rules of the process.

Ideator-03 16:58

Umm.

Researcher 16:58

So.

So that's that's uh, that's something that is quite important, right?

Because that requires your attention and and our our idea.

Last time was some kind to kind of drag the users activity towards this pending sorry attention towards this pending activity by possibly making it like pulsate or?

Animate in some way that makes it the eye draw towards this, this this unfinished activity.

Ideator-03 17:32

Mm-hmm.

Researcher 17:33

UM and.

Yeah, I think that's more or less what we got around to.

We've got to the States and.

I don't know what makes more sense to you to pick up on.

I think probably we should maybe talk rules because and unless you have a comment on any of this and you wanna add something to the the ideas that that we we knocked out last time with Ideator-02.

Ideator-03 18:06

No, nothing.

I mean I I cannot add anything actually, but the only one I could I couldn't see very well.

Researcher 18:11

OK.

Ideator-03 18:14

That mean in terms of Internet, in terms of science, it's pending that for me is is not super clear but.

Researcher 18:15

Umm.

I think that's because it it it needs to be animated.

If it was, if it was.



If the IT was like one one, if it was doing like this like warm, warm, warm, warm, warm one that that's what you're you're meant to to imagine is happening here.

Ideator-03 18:32

It's a kind of alert or alarm.

OK, makes sense.

Researcher 18:43

That's what the lines mean.

It means it's contracting and expanding.

It's like, hey, something's going on over here.

You might want to investigate it.

UM.

Ideator-03 18:53

My.

Researcher 18:54

Sue.

So maybe.

But.

Ideator-03 19:06

I'm not sure if.

Researcher 19:06

See.

Ideator-03 19:20

Sorry, I can.

I can I use my digital pen here and dropped and drop something like.

Researcher 19:23

Yes, please, please please.

Ohh I would I would.

I would love you to.

To to go nuts draw, drop anything you.

Ideator-03 19:33

How can I do that?

I mean is is the first time I use this platform and then for me it's a bit French are usually use mirror mirror but I don't know how it's called.

Researcher 19:38

You should.

Ohh OK well I I think I've got a mirror account we can.

You can jump into there.

But you should be able to to edit.

You should be able to just drag and drop files from your desktop into the into the Figma board.

Ideator-03 19:55

I.

Researcher 19:59

Also, you should be able just to copy it and paste it as you would any other.

Any other kind of shopping?

Ideator-03 20:06

I didn't know it right now.

We just can't.

View only.

Researcher 20:12

Uh, OK, you know what?

Give Me 2 seconds.

We'll do something else.

Sorry, I'm at a pretty slow computer because I have two options.

I have a very powerful computer which is extremely loud and ruins the recording or I have an older computer which is very silent but also quite slow.

So I am jumping into mirror right now and setting up the board.

It just needs to respond to me.

Ideator-03 20:57

Hmm.

Researcher 20:59

There we go.

Something's happening.

And share.

And ideation 2.

And.

Anyone can edit?

Can you?

Uh, they don't 6.

Which could you drop your email in the chat?

Because then I'm gonna invite you to the mirror board.

Ideator-03 21:47

Yeah.

Researcher 21:48

Or you can maybe it's easy if you set up a mirror board and share it with me.

If you're used to working in it.

Ideator-03 22:04

Umm I have to count.

Sorry, like I need to figure out which one.

Ohh, I really hate it.

Danish keyboard.

Yeah. OK.

Researcher 22:22

My apologies on behalf of my horrible language.

Ideator-03 22:50

But what I wanted is actually work in your platform because you are already working in that.

Researcher 22:57

OK, I think you, I mean I've already given you editing privileges, but maybe you need to make an account before you are allowed to edit.

I seem to remember that being a thing last time. Uh.

Ideator-03 23:09

Yeah.

OK.

But let's move on and then I will see if I can add it something later.

Researcher 23:22

OK.

Otherwise, I mean you if if you want you can also.

I mean, you can always if you're making sketches on your your tablet or whatever, you can always email them to me.

And yeah.

Uh, you can share your screen if if you have an A work environment that you can use easily and then just email to me the the outcome.

Ideator-03 23:42

OK.

That sounds that that would be awesome because I had some ideas.

Researcher 23:46

OK, let's do that. Yes.

Ideator-03 23:49

The weekend only was thinking, OK, maybe it'd be nicer if we can use a platform where I can draw.

Researcher 23:56

Yeah, knock yourself out.

Just go into that.

Show your screen and we'll go from there.

Ideator-03 24:03

Yeah.

Then about.

But well, finally we are working on which platform.

Researcher 24:12

Whatever you are most comfortable with, if you're, if you, if you can screen share, it doesn't really matter what platform you were working in.

If so, whatever you're comfortable with, uh, going to that screen share so I can I can, I can kind of work along with you.

Ideator-03 24:20

Uh.

Researcher 24:29

And then when we're done, if it's a platform that I don't have access to either invite me or just save it like to a hard copy like PDF or JPEG or whatever and just drop it into the chat or email it to me.

Ideator-03 24:45

OK.

But I mean right now, let's try with your ones and then let's see it with perfect.

Researcher 24:50

Look, OK, cool.

Ideator-03 24:53

OK, let's see.

Maybe I can.

I can do it.

Student.

What type of institution do you attend or work for?

None of them.

Uh, yeah.

OK, let's try it with your platform and then let's see because I can see that you have other things here.

Like go to shopping condition 123456.

What it is?

What is it?

Researcher 25:47

I'm sorry.

Where are you at?

Ideator-03 25:50

In in your link.

Researcher 25:51

Ohh yeah, yeah.

Yeah.

Uh, that was busy, yes, but that's because there may be situations where a.

There may be situations where, let's say that you have an activity that requires multiple conditions be, uh, kind of met before you can execute it.

So this was, uh, we're we're thinking, how could you signal to the user kind of direct their attention towards those activities if you imagine that you are in a like in, in the three environment and you try to pick up a coffee cup and you can't pick up the coffee cup in some reason, then you need to know well what do I need to do before I can pick up the coffee cup and the what if there are 20 different things you need to do around the room before you can pick up the cup, then we need to tell you what those things are now in the in the in the grasp version of things.

There are just these arrows pointing to them, so if we want to do away with the arrows, we need another way to signal this and one a one way was simply to like illuminate like a a road or like a kind of an umbilical cord leading from the active condition, the active activity to the conditional activities.

Ideator-03 26:54

Mm-hmm.

Researcher 27:18

Another was to do kind of like a kind of a little little navigational pointer, which is the one here on the right.

Another was to have kind of a a little compass and these these are all kind of pretty standard gaming computer game.

Yeah.

Ideator-03 27:39

Yeah, the old style one.

Researcher 27:40

Yeah, I cannot refuse, right?

Yeah, yeah.

Yeah, exactly.

And of course this.

What?

What we did here with the roads is very, very, very, very, very, very, very similar to what we want to get away from, which is like physical links between the activities, but we may end up in a situation where you kind of have to do that but or ideas then to was to only have it be active for the the condition that you're trying to or the the activity that you're trying to execute, right.

So it's it's very it's context sensitive and and the the the links only light up depending on what you're trying to achieve.

Ideator-03 28:19

Well, the idea is like to to reach the 3D.

Right is because right now until now we are just.

Researcher 28:27

Yes.

Ideator-03 28:29

I can see everything in in too deep.

Researcher 28:32

Yes, that's that's our limitations of of the you know the the working environment.

We unfortunately can't ideate in a 3D environment right now because we don't have a 3D environment to.

To do this in but So what you need to kind of do is I guess add in the third dimension yourself and imagine that this is the environment seen from the top.

Like this is a bird's eye perspective of the environment.

Ideator-03 28:56

Mm-hmm.

Researcher 28:58

Environment.

So you have an activity you're trying to execute it.



You can't, and suddenly like this, this road lights up and leads you to the the activities that you need to perform first.

Ideator-03 29:10

Umm.

Researcher 29:13

UM, because that's that's that's the that's kind of a.

Ideator-03 29:14

OK, I would.

Researcher 29:19

That's one of the the issues that we're facing is what if well, two things, what if there are multiple activities that need to be performed as a condition, but also what if they're off screen?

What if suddenly the what if you try to to perform an activity and the game needs to tell you?

Well, you have to do this other activity first, but that activity is behind you.

How do you tell the user?

Ideator-03 29:45

Hmm.

Researcher 29:47

Hey, you're gonna have to turn around and look behind you and.

Ideator-03 29:54

I mean.

Researcher 29:54

So that that's another challenge to obviously one is simply just a pointer that is that points like the direction it wants you to watch and there is a some kind of umbilical road something that leads away from the activity off screen.

Off screen.

Umm, another could be sound, but we might be playing with the with the sound off.

So I guess if, but I don't know if we should go move forward kind of in a in a structured manner, so cause you know because we had some ideas last time.

Ideator-03 30:20

OK. Yeah.

Yes, please.

The time is right.

Researcher 30:32

So we're kind of all over the place, so.

But if you have any ideas that have sparked during our conversation, you are more than welcome to to kind of take the wheel and and and tell me what you you have.

Ideator-03 30:46

I mean, I was since like we maybe we can mix both the both the screens because I can see that for me it's important.

Researcher 30:51

It.

Ideator-03 30:57

I mean right now until what I can see right now is is like I'm.

I can imagine that I'm in A and it would page that is actually the one the most awful ones.

There are the ones that you need to to work with the government.

That's what I can see here.

Researcher 31:13

Yeah.

Ideator-03 31:15

And then you have a lot of.

Yeah, information and you have to pick one of them and that is the worse environment of the the web pages.

Researcher 31:25

That's not good.

Ideator-03 31:27

I mean, it's the one that you really hate it because I never know which one I have to pick.

Researcher 31:28

Yeah, exactly.

Umm.

Ideator-03 31:35

Umm, but then I have two issues and then this one is is the first one that is the.

This is the kind of graph that I can see right now.

The other one is the 3D and then for a 3D.

But for me it's actually it's important to draw then I will show you.

Where are you?

Where are you?

What are you?

Researcher 32:07

What are you trying to do?

Are you trying to screen share or OK?

Ideator-03 32:10

Yes, but I don't know where is your.

Dear.

Teams.

OK, you're here. Finally.

OK, perfect.

And then the screen test.

Umm just scream?

OK, now we have an empty space.

Researcher 32:38

Perfect.

Ideator-03 32:39

That great, but I'm not the best drawing lately.

Bad like.

Can you imagine a little person here?

Researcher 32:50

Yet.

Ideator-03 32:57

Yeah.

Why, I ask you about the characters?

Because for me it's different.

Researcher 33:08

Umm.

Ideator-03 33:08

A person who has just one eye and one leg and two legs.

I mean the reaction with the environment is completely different and then?

Researcher 33:19

Umm.

Ideator-03 33:21

If we imagine, just like I'm trying to figure out.

If we are just.

Walking around, let's imagine is a park, and then you have so many.

Researcher 33:37

Yep.

Ideator-03 33:41

Ways and you have to choose one.

Great.

They usually.

But you have to sign.

And widow they from.

Researcher 34:04

Umm.

Ideator-03 34:10

How do you know what is the the right one for you?

Or maybe three one of them, they are.

They're OK.

But then depends of what you need, right?

Researcher 34:26

Good.

Ideator-03 34:26

And then.

What are use in the first case?

Usually I start using colors.

Researcher 34:35

Yep.

Ideator-03 34:37

To define the difference between one and the others.

I mean, this is the way it work.

Sorry this is is not with the conditional.

Researcher 34:47

I I I am as I am a blank canvas literally.

Well, not literally, but figuratively.

I want I wanna get away from how things are usually done.

That's why you're here.

I I want your insights.

On how to communicate in a in an A non traditional fashion.

Umm, the again the keys that simply just different different again differentiate between uh, different kind of rules and different states.

And so I need to know that if I go over there, it's because there there's a I have a I have a response waiting for me over there.

It's something waiting for me that needs to be done.

If I go over there, it's because I have an unmet condition.

That needs to be done before I do something that I wanna do.

Umm.

And I need to to know that if I go that so so that's essentially it, right I I just need to be able to you need I need to be able to to read from the environment over there is something conditional over there are something as a response and and if we communicate that via color.

Shapes sounds it's all on the table.

It's it's. Yep.

Ideator-03 36:14

It's slightly and then this is one of the things like also thinking about an environment and then you have the colors.

Researcher 36:20

Mm-hmm.

Ideator-03 36:22

The first thing that way you have to think it's about colors, but then also light if you're already know which one would you have to pick and then you have to a highlight that path UM and then to show you that's what it did.

Researcher 36:30

Yep.

Umm.

Ideator-03 36:44

Here is actually I was thinking about the what you say.

Umm the executed and then you you continue or you going back and going back to the the the the same path to sorry just let me because I cannot do both things at the same time.

Umm.

For example.

I don't know if we want to go to.

I don't know the to the apple tree.

Researcher 37:21

Mm-hmm.

Ideator-03 37:22

Park.

Yeah.

Then you have to move to this way.

But I have.

I don't know certain time to stay there in the park and then I have to go back and then you see these here though this is the tree.

The 03 come on.

I used to be a good report.

I just to be a painter.

But yeah, great.

Perfect.

Then I have, yeah.

Damn.

I would like to here.

I've been thinking now.

Yeah.

Storytelling.

Something like that is.

Researcher 38:20

Umm.

That that's a good way to to lead people along narrative.

You know it's it's a it's, it's it.

But narrative is a process of it.

You know of a sort, right?

It's it's.

You have to like this happens and this happens when this happens.

So it's kind of a choose your own adventure.

You know it's the.

It's the story of of the.

Yeah.

Again, well, life is just a series of conditions and responses, isn't it?

Stuff you have to do and and and stuff you need to do before you can do the stuff you want to do.

Ideator-03 38:59



And then this one.

But she if I can.

I'm there.

We have park, yes.

And then we have.

Pathway.

You have an apple tree.

Sir, if I have a terrible.

And create.

And this is the first goal.

Umm.

Then we have, I mean we need to create all those task in the same place.

But I don't know which ones could be in a park.

Researcher 39:58

Well, let's let's, uh, let's, let's just workshop that the apple tree.

So.

So what do you what what should the apple tree be?

Should this be something that you you need?

Is that something you need to do or is it something that you?

To uh, you you is is it?

Is it a a conditional response or or something else?

Is it something that you have to do before you leave the park?

Is it something that you have to do before you can do something else, or is it something that you can't do before you do something?

You do something entirely different.

Ideator-03 40:36

Of so many questions.

Researcher 40:38

Hmm.

Well, let's just start.

Let maybe turn it around.

Let's let's try to let.

Ideator-03 40:41

No, no.

Yes.

No, but but but do it again.

Yeah, just.

Researcher 40:44

So let's say that let's it's a response.

Let's say that the apple you, you are in this park because you need to pick an apple.

That's the.

Ideator-03 40:53

Yeah.

Researcher 40:54

That's the unmet that's a pending response in this process.

Ideator-03 40:59

Umm.

Researcher 41:00

You went into the park.

The apple needs to be fixed before you leave the park.

Ideator-03 41:05

Umm. Yeah.

And then?

What happened between between?

Well, the first thing is like you have to choose.

Researcher 41:18

Umm.

Ideator-03 41:18

This is the fierce action, I suppose.

And then.

Researcher 41:26

Yeah, there may be multiple apple trees and you wanna get one of each.

Ideator-03 41:31

Multiple apple trees.

Researcher 41:33

No, I was just if if it's if it.

Never mind, never mind if possible. Yes.

Ideator-03 41:38

It's possible.

Yeah.

Researcher 41:41

So.

So yeah, that that could be like a choice, right?

Let's say you have 3 apple trees and you have to you have to pick one from each tree before you leave the park.

So that could be that could be a situation where you have three pending.

Activities Apple Tree 1.

Apple Tree 2, Apple Tree three.

So there there are two questions here.

One, how do you signal to the user that?

He needs to pick an apple that that is his goal is to go and execute the pick Apple activity and the other is how do you visually show him that there are three different trees and three different locations that require his attention?

Ideator-03 42:26

Yeah, can be in different occasions also and and also maybe you will meet you you require help for picking the apple.

And then and then how do you show that that for example like showing that this one is with another color, the one that you have to do wanna pick and then the other one?

It's just here.

And then maybe when you approach the the the?

The apple do you wanna pick?

Maybe some sounds OK let me sounds something.

How does this sound?

Just like it's like that.

I think sorry, but it's something that's something like that.

Researcher 43:25

Yeah.

Yeah, that.

Yeah, it's a speaker, I can tell.

Ideator-03 43:32

Uh, and and the light.

Sure that we need to light.

Researcher 43:45

So you're picturing kind of a like a a spotlight or so like a God ray coming down like ohh.

Ideator-03 43:50

Yeah.

Researcher 43:51

Kind of.

Apple.

Yeah.

Yeah, that's cool.

Ideator-03 43:56

Yeah, it's exactly.

Researcher 43:56

That's that's a. That's a good point.

Right, so so directional light kind of is is something that everyone probably knows even like if they've never been to the theater, they've seen like footage from a theater, they've seen the spotlight come down and say that's where we want your detention.

Ideator-03 44:16

Like shell?

Exactly.

Especially when you have many things around.

Researcher 44:20

Umm.

Ideator-03 44:20

It's important also just to to highlight Umm.

Researcher 44:24

Let me let me flip that around then let's say that.

Let's say that we have the inverse.

We have an activity with an unmet condition, which means that. I'm sorry.

I'm hijacking the, but you have to leave and that's at some point.

So, umm, so let's say we have an activity with an unmet condition.

Ideator-03 44:43

Yeah.

Researcher 44:48

Uh, which essentially means that you can't do a before you've done B, so we need to signal to the users that you can't do a.

Right now we don't want you to try to do a until you've done something else.

Ideator-03 45:04

Mm-hmm.

Researcher 45:05

Which is kind of the inverse of the rest of the the pending response, right?

The pending response we want his attention over there because he needs to do that the unmet condition, the, the, the activity went unmet condition is kind of twofold.

One, we need to signal.

You can't do this right now, but we also kind of need to to to signal.

Ideator-03 45:23

Yeah.

Researcher 45:27

But you can't do it if you do this.

Ideator-03 45:30

Hmm. Mm-hmm.

Researcher 45:33

And I suppose, UM.

It might be kind of cognitive overload if we if we communicate, we we we communicate.

You have to do this thing before you do this thing.

Kind of right off the bat.

So maybe we could communicate.

Uh, you can't do this thing.

And then if they try to communicate, they try to do the thing they try to pick the apple from the apple tree, that they're not allowed to pick.

Then maybe we could say that we could kind of signal draw their attention to the thing they have to do.

Ideator-03 46:13

Yeah, I think it's possible to create a block or something like and also create some sounds.

Researcher 46:14

Right.

Umm.

Mm-hmm.

Ideator-03 46:27

In order to show that it's not possible, it's it's not available to pick the other.

Researcher 46:27

So.

Umm, right.

So some kind of like a so kind of like a one or sound or something like that.

Ideator-03 46:35

Exactly.

Researcher 46:37

What?

What kind of block are you envisioning?

What?

How do you how do you kind of stop without an actual stop sign, which seems a little on the nose, but it could be a stop sign, but it also might be something that's that kind of is a little more kind of intuitive.

Ideator-03 46:48

Well, usually.

What I do on some presentations, it's actually when I need to show that it's not possible.

Researcher 46:54

Me.

Ideator-03 46:58

Well, like they do.

Researcher 46:58

Yep.

Ideator-03 47:02

Uh, let me see.

Umm yeah.

Sometime later.

I E usually.

Yeah, I'm depositing i.e.

That is the kind of block I mean.

Researcher 47:19

Umm.

Ideator-03 47:20



You can see the colors.

You can see that it's it you that is your goal.

Researcher 47:22

Umm.

Hmm.

Ideator-03 47:26

God is not available, and then it's it's Gray.

Researcher 47:28

Umm.

Ideator-03 47:29

It's it's, it's the the color.

The hue is not the perfect color, and that is the way that usually create a blocks and then that it's in terms of colors.

Researcher 47:34

Hmm.

OK, so we can.

Umm.

Ideator-03 47:45

But then in this case, because we are trying to recreate a 3D also it will do sounds because it's it's something that usually happened when you are you are on the street, you know you have a warning when did something, it's it's wrong.

Researcher 47:58

Umm.

Umm.

Ideator-03 48:07

And then I will.

And then it use it.

You need to do something before and then also you will use light to show what is the other thing you have to do it before or and then this is.

Researcher 48:19

Umm.

Ohh.

OK, OK. OK.

So we.

Ideator-03 48:27

This is great, but then you have to go back or do something else.

Researcher 48:29

Umm.

Ideator-03 48:35

Like.

Researcher 48:35

So OK, so let's say, and I'm going to throw you a kind of a curveball here.

So.

So so I'm assuming that once the user's attention is on the thing that he's not allowed to do, and that might be to if, if the camera focuses on it too long, if you tries to touch it and then then we trigger the the the the redirection and and and and you're saying do that with the light.

Ideator-03 48:53

Umm.

Uh-huh.

They'll be.

Researcher 49:06

So the obvious answer would then be if the other object is within his field of view, then you just shine a spotlight on like do this do this, but what if it's outside this field of view?

Ideator-03 49:14

Yeah, exactly.

Researcher 49:19

If you look at me, what if the thing that we're that we're we're trying to direct him towards is not here, but it is?

I'll do this.

It's it's, it's out here.

Ideator-03 49:30

Just in the other side.

Researcher 49:32

How do you how do you go?

Right. Right. Right.

Yeah, to to make the camera kind of to make the user pan over to to look at the thing. Umm.

Ideator-03 49:41

Actually delighted works.

I mean it, it's because it's because I've been working with lights with so many years.

But usually even what when you have the light on your background.

Researcher 49:47

Yet.

Ideator-03 49:51

Also, you can perceive the light because the colors of all space change.

Researcher 49:52

Umm.

Ideator-03 49:57

Then of course it places is completely dark here.

Researcher 50:07

Uh-huh.

Yeah.

Ideator-03 50:13

This is the dark rain because it's not the lighter the light is in the back.

Researcher 50:17

Umm.

Ideator-03 50:20

And then that light can give you a perception that you have to move your body to see where is actually the light.

Researcher 50:30

Increase.

So we're kind of like the, so we're we're that you're thinking like kind of a peripheral light like.

Ideator-03 50:35

Put your put your light in the back on the back and then you you also can't perceive it.

Researcher 50:42

Uh.

Ideator-03 50:43

If you put all your your, if your room is completely dark and then you can perceive the delight, it's it's behind.

Researcher 50:47

Yeah.

Ohh OK, so it's kind of like uh.

Thank you for coming to my piece of performance art.

OK, so so am I I I just did that little thing just to.

Ascertained if I understand you correctly.

So.

So you your idea is that the so the environment that the user sees is is grayed out and and dark, but there's kind of light coming from off screen.

Ideator-03 51:45

Yeah.

Researcher 51:46

Wait, so you can't see the source of the light, but you can't see the effect of the light on your on your environment.

Ideator-03 51:51

And your environment? Mm-hmm.

Researcher 51:52

Yeah, yeah, yeah.

OK. OK.

Yeah, that's cool.

That would occur, of course, to be.

Yeah.

Yeah.

Yeah, yeah, yeah.

OK.

Yeah, yeah, yeah.

I'm just trying to think how to implement that, but I guess if if you make lights kind of a kind of an integral thing, like if there's so there's no like Omni directional light on the scene, but there's just like light sources.

Yeah. OK.

Ideator-03 52:18

There are light sources and and if you have a high intensity in one of them, then you also can't perceive it is actually the path because you need to.

Researcher 52:28

Umm.

Ideator-03 52:31

OK.

Well, I don't know if it's helps.

Researcher 52:37

It does.

It no, please don't.

Don't second guess yourself.

This is good.

I I really hadn't.

I hadn't think of of light as as like source light as a a a.

As an idea, I was thinking more of of like the object kind of lighting up and then you know, cuz I'm a gamer, right?

So I'm thinking ohh, what about the little like you know pointers?

But yeah, the idea of just something off screen trying to get your attention by lighting up and that affecting like indirectly your environment kind of causing you to to like go and what the hell is that?

And then start looking around at that.

Yeah, maybe.

What about other?

Ohh no, we should say we should stick with the rules.

Ideator-03 53:22

Just.

Researcher 53:23

We should stick with the rules.

So, so we've done, we've done response, we've done condition.

I'm gonna ask you to to to go big or go home here.

What about the milestone relation?

The milestone relation is the tricky one, because that's the one that is extends the response.

The response says you have this thing that you need to do.

Please go do it.

Go pick the apple, but the.

Ideator-03 53:53

Did you?

You don't want to do it, but this is there.

Researcher 53:55

Okay, you might want to do it, but the milestone is an extends that and says you have this thing that you have to do.

You have to go pick your app.

Pick the apple and you're not allowed to leave the park until you do the milestone.

Well, that's the milestone that says you cannot leave the park until you do the the, the, the, the, the doors to the park are shut.

Ideator-03 54:16

Umm.

Researcher 54:20

You cannot get out, but once you pick the apple once the pending activity has been executed, the doors open and you're allowed out again.

So here are the milestone activity is, is, is the, is, is the you know is is the the closing of the door is right.

It's the activity that is that is disabled until you perform the pending activity.

So moving on from our little Apple analogy and I'm well aware that we are one minute to deadline.

So we'll we'll do it quick, but how would you extend this kind of response illustration with and communicate that there's this other activity which has become that has suddenly become disabled because you haven't done that pending thing?

And how do you kind of link those two?

Ideator-03 55:10

Umm.

Hmm.

Researcher 55:14

That's a tricky 1, isn't it?

Ideator-03 55:15

Yeah, there's a Turkey one.

I mean no clear right now.

Hmm.

I mean in terms of light, it's like and also he was thinking about a theater when everything is finished in a theater and everything, everybody's gone.

Researcher 55:34

Hmm.

Yep.

Umm.

Umm.

Ideator-03 55:46



All the lights are on because you need to clean up everything.

Researcher 55:52

Uh, yeah, yes.

Ideator-03 55:52

And and then I was actually thinking about these, this little tail, if you finish.

Researcher 55:59

Umm.

Ideator-03 56:03

They require task and then it will.

The doors are open and then also you can highlight everything.

I mean, you can see you cannot see shadows because usually everybody everything has shadows.

Researcher 56:14

Umm.

Ideator-03 56:17

But now, since you finish a task and then you are able to go out, you got like everything play with brighter colors.

Researcher 56:27

Umm.

Ideator-03 56:31

Instead of.

I don't know, like in a sunny day.

Because before, because before.

Researcher 56:35

That's interesting.

Yeah, yeah.

Ideator-03 56:38

It's just like with with a lot of contrast.

Researcher 56:41

Umm.

Ideator-03 56:42

But then at the end of the detailed you can see everything.

Researcher 56:47

That's interesting.

So, uh, the thing?

Yeah.

OK.

So when you when you have imagine you have two scenarios, right?

One scenario is that you have the you have the response the pending activity, but you don't have a milestone, right?

Ideator-03 56:57

Yeah.

Researcher 57:07

So the nothing is blocked if you don't perform the pending situation and the other you have the pending situation.

Ideator-03 57:07

Mm-hmm.

Researcher 57:14

But there is a milestone, right?

So it so so not performing the pending activity will mean that the milestone is blocked now because of the way that DCR works, you are allowed to perform the milestone activity while the the at any time where the the pending activity is not pending right.

So if you imagine.

Something triggers the pending activity like uh, let's say that you were in the park and you become hungry.

Ideator-03 57:50

Umm.

Researcher 57:50

That trigger that triggers the pending activity, and if there's then a milestone, then as long as you don't, you haven't picked the apple, the doors are shut.

If you never become hungry, if the thing that act that kind of makes the pending activity pending never happens, then the milestone is is is never kind of shut.

So it's I guess it's it's kind of the equivalent of you walk into the theater, but the show doesn't start right.

Ideator-03 58:17

Mm-hmm.

Researcher 58:18

Uh, if the show doesn't start, then the pen, then the the the the pending kind of activity of watching the show never becomes pending and and then finishing the show and the doors opening is never really relevant.

Sorry, this is terrible explanation I think maybe I'm just trying.

Look, I think I'm just trying to say if it makes a difference in your mind, if we're going back to the theater analogy, is there a difference between the theater if the show never starts?

And the theater after the show has ended.

Ideator-03 58:59

Yeah, there's different, completely different it is.

It is, it is.

I mean because.

If never started, you don't have a scenario.

You don't have anything.

But it finished.

You have to clean it up.

Everything but you also can see everything that happened there.

All I don't know.

Researcher 59:26

OK.

Ideator-03 59:28

Long times if they have, but it is hard. Yeah.

What else?

Umm.

And also the position of the light, everything.

Researcher 59:37

Could cause the the thing.

Ideator-03 59:38

Yeah, there are two different things.

Researcher 59:39

The thing it in is in in this in the, the kind of the DCR analogy, there's not really any difference between walking into the theater and the theater.

The show never starting and walking into the theater.

The shell starting, you watching it, and the show ending because in in the both states you're allowed to leave.

Uh, but I I think I I understand.

Ideator-03 1:00:04

Yeah.

Umm.

Researcher 1:00:16

This is on the pending activity.

When you perform the pending activity, the spotlight disappears, the lights come up and and we're back where we started, we were allowed to leave the theater.

So I think the analogy still works, even though it's it's not 1 to one with the real life.

Uh, we are at, we are 4 minutes past deadline.

Ideator-03 1:00:39

Yeah.

Researcher 1:00:40

So I'm gonna let you go.

Ideator-03 1:00:43

Yes.

Researcher 1:00:44

Thank you very much.

Umm.

Ideator-03 1:00:46

Yeah.

Researcher 1:00:46

Umm, I will let you know how it goes.

Ideator-03 1:00:52

Perfect.

Yeah, it was a really nice conversation.

Researcher 1:00:56

Well, thanks.

It was really cool.

Thanks for your time by.

Ideator-03 1:00:59

OK.

It's a premium about nice night.

I don't know.

Researcher 1:01:04

That's it.

Who is?

Yep, 4:30.

We're getting very close to the last night.

What time is it over there in are you in Colombia?

Ideator-03 1:01:09

The yes, I'm Columbia.

Researcher 1:01:13

OK.

What time is it there?

Ideator-03 1:01:15

9:30.

Researcher 1:01:16

Ohh that's ohh yeah. Bedtime.

OK.

Thanks a lot.

Ideator-03 1:01:20

OK.

Researcher 1:01:21

Have a good night.

Ideator-03 1:01:23

Bye bye.

Researcher 1:01:24

I E.

Ideator-03 forlod mødet

Researcher stoppede transskriptionen

\subsubsection{Ideation Session 4}

Ideator-03 0:06

OK, perfect.

Researcher 0:09

And spoken language English and it seems boring.

Ideator-03 0:10

Thank you and.

Researcher 0:14

Great.

OK, so so last time we spoke.

Ideator-03 0:17

How are you doing?

Researcher 0:19

Oh, I'm good.

I'm tired and I need to shave.

As you can see, but the the running joke is is always that you can always tell how far along you are in a project by the length of my beard, because I the first thing that kind of goes is just I don't have time to shave.

I gotta work.

Ideator-03 0:37

Well, it's almost December.

No worse.

Researcher 0:41

Yeah, I can play Santa Claus.

OK.

Ideator-03 0:46

When do you have to to deliver everything?

Researcher 0:51

Uh deadline is January 1st, but I I kind of need to wrap up the the the game portion here this weekend cause I have some.

I'm running it by a Hugo on Monday and then I have some validation lined up on Tuesday.

No.

Yeah.

I just I kind of need to to wrap it up, but it's it's process.



It's coming along pretty nicely and and the the, the, the ideas of using lighting to to to kind of signal state really what that very well.

Ideator-03 1:28

OK.

Researcher 1:28

Sue, what?

I'm gonna do is.

I'm just gonna screen share and I just want to chat about how we've how the what we talked about last time has been implemented and any changes that you feel need to be done and just a couple of things that I kind of thought of and that should be it.

Damn.

Are you seeing what's alright?

Ideator-03 2:03

Yeah.

Researcher 2:05

OK, so this is this is a.

This is a development environment, so there's a bunch of stuff that is kind of wonky, like the fact that I can I can fly through the ground.

Umm, so that's not the.

Ideator-03 2:16

Ah.

Researcher 2:17

Yeah, that's that's not supposed to be like that.

But so this is something I just kind of threw together with assets from Unity Store and I'm just gonna do a quick run around and tell you what everything is and and how it relates to what we spoke about last time.

Ideator-03 2:35

Mm-hmm.

Researcher 2:36

So the idea is I'm just gonna zoom up a bit.

The idea is that every activity is kind of its own little section of the the world map.

Uh, so obviously there needs to be some kind of uh indicator of what it actually relates to, but the idea is that it's kind of a delimited by just like these these paths and the state of the activity is.

Ideator-03 2:46

Yeah.

Researcher 3:09

This is sort of the the button.

Essentially this is but.

Ideator-03 3:11

Just started the point.

This is the starting point I suppose, or.

Researcher 3:17

This is well, well, it it could be.

But remember the the whole thing about this DCR graph is that it's open it's it's it's kind of open world, there's there's no starting button, there's no ending point, you can just go in and as long as the there's no rule that prohibits you from performing in activity, you can perform the activity, yeah.

Ideator-03 3:26

Yeah.

Hmm.

Researcher 3:39

So the idea is the first thing you kind of need to indicate is whether and activity is a.

It is.

Is is included or excluded and whether it has executed or is not executed.

Ideator-03 3:50

Yeah.

Researcher 3:55

So As for an an unincluded, an excluded activity is essentially just not there is gone and included activity is represented by some kind of.

Ideator-03 4:05

Umm.

Researcher 4:09

This is suppose this is supposed to be spinning.

I haven't implemented the the spinning spinning animation yet, but this is a the the actual kind of saying that you can interact with will will have an animation on it, so you can kind of click it and and and and execute the activity.

Ideator-03 4:27

Good.

Researcher 4:28

And the idea is that if it if it's a untouched activity, if if the activity hasn't executed yet it it has this particle effect.

Ideator-03 4:35

Mm-hmm.

Researcher 4:38

And the reason?

The reason it kind of, uh yeah, thanks.

Ideator-03 4:41

Just give me a second that it's butter.

That song, yeah.

Yeah. Thanks.

Researcher 4:48

So the reason that it kind of reaches up all the way into the sky is because since we're dealing with the 3D location.

Ideator-03 4:55

Mm-hmm.

Researcher 4:57

The player might be behind an object and the idea is then that you know by looking up it can get an idea he can get an idea of where the activities are.

Ideator-03 5:04

OK, see.

Researcher 5:08

I'd ohh there's something over there.

Let's go and we'll investigate it like, ohh.

It's the coin activity. Great.

Ideator-03 5:14

Mm-hmm.

Researcher 5:14

And as you can see, these particles are really there are numerous and their moving very kind of quickly as opposed to this activity over here where the the activity, the the particles are uh a lot

slower and Jun pharma tree and the thing I want to signal here is this activity has been not been executed yet.

Ideator-03 5:33

Umm.

Researcher 5:40

This activity has been executed, but you can still act it.

Ideator-03 5:40

Not.

Researcher 5:45

You can still execute it again because it's still there.

It's still active.

It'll still be animating, but the difference between the two is this is not activated.

Once this is activated at least once, so this is new in shiny and this is less new.

Ideator-03 5:57

OK.

I mean the names one is being executed at least once, yeah?

Researcher 6:02

Yes, exactly.

The one that's still very, very near, very shiny, has yet to be executed.

Ideator-03 6:08

Umm.

Researcher 6:10

And the one that is less shiny is has been executed, but is is can be executed again.

There's nothing that kind of prohibits you from the executed, so they're in, in a sort.

Ideator-03 6:21

Hmm hmm.

Researcher 6:24

They're in the same state, but this one has.

Uh has already executed.

So that's the that's the the the activities that are included and have executed and have yet to execute.

Ideator-03 6:45

And do you have kind of animation for activity pending?

Researcher 6:45

Another.

Ah, yes, yes, we'll get to that in a second.

I'm just gonna take a little quick little tour and there was a falling down, OK, so.

Ideator-03 6:54

OK.

Researcher 7:04

This is a disabled activity.

Ideator-03 7:08

Do you have different kind of buildings?

Researcher 7:08

Yet yeah, yeah, I just.

I got a bunch of assets from Unity Store and I just kind of thought, OK, what would a cool little narrative be?

And I thought, well, let's let's have just some some activities that are like this.

This is like a very, very, very, very bare bones adventure game where you go in there.

So say I could.

I just need this to go yesterday.

Ideator-03 7:31

Is like walking around from the past to the future.

Researcher 7:37

Yeah, sure.

That sounds good.

Ohh so this is a disabled activity.

Uh, this is essentially just your idea that an activity that is that cannot be executed.

Uh, because it's in the disabled state, is surrounded in by a deep and impenetrable fog. Uh.

Ideator-03 7:53

Umm.

Yeah.

Researcher 8:02

There's no, there's no shiny, no nothing shiny.

Ideator-03 8:03

There umm.

Researcher 8:06

If you click on it, it's not it.

Actually, I think probably I'll just, I'll just remove the the button icon just to further kind of underline that you cannot interact with this activity.

But essentially, if the activity has been.

Disabled it is kind of, yeah.

Engulfed in fog and you asked about pending activities.

The thing about the pending activities is that they kind of affect the global state of the the process because when an activity is pending, the process is in the state where it's known as it's not accepting, which essentially means that.

Uh, the the the process is in the in the legal state and you have to before you have to perform these pending activities before you kind of return to a legal state, right?

Ideator-03 8:56

Umm.

Researcher 9:02

So that's the closest that you get to ending a process.

Is that the process is kind of blocked.

It's the it's kind of like you go into, you go into a a restaurant, you order your meal.

Uh and the pending activity is that when you get your meal right?

Because if you don't get, if you if you don't get your meal, something has gone horribly wrong with the the restaurant process that that's that's the uh.

Ideator-03 9:31

Is like if it's like you put our kind of a timer and then the timer.

I run out the time well the the time.

Researcher 9:40

It it it, it could be I I think that there is a timing aspect in in the more advanced versions of of the process notation, but this is just like bare bones.

We don't, we don't deal with with timers, so this is in this version the restaurant can take as long as it wants to give you your food, but they're they.

They have to give you your food.

That's that's part of the, that's part of the deal.

So you might be there for a while, but you're kind of you're guaranteed to get your food.

Ideator-03 10:07

Yeah.



Researcher 10:07

Umm, so the way that this this is action idea I got from what you said with regards to milestones, but since the global state is affected, I thought it would be kind of neat to.

To signal this.

So if if we're in a situation where a pending state is is activated the.

The uh, uh.

Ideator-03 10:32

Yeah.

Researcher 10:32

The the the global state change and I I just chose to symbolize that by the the sky changing color.

Ideator-03 10:39

Mm-hmm.

Researcher 10:39

So so when you're in a non pending state, the sky is blue.

When you are in a, when the when an activity in the process is in the pending state, the the the sky switches called to kind of signal this to the user and the way you know which activities are in a pending state is oh I just, I just shut the sun off in second. Uh.

Some some since since since since, since, since.

Since there's this, there's this.

So this is again, this is supposed to happen automatically.

This is developing environment, so it's done manually by finding.

So the sun, the sun is setting, which is which means that now you have a pending activity and the way you know the an activity is pending is again something that you suggested.

The damn thing lights up.

Ideator-03 11:30

Mm-hmm.

Researcher 11:32

So so you can kind of see the like this is a.

Ideator-03 11:35

I like the drama.

Researcher 11:37

Say what?

Ideator-03 11:38

I really like the drama.

Researcher 11:40

Ohh yeah, thank you.

Ideator-03 11:40

Did, yeah.

Researcher 11:42

It's it's.

Yeah, there's there's a little.

There's some some theatrics here.

Uh, it doesn't actually have anything to do with anything.

I just thought it was kind of funny to have an import passed out on that so, but but what you can see is there's no lights on this activity and there's no lights on on the goat.

Ideator-03 11:57

Yeah.

Researcher 11:59

There's no lights on this building.

Ohh lights.

Ideator-03 12:01

No.

Researcher 12:03

So this would mean that this building is important and it is important because it's pending, right?

So what you would then you need to do is go and click on the orc here and the lights would then go out and to indicate that the the the pending activity has now been executed and if that was the only if it was just a pending activity, the sun the it's the sky would revert back to to its its the sky would revert back to its blue color because now the the global state has returned to a state where there are no pending activities and like to go out.

Ideator-03 12:08

Yeah.

Yeah.

Researcher 12:44

Then there's another kind of change.

To the global. I wouldn't.

It's not really change the global state because there's no real difference between a process which is in the.

I stayed where there are unexecuted pending pending activities and the state where or process where there are unexecuted pending activities and on a blocked milestone condition.

If you remember if a.

If a activity has a milestone relation to another activity and that activity is in the pending state, then the milestone activity is blocked from executing and the metaphor you could have there is.

Ideator-03 13:22

Mm-hmm.

Researcher 13:31

If we go back to our restaurant metaphor, if you go in and order food that's that's your inciting activity, right?

Ideator-03 13:39

OK.

Researcher 13:40

Ordering food places the get food activity in the pending state, right?

Ideator-03 13:46

Mm-hmm.

Researcher 13:46

You you need your food.

This is very important for the process.

The process needs to make sure that you get your food, but as long as the get food activity isn't depending state BA close restaurant activity is blocked for Mexico, so the the the the closed restaurant activity is the milestone activity and the get through the pending get through activity is blocking that from executing right.

Ideator-03 13:53

Yeah.

Mm-hmm.

Researcher 14:12

So the story here is you go into a restaurant, you order your food, and until you get your food, they can't close the restaurant, which is pretty good practice, right?

Ideator-03 14:21

Sure.

Researcher 14:23

You know, we kind of weird.

Just sit there and they shut down the the lights and and everyone goes home.

You still haven't gotten your, so that's the metaphor, right?

Ideator-03 14:29

Start, yeah.

Researcher 14:31

So and I thought that was kind of important.

So what you suggested was that the theater analogy, right?

What?

What indicates that a change has has has undergone? When is.

When is something important happened?

Well, your example was the theater lights go up. Right.

Ideator-03 14:51

Mm-hmm.

Researcher 14:51

Theater lights are dark when the when the play is on, theater lights go up to the signal, but now the theater is over.

So the way I went about that is by introduced a third state.

Uh, which activates when?

A.

Uh.

When they, uh.

When a pending it when there's when there's a pending, when there's unexecuted pending activity.

Uh, and it has a milestone activity, which is it is has yet to be which is then blocked, right?

Ideator-03 15:23

Yeah.

Researcher 15:28

So the milestone again in in standard DCR semantics, there's no difference between an activity that's blocked.

Sorry, there's no difference between the activity that is disabled because the condition hasn't been met and an activity that is disabled because it is a milestone activity and it's the relevant response hasn't been that, but we're we're trying to evolve here.

Ideator-03 15:51

Umm.

Researcher 15:54

So I thought, well, how can we make the how can we make the disabled fog a little more interesting?

And I thought, well, we're already kind of in the light with the light and shadow world here, right?

So I figured, well, if we're highlighting pen unmet pending activities with a white light, why don't we highlight the corresponding milestone?

Can sabled milestone activity with in far to illustrate that it is disabled but a red light in till istrade that it's it's disabled because it's an unwritten master activity and I just picked I just picked red to differentiate it between the the pending activities and it ended up looking like like a really cheap horror movie which I actually kind of like but I don't know how you feel about that.

Ideator-03 16:31

Umm.

Researcher 16:45

Ohm.

So and then if we then if we then, but if we then what you may call if we then activate.

Sorry if we execute all the pending activities.

Ideator-03 16:59

Yeah.

Researcher 17:00

What's going?

Ideator-03 17:00

Well, it execute well if you execute the the pending activity.

What had happened after after that? Because.

Researcher 17:06

After that, then the the lights go up, right?

Ideator-03 17:08

Mm-hmm.

Researcher 17:11

Because then we're in a situation where the the the milestone activity is no longer blocked and we return to a state where it can execute.

So what would then happen is that the with uh, yeah, it's good.

We're going to return to to daylight and.

OK.

There you go there.

We're gonna return to the daylight Now this.

This is just a a.

Since this is a test environment, there the the the state of the activities are not affected.

Ideator-03 17:52

And then it will to, yeah.

Researcher 17:53

What?

What?

What?

What would happen is that the the fog would disappear and the red light would disappear and it would just look like a like a like.

Ideator-03 18:01

Like this house over there, it looks like.

Researcher 18:03

Yeah.

Yeah, like the house or the the gold mine here.

Ideator-03 18:06

Mm-hmm.

Researcher 18:07

Umm and the and the.

The fact that the sky changes back to Blue tells us that there are no longer any pending activities.

And that all, all of milestones have been kind of unlocked.

Ohh, so yeah, that's pretty much how I landed what we talked about last time.

Ideator-03 18:25

I yeah, it's the work.

It's a lot of work to.

Researcher 18:32

It did take a while, but it especially the the particle system, is the kind of finicky, but I like.

I kind of like what we ended up with.

What do you think what translates well, what has good signal value?

What is confusing?

Did you get inspired to make any other recommendations during this whole presentation?

Ideator-03 18:54

Follow I think that the fierce part is the most uh, it wasn't super clear, to be honest for me. But the shot.



Researcher 19:03

Yeah, the.

Ideator-03 19:04

Yeah, yeah.

I don't know.

If maybe you need more.

Researcher 19:10

Uh, we talking about the the unexecuted activities?

Ideator-03 19:12

Yeah, please.

I know sparkled like I don't know how to call them like little stars.

Researcher 19:19

Yeah, yeah.

Ideator-03 19:20

Well, those I cannot see actually the difference between one and the other one.

It might be because they need a a caller or something like to make a better, yeah.

High difference because I cannot see very well.

I I recognize that.

Researcher 19:37

Yep.

Ideator-03 19:38

What you want to achieve and you know that you want like something more intense in this part and the other less.

But still I think something is better that is actually the one part that I for me was difficult to to see it.

Researcher 19:49

OK.

Ideator-03 19:55

Umm, what else?

Researcher 19:55

OK.

Ideator-03 19:57

Umm, the other part that for me was a bit confused.

Researcher 20:11

Yeah.

Ideator-03 20:12

We these are sky.

That is like noon, I suppose.

And then we have the sunset, and then we have actually at night.

But between those steps, I don't really recognize actually from the sunset and to until the night, I cannot recognize the difference between both of them.

I will just jump from one to another, but uh, don't don't create like like.

Researcher 20:36

OK.

It's OK.

It might be OK.

Well, it might then be the best solution to simply eliminate the sunset and just stick with like a two state because.

In the what?

The daytime means that there are no.

There's nothing that really need your attention, right?

There are no kind of pending activities.

Ideator-03 21:04

It's chocolate.

Researcher 21:05

Uh, if we have pending activities, then the global state has has changed and we need to signal that.

So that's why the sky changes now.

The only difference that I the the only reason that I introduced the sunset and the night sky is because that there are two kind of scenarios, right?

There's one scenario where you have pending activities but no milestones and another whether you have pending activities and milestones.

But that is also differentiated by the the the milestone.

Ideator-03 21:39

Your the other atmosphere around, yeah. Uh.

Researcher 21:40

It can be having. Yeah.

Having fog and red light, so that might be sufficient to signal that, hey, there's something different going on over here.

Ideator-03 21:52

Yeah, otherwise sounds like it's quite normal.

I mean, it's like, OK, it's part of the day.

We are just. Yeah.

Yeah, the time is, but no more than.

Researcher 22:01

OK.

Yeah, it it's a good point.

It might be confusing that there are.

Yeah, three global states, when two might as well supply.

So yeah, I think that's a good point.

We'll, I'll and also it's there's a more kind of contrast, right thinking night and day you don't say night and sunset day right?

Night day.

So.

So yeah, that'll that makes perfect sense.

Ideator-03 22:24

OK.

I mean, it was.

I I don't know what can I, but I mean that's just that you cannot see, yeah.

Researcher 22:31

OK, well, if you don't have anything to add then I have a couple of questions I write.

I like to run by you, and if they're out of your wheelhouse, then that's perfectly fine.

If you don't feel that you, you, you you're qualified to answer because some of them are kind of UXE.

But yeah, just let me.

Let me hear what you got.

So one thing I was I was kind of worried about is this symbolism now or metaphor cause metaphors can be metaphors can be really powerful to convey kind of and simplify messages.

Ideator-03 22:59

Umm.

Researcher 23:05

But you can also get get 2 metaphorical and then you actually add to the cognitive load because you have to like figure out what the hell is this metaphor about?

Ideator-03 23:06

Umm.

Yeah.

Researcher 23:14

Right.

So the one of the so.

So I kind of went with the the fantasy settings because of the essentially some of the stakeholders have have have suggested that we kind of go with a gamified setting.

Ideator-03 23:31

Mm-hmm.

Researcher 23:31

Uh, but but other stakeholders have warned that if you again, if you if you wear to to too far away from the what the process is about, you might end up confusing your your user right?

So in a situation where we're trying to like illustrate a business process where the keywords are is stuff like uh, email clients, uh archive document.

Duke business stuff.

It might get a little tricky to convey that through like a fantasy metaphor.

Whereas if you were in a if, if if the game space was just an office, right if instead of uh, instead of this fantasyland, all the tiles were like just rooms in an office and all the graphics were was like boring stuff like a water cooler and a desk and a pile of papers and all the, the, the, the kind of the the spinning icons that you can press to to execute the activity.

This stuff like computers or documents or waste paper baskets and stuff that's closer to the keywords of the process, whereas this is a lot more kind of engaging I think cause the the the problem of the kind of the reason that the the the officers are boring.

Ideator-03 24:58

Hmm.

Trouble it is, yeah.

Researcher 25:10

So so if you wanna, if you wanna engage and and again it's this is a game for but the actual kind of user user base is kind of up in the air right because it might be for young people who are like learning a process.

Ideator-03 25:11

Yeah, but it was thinking.

Researcher 25:28

Uh, and who want to like you need to learn how to work in emergency care in a hospital, or it might be young people who are learnt who are working in daycare, right?

And who needs to learn that kind of process, right and?

So.

So.

So on one hand, if you then replace all the assets with like you know assets that are more closely related to what they're doing to they today, you're kind of putting them closer to the process.

But you're also making the game space less interesting and and maybe more less engaging, and thus more boring, and you might lose the the gamer of user might lose interest faster and they will have it like a more difficult time to learn the process.

Ideator-03 26:20

Hmm.

Researcher 26:21

Or or not I'm it's it's it's sort of up in the air.

So I was just curious if you have any kind of thoughts on the merits of going, uh, kind of veering towards?

Ideator-03 26:34

I've been thinking, actually I really tricky question because it's because in this in this way it's easier for everybody.

Researcher 26:37

Yeah.

Ideator-03 26:43

Understand what?

It's what?

What you try to achieve otherwise if you try to do it in another way like in the business environment, it's not.

It's more than boring.

It's also create all limitations you know, because it just people that he's it's involved in that environment, can understand what you want to achieve.

But other people outside of that environment would be, yeah, it might be more difficult.

Researcher 27:08

Well, I mean, I mean you would be able to to exchange the assets dynamically, right?

So the I think the idea is that we can we could create like an abstract uh game space and then just hot kind of hot swap the assets, right.

So you you you create this framework and then you say, OK, well now this process needs to models something from like a this domain.

Ohh, we'll just we'll just swap all the assets with with with the hospital assets.

Alright, but now the the the software needs to be used in the daycare center.

Ohh well, we'll swap all the assets with with stuff that is from like a daycare center environment like kids and play.

Ideator-03 27:48

Ohh, you're usually what I and I was thinking.

Usually what I do when when I have to actually mix many things that are not involved in my expertise, I tried to check the symbols while they are in the business, for example, and then I tried to pick some some images that came from that and I tried to add it to.

I don't know, like for example on a presentation and then if I wanna do on a list illustration about, I don't know.

Just like, uh, a sheep.

Now right now I'm doing a ship and then, but also I have to mix it with electronic stuffs and then what I do is actually I do illustration about simple things that they are related with.

But the most simple thing that you can do?

Umm.

Let's try to figure out what all the most umm, umm, I don't know what kind of symbol you can get in a business environment.

UM, unarchived like well?

Researcher 29:00

I mean, I I supposed you could go in and try to find fantasy symbols that are kind of tangentially related to the business symbols.

Like, I mean if it's a book that can be replaced with a scroll, if it's a waste paper basket, it can be replaced with like a dung.

If it's a if it's an archive or something, it can be replaced with like a, a a bookshelf.

So I mean, you could probably go and find fantasy symbols that symbolize the same stuff as the business stuff does.

I think what I I'm I'm just worried is that is is whether you by setting it in in like in business fantasyland, fantasy, businessland, uh.

If you're adding to the cognitive load of understanding the process, or if you're subtracting from the cognitive load by making it more energy, uh.

Uh, so yeah, yeah.

Ideator-03 29:58

Hmm.

Researcher 29:59

I don't know if you, uh, if you have any experience with when you're illustrating stuff it it's better to stick closer.

You.

Ideator-03 30:20

One, they are jump to this kind of creative process.

They actually feel happier for being involved in these kind of environments, completely different, because sometimes they they don't have the opportunity to be to be there and then it's actually more simple.

I mean, I think that it's not a problem, in my humble opinion, of course, because I don't really know what kind of stakeholder do you have? Uh.



Researcher 30:49

Uh, well, the the the validation stakeholders are going to be kind of very like office people.

But again, if you're saying that sometimes it they appreciate being kind of lifted out of their mundane lives and plopped into something a little more artistic.

Is that what you're saying?

Or did that message change?

Ideator-03 31:08

Yes.

Yes, exactly that.

It's because they don't have the chance.

Researcher 31:13

OK, cool.

Ideator-03 31:14

That.

That that's what happened to me.

But of course I don't know what kind of stakeholder to you.

That you are working on which?

Researcher 31:22

We'll find out.

Okie dokie, no hang on.

But minute.

Yes.

Ideator-03 31:34

And of course, and I still also simple, I mean it's easier to understand it actually that's that's that's that's nice.

Researcher 31:43

OK, cool.

Alright, let's move on to something a little more.

Uh.

Maybe artistic because this is the real umm brainbuster cause all all of the stuff that we've kind of illustrated so far is very kind of state related, right?

It's it's a you you communicate kind of constraints through cause and effect, right?

You and you're gonna have to imagine this, but you execute the the pending activity and the milestone.

Uh.

Disabled condition kind of becomes enabled or you.

Or you you execute the whatever this activity is and this activity becomes disabled, right?

So there's a cause and effect between it and you can tell that something has happened because the state has changed.

Ideator-03 32:42

Mm-hmm.

Researcher 32:47

But when that's that's kind of learning the process through by walking through the simulation right and experiencing it first hand, there might be users who would much rather be able to.

See the rules without necessarily executing the rules right.

There may be users who want it, who wanna say ohh well I would like to know what executing this activity does before executing it right?

So they'd like to know that this executing this activity disabled this activity without actually executing it and seeing it being disabled and in the, you know, in the in the current I mean the standard graph DCR graph that symbolized by an error.

There's a colored arrow.

Ideator-03 33:43

Yeah.

Researcher 33:43

You're in here and there's a little kind of dot at the end of it, right?

You need to understand you need to kind of work out where that dot right.

And if we want to please both users right, we wanna please both the ones who are kind of exploring the world and seeing the effects of their actions and the ones who just wanna read the map essentially.

Right.

They're the ones who don't wanna walk.

The city is wanna watch that.

Ideator-03 34:09

If you know Web page and just like uh, check it out.

Like, but it's going on around.

Yeah, two understand all the information that it's behind or something like.

Researcher 34:16

Yeah.

Yeah.

I mean, yeah, exactly.

You can you.

It's the difference between going to Prague and and walking around.

Say, OK, well, if I walk from this end of the street to that end of the street, where do I end up?

But that's the explorative way of going about it.

The other way of going about it is taking your map and saying ohh well I start here and I walk down to the street.

I'm gonna end up at the powder tower.

Interesting, right?

Ideator-03 34:41

Yeah.

Researcher 34:43

And ideally we want to please both people.

So I was kind of curious if we, I'm just gonna let it, Ideator-02, if we would like to.

Ideator-02 deltager nu i mødet

Researcher 34:54

Hello and welcome.

Ideator-03 34:55

Hello.

Ideator-02 34:55

Hello.

Researcher 34:56

Welcome.

Uh, we're we're like, we're in the, we're in the thick of things.

Ideator-02 34:58

Ooh.

Researcher 35:01

So I try to keep up.

Ideator-02 35:02

I'll pick up you guys just consume.

Researcher 35:05

Well, I'll just.

I'll just.

I'll just repeat my last sentence, right so.

Right now what we've implemented here is beautiful fantasy realm that I've implemented.

It's very much based on process exploration.

It's very much based on you go to the pub, you execute the pub activity and the result is that the church activity or whatever this is becomes disabled, right?

So because you can't go to church when you're drunk, I found out the hard way.

I didn't so so.

So it's kind of, it's all kind of based on the on seeing the state changing based on your actions, right, go to the pub, you can't go to church.

Great.

Umm, that's the that's that's that's learning the process by executing the process and exploring the process.

Some people don't like to do that.

Some people want to read the map, some some people want to go and see.

Well, I don't want to find out that if I go to the pub, I can't go to the church by going to the pub and being barred from the church.

I want to somehow be able to see that going to the pub will disable the church activity without actually executing the pub activity and the way the DCR graph does that is the way any of graph does it.

Ideator-02 36:37

Hmm.

Researcher 36:41

It has iconography and it has arrows.

It has a a colored arrow, yellow.

If you're interested, arrow going from one activity to another activity and then there's a little kind of.

All at the end, right.

And if and if you want then if you wanna learn read the map you have to like be able to know what that ball means, et cetera.

Right.

But we're not.

We're not doing that, man.

We're tool, we're trying to innovate here.

So what I would was kind of curious is if you have any ideas of ways that we could illustrate.

That relationship the, the, the, the kind of in this case the disabled relationship graphically right and you know one way to do it would would just be to draw an arrow right to just have like a if you right click on the pub you an arrow like arrows shoot out from the pub and and and and show you all the effects that clicking on the pub would would have.

I'm, but I was curious if if anyone has any.

Ideas of other ways that we could do?

And this is a really, really tough question I've been I've been working with this for months and I still don't have a better idea then.

Some kind of umbilical cord, but you got Chris.

Ideator-02 38:11

I have an idea.

I don't know if it's a good idea, but it just hit me.

You know, this is the fantasy world.

You know, you could consider populating it with with some kind of humanoids.

Researcher 38:22

Ohh.

Ideator-02 38:24

Whatever is walking around where they are allowed.

Researcher 38:26

Oh yeah.

Ideator-02 38:28

So you could have it so if we have paths going from things you know with small Rd for people walking or whatever, and then we have a path directly from the the in to the church and we can see that no one walks from the end to the church, but we see that people are walking from the church to the inn.

Researcher 38:40

Yeah.

Ideator-02 38:50

Maybe something like that.

Then we keep it.

Kind of in this theme at least, the idea of that maybe.

Researcher 39:00

I understand.

So so we we essentially replace the the arrow with just like a moving figure.

That's a cool idea.

I could do that.

Would you have it then be like a constantly looping animation or would you have it be that you trigger it right you, you you you press like there's a guy outside the puff you press them and he goes running.

Ohh or would it be passive?

Ideator-02 39:24

I mean.

I mean, I guess if we trigger it, we need to see what happens, right?

So in that case, I would imagine that we then see a drunk cool follow me along now that that then walks to the church and then someone would be like, no, you're not getting in here.

Researcher 39:31

Right.

Ideator-02 39:44

Maybe the the Cardinal was standing there.

I don't know, just you know, denying entrance.

Researcher 39:48

Yeah.

Ideator-02 39:48

That would be like a literal way of indicating this, right?

If we do the action, if we just had it running by itself at all times, we can see they don't go there, but we could use the same thing so I could go there, gets denied.

So you know you can't do that.

Possibly.

And then we might consider these people who come from the inn Good color code.

Them maybe in yellow.

As you just said, that's what it's used now.

So when they go to the church, you can see that it's just.

Just I don't know, vanish.

I might be a little too literal here, but you know that was what I thought.

Researcher 40:26

OK.

OK.

Yeah, you know, so, so you OK, so you, you, you you use colors the existing colors and you at least it then you can signal that differentiation between the people, right.

Ideator-03 40:31

It's.

Researcher 40:41

You can see all.

Well, there's only red people passing from this activity and this activity and there's only yellow people. Cool.

Ideator-02 40:48

Yeah.

Because then we're going back to some of the ideas that actually think we're running.

You mentioned it a while back.

We're having using colors right and and shading and and and light and stuff like that.



This is a little a bit literal approach, but you know.

Ideator-03 41:01

No, I like it.

It's quite like a zombie.

Yeah, zombie environment.

Yeah, yeah, sounds good.

Ideator-02 41:08

Yep.

Yeah, but then you have to name the in Winchester.

Ideator-03 41:11

Umm, I didn't.

Can something more simple?

I mean, it may be just a stupid idea, I don't know really.

But I was thinking like to create a great scale of colors and that part and then if you move outside of that area that is disabled and then you can start seeing the colors, they'll natural colors of the environment.

That's what I was thinking, but no more than that.

Ideator-02 41:40

Umm.

Researcher 41:42

Sorry, could you repeat that?

I'm not quite sure I understand.

Ideator-03 41:46

That, for example, if you have an area that is disabled and then that part I will put it in Gray colors like in black, white and then if you go out of that area that is disabled and then you can start seeing the colors that like the yeah, they're all rainbow.

Researcher 41:50

Yeah.

Yep.

Yep.

But how how?

How do we then kind of?

How do how do you create the the connection then between the the area that imposes the disabling effect?

Ideator-03 42:23

I don't know.

It's just, I know that it works, but I it's it's like a.

Umm.

Maybe if I can give you an example, let me check.

Researcher 42:32

Oh, I I love examples.

Ideator-02 43:40

You're muted, Ideator-03.

If you were talking, I don't know that you're moving around.

Ideator-03 43:43

Yes, I I was liking.

Uh, I cannot share my screen right now, but I'm going to send you a picture, yeah.

Researcher 43:54

She's actually an opposite ventriloquist.

She she moves her mouth, but no sound comes out.

Ideator-02 43:57

That's amazing.

Researcher 44:02

Uh, did you drop it in the chat or did you mail it?

Ideator-03 44:05

Yes, I I think I can do it on the shot.

Let's see.

Umm this should be possible.

Researcher 44:18

Oh, is it?

Is it a a image?

Otherwise you can just drop it in your mirror board and I can access it from there.

Ideator-03 44:27

All where I can't.

Well, I'm going to send you today.

You're gonna want that.

It's easier.

Researcher 44:31

Uh, great.

Ideator-03 45:06

How many, Researcher do I have?

Researcher 45:11

Not enough.

Ideator-02 45:12

Umm.

Ideator-03 45:20

OK.

I mean, that's not important.

What is written around?

But what I tried to explain it's actually to do the opposite.

I mean, if have you have you received an email?

Researcher 45:42

Uh, I have not refreshing like Mad Men.

Ideator-03 45:50

Let's see.

Maybe I sound another person.

Researcher 45:56

One of your many other assignments.

Ideator-03 45:59

I have like 4 at least, I E.

Researcher 46:01

Oh no, I've got it.

I got it.

I got it.

I got it.

There we go.

OK.

What do we got it.

Okey dokey.

Yes.

So, uh, yeah, yeah, yeah.

Ideator-02 46:07

I look forward to seeing it.

Researcher 46:10

I'm just.

I'm a screen share.

It is settled down now. Uh.

Ideator-03 46:13

It's just from the presentation that I did like two years ago, but.

It's.

Researcher 46:22

Alright, So what are we having?

So OK, so we have a a big old a big area and everything is grayed out except this guy right here.

Ideator-02 46:24

Of cool.

Researcher 46:31

Right.

So that draws focus.

Ideator-03 46:32

Except the exactly and then what I suggest actually is to do the opposite.

Actually, the Gray area is like the people that, well, the area that is disabled that.

Ideator-02 46:44

Hmm.

Researcher 46:44

Oh oh, so you ohh so you're like mouse over it and and every anything that it might disable get gets greyed out.

Ideator-03 46:54

Yeah.

Researcher 46:55

And then, like everything and anything that might exclude, like disappears.

Anything it might make pending starts bouncing and anything it might.

Include uh.

Well, we'll think of that.

So OK, so you actually, so yeah. Yeah.

Yeah.

So you have like a.

Yeah.

So you instead of having errors and stuff, you simply just have the the, the, the effects kind of preplay.

Ideator-03 47:23

Hmm.

Researcher 47:23

Uh, yeah.

So we mouse over it and yeah, that's very easy.

Ideator-02 47:27

Yeah.

Researcher 47:28

Why didn't I think about it?

Ideator-03 47:28

What's that?

Ideator-02 47:30

They're easy.

Researcher 47:30

That's excellent.

Excellent.

It's a good idea that the.

Ideator-02 47:33

I think you you can even consider including the colored roads that you have here as a way also to.

Researcher 47:39

Uh, yeah.

So you yeah.

So you you show like, OK, so yeah, so you.

Yeah.

So you kind of double double tap it, right?

You say, OK, so you show the show, you highlight the roads and you you showed the you kind of preplay the results.

OK.

And then I guess you could maybe you could like I don't know, maybe you feel like click it or something then you can like lock in that and then you click another.

Well, now I'm just spit balling here.

That's great.

That's a very good idea.

Ideator-03 48:10

OK.

Researcher 48:10

I like it.

How do I get out of this?

Uh screen sharing?

Ideator-02 48:14

Don't.

It's a good idea.

Researcher 48:17

Uh.

Boom.

Stop sharing.

OK.

We will go back to, OK.

So we have 8 minutes of your time, Ideator-03.

So what I'm gonna do is I'm gonna ask hopefully a simple question.

It is so since you weren't here for the The amazing tour of of of Easter Aus.

Which is like totally original name for this fantasy Rome.

No, it's north.

Ross S Ross. OH.

Ideator-02 48:49

You already know.

Researcher 48:49

So yeah.



So smaller this kind of UM.

Fog means that this activity is disabled.

You cannot interact with this activity.

It is very spooky.

You don't wanna go to now what would be helpful would be to.

No.

Two things it would be to know.

What you need to do to make it enabled and to do that we could simply just do what andronica just suggested, which is essentially just the reverse right you you click it or you right click it or something and the the the activities that you need to uh and uh execute in order for the disabled for this activity to be enabled is shown like is highlighted right.

It's like point whatever, but it also would be interesting to know like keep track of how many activities have you still you still need to go right.

Like, let's say we're in a really complex process and they're like 10 activities.

That need to be that need to be executed and you need to kind of keep track on how many you still need to execute for whatever reason.

And then my thesis advisor, he came up with a really interesting idea, which is essentially just uh lock icons.

But which is essentially just you have a bunch of blocks, some of them are open, some of them are not, and the ones that are still locked.

That's the amount of activities that you still need to execute and the ones that are open symbolized the number of activities you have already instituted.

So we could make like some floating locks.

I have a a lock asset.

I could just like float in the air here, but I was just curious if you guys have any other kooky ideas how to do that.

How to keep track of how many, how many activities still need to go?

Or uh?

Like uh, the same goes for like the milestone activity.

How many unmet?

How many pending activities do you still have to execute or what else is there I guess?

Uh.

Or just general how many pending activities are still are still unmet, right? Umm.

So yeah, how do we keep track of that in a cool and intuitive fashion?

Ideator-03 51:27

Hmm.

Hmm.

Researcher 51:38

And you can't say locks because that's already taken.

Ideator-02 51:38

I mean.

Ideator-03 51:40

Or.

Researcher 51:43

I'm sorry.

Ideator-03 51:45

Ideator-02.

Ideator-02, do you have an idea?

Ideator-02 51:48

I mean the obvious one is some kind of progress bar somewhere, right?

Researcher 51:52

Ohh yeah, that's a good idea.

Ideator-03 51:53

Yeah.

Ideator-02 51:54

And it's like my go to UX solution for that.

It's always show progression for something.

UM, but I'm not sure if that applies to this kind of UI interaction design we are having here.

Maybe we could, if you're already talking about a floating lock, we could easily talk about a floating progression bar that you can see how far it is, and even include the lots.

Researcher 52:23

And yeah.

Ideator-02 52:26

I would definitely recommend having some kind of calendar so you can see how many are we talking about.

Otherwise it might get too abstract, especially one to end a situation where there are a lot of stuff that needs to be a lot of activities.

Researcher 52:35

Yeah.

Ideator-02 52:40

We need to make sure that we actually that actually getting active because it's it's easy if it's only two or three activities need to be active, but once you have like 10 or 11 gets really hard to do it without something concrete that you can take a look at.

Ideator-03 52:51

Umm.

Ideator-02 52:56

Umm, you could also of course make an abstraction of that number.

I'm just thinking loud here.

It could be a circular diagram where it's like, you know, like when you play Trivial Pursuit, you have the different cheese that gets filled out as you progress.

You could use the same system where the Jesus, the cheese, the cheese, is that even a word?

I don't know whether cheese could fill out as the activities are getting activated or getting becoming active right?

So you know, then you can see the progression of how far you are and you can even color code that depending on I don't know, criticality or even type of activity that we need to make sure we're working on.

Is it a milestone?

Is it a because we need something else, right?

Ideator-03 53:44

Yeah, I like it.

Researcher 53:45

Is is it something that should be like globally accessible cause it might get kind of crowded if if you're tracking every single activity at the same time?

Ideator-03 53:46

I mean.

Researcher 53:54

Or should it be something that like appears as a like a canvas or something, or floating in the air or whatever when you when you focus on the on the activity?

Ideator-02 54:07

It depends on what you want with it, right?

Do we want to know about it at all times, or do we want to know about it?

Sometimes right?

If we if we want to keep an overview, I mean we could do, if we OK, if we continue on the thought that we're running a present it with her image before that you know the game will changes once you click it or something like that.

We could put it as further information.

When you click it or whatever something like then it pops up.

You can see all the relation and the status of sit relations.

Umm, we could also if it's something that's critical to know beforehand, just to keep an overview when you're flying around in this map, we could have a small indicator just to show you know we ain't there yet, but then when you tab you get more details.

Why aren't we there yet, you know?

Does that make sense?

Researcher 55:00

Uh.

Ideator-02 55:00

I'm talking to abstract.

Researcher 55:02

No, no, that's good.

I may.

I may get back to you on that, but I just kind of wanna ask you guys one last thing before we we let me.

Ideator-03.

Jet.

That's this guy right here, right cause.

There are three elements.

Uh in the activity spaces right now.

Just Ideator-03 already knows this, but the way I kind of set it up is that every kind of grid is, uh, grid area is an is an activity.

Ideator-02 55:32

Uh-huh.

Researcher 55:32

Every activity has kind of like a a little kind of a.

Ideator-03 55:32

Umm.

Researcher 55:38

Decorator I would almost call it.

That is kind of not interactive, but just kind of is is there to populate the game space with like something interesting because we're making them computer game, we might as well make it fun to look at.

Then there is a we have to imagine this is spinning.

There's then there's an actual interactive element which will be spinning in in.

Essentially, just animate to kind of draw the users attention to it and make them wanna click it and clicking this will actually execute the activity, right?

Uh, But then there's this guy because I was.

I was thinking depending on how we end up what kind of do you user interface, I end up making right?

I don't want like a ton of buttons everywhere, like we're playing legal legends or whatever.

Ohh so I thought.

Well, if we're in a situation where they want to learn like they wanna be able to navigate, why not kind of put this guy here, right?

So the idea is that you can what we were talking about before.

If you wanna see what the like the the closest related activities are, uh, this is the the guy you click, right?

So you click the signpost.

Ideator-02 56:56

What are you when you say this?

What is it?

Is it the axis?

Is it the signpost?

I'm not sure.

Researcher 57:02

The side post and that's the that that's the question, right because.

Ideator-02 57:03

OK.

Thank you.

Researcher 57:07

Like on one hand, you could put multiple kind of actions on the axe, right?

You could do like if you left cricket you execute the activity, but if you right click it then you see the the other activities that relate to it.

Like if you left the right click it then you see if it will disable any activities or include any activities or whatever.

But then you have to know that.

Ohh well I have to use both right in the left mouse button.

The alternative I've just what?

Ideator-02 57:40

I have listened.

I have a solution for that.

Researcher 57:45

Oh, OK well, my solution was to just put another icon that is clickable, right?

So essentially make this animated.

If you click it with the left mouse button then it does that thing we talked about where it highlights the other the other.

The other activities right?

Ideator-02 58:01

Umm.

Researcher 58:01

Ideator-03, would you like to to punch out?

As you already know, don't know she's still there.

Ideator-03 58:10

I have two minutes.

I have two minutes.

Researcher 58:11

Say what?

You have two minutes.

Ideator-03 58:13

I have two minutes.

Researcher 58:14

OK.

Well, you have two minutes to provide any insight that you might have on that level.

Question that I just posted if any.

Ideator-03 58:22

No, no, no.

Yeah, I mean, I'm, I'm thinking about it.

And also I was thinking actually to the last question the the question before you were asking, the only way was thinking about about when if I have to repeat an task on activity an activity with this smoke, I was thinking like to reduce the kind of smoke step by step every time that you do on a task and then we'll do a start just removing the smoke until you can see the completed image that's.

Researcher 58:34

Yeah.

Ideator-02 58:48

Umm.



Researcher 58:48

Yeah. Umm.

Ideator-02 58:54

Umm.

Researcher 58:55

Yeah, yeah, I thought that that's that.

That's a good idea.

That kind of I hit up on that as well.

The only downside is then there might be like if you have like 100 activities, the difference between being at zero and being at one might be so minuscule that it's gonna be difficult to spot the difference.

But it might be a nice kind of, uh, what's the word when you're, like, a redundant, like a redundancy, right.

Ideator-03 59:13

True.

Researcher 59:22

So you both have the the, the, the the more like kind of uh, discrete indicator, but then you also have this kind of visual effect on the world just to to to aid with emergent, right, because it's a cool idea.

Ideator-02 59:33

Umm.

Researcher 59:37

I I think it's a really fun that you see the the the fog lift gradually as as you progress and then there's there's also kind of a little dopamine hit there as well and maybe that you you get to see.

Ideator-02 59:48

And actually, and I think that's a great idea.

And and this is there's an obvious solution for that issue with.

If there are 100 activities and difference between two and one doesn't matter, just just cut it like every 25 you know, make sure it has four states, so you see the progression.

Researcher 1:00:01

Umm.

Ideator-02 1:00:03

But you know when it's clear and when it's not clear when everything is done and not that could be a way of handling it well.

Researcher 1:00:07

Yeah.

For who?

Cause that's really easy to handle with the capacity, right?

You just reduce the opacity of the the particles and then you turn it off the that.

That's easily done.

That's really good idea.

Ideator-02 1:00:19

Reduce the amount of power.

Researcher 1:00:19

Are those goats walking?

You are those goats moonwalking.

Ideator-02 1:00:24

Definitely.

Researcher 1:00:26

Ah, so OK, I think you're 2 minutes are up.

Do you have any final words on the the navigation conundrum?

Ideator-03 1:00:35

No, no, no, no.

Researcher 1:00:36

Ronica OK.

Ideator-03 1:00:37

Congratulations and it's a lot of work.

Researcher 1:00:40

Thanks.

I hope that the yeah, it's not wasted effort.

We'll see if the the doctor is like it, but thanks.

Ideator-03 1:00:45

Like.

Yeah.

Researcher 1:00:50

I'll. I'll.

I'll send you a link to the the the finished game and get to give you credit and all that good stuff  
I'll.

And if I if I get a good grade, I'll.

Ideator-03 1:00:55

Yeah.

Researcher 1:00:57

I'll send you a bottle of tequila or something.

I don't know what you guys drinking Colombia.

Ideator-03 1:01:02

Yeah.

Yeah, as we do.

Researcher 1:01:05

Alright man.

Ideator-02 1:01:06

I Sierra, I'm wrong.

Ideator-03 1:01:07

OK.

See you guys have a great day.

Researcher 1:01:10

I, Erica bye.

Ideator-03 1:01:12

I've got.

Researcher 1:01:17

OK.

Ideator-02 1:01:17

OK, no.

Ideator-03 forlod mødet

Researcher 1:01:18

So we'll we'll let's continue in English just for the the the transcript.

Ideator-02 1:01:21

Yes, the.

Researcher 1:01:23

So what you missed by being tardy is, uh, no, that's my.

Ideator-02 1:01:28

Are you?

Researcher 1:01:33

I really appreciate your time and effort.

So states activity states.

So as I mentioned before, this is just vanilla.

This is just I can't right?

That's just something that is there to look to populate the world look good.

Why does actually?

Interesting is the roads that kind of drain the activities and that you can then follow to their other activities and then the this kind of pathway.

I'm actually.

I'm what I'm gonna do is I'm gonna extend the pathway into the center to make it a little more obvious.

And then I'm gonna move the icon over here, right?

Ideator-02 1:02:11

Young, young.

Researcher 1:02:15

So it's all kind of centered in the middle that also.

So it it becomes more obvious that you wanna follow this path to get to something good.

So the idea is that this is the active element I'm pointing at the screen like you can see me pointing at the screen.

So the problem is because I wanna.

I keep trying to move the mouse cursor over there and it's not working because I'm disabled.

Umm I have a very tough tough life as you can do.

Ideator-02 1:02:39

Umm.

Researcher 1:02:42

So the idea is that this this graphic is gonna like spin or something, right?

It's just it's gonna rotate on its Y axis just to in the Omate and Bob up and down.

Maybe just to indicate this is where it's at, right?

This is an active element.

This is something that you can interact with further more.

I did these particles effects for two reasons.

One is, since we're in a 3D environment.

You might be behind something.

As you can see on the screen here we are behind the house, but you can still see the particles, right?

So the user knows ohh there was a party over there.

Let's go check it out.

Ideator-02 1:03:24

Yeah.

Researcher 1:03:25

There are two parties, in fact.

There's a party here and there's a party here.

But this party is jumping and this party, while it's still going, it's kind of winding down as you can see, the particles are slower and there are fewer and far between.

They still reach the all the way up, so you can still see them when you're behind like a house or whatever, but there's a visual difference between them and what I wanted to convey with the visual difference is that this is untouched and this has been activated at least once, but can still be activated.

I don't know if that works.

But it was kind of what I was the only thing I could think of.

Ideator-03.

She said that she would like like an additional kind of visual indicator like that.

Maybe the color is different?

Like maybe this is white and this is white and this is green maybe or something just to indicate that there is gonna get the difference, but I don't know if there's a more intuitive way to differentiate an activity that is active and executed and and activity that is active but has yet to be executed.

Ideator-02 1:04:36

I think if it's executed maybe it should move to indicate that something has happened to it in some way.

Researcher 1:04:45

OK, so like couldn't like continuously move or or or or or move in space like uh.

Ideator-02 1:04:49

Yeah.

Yeah, but then it didn't get that.

No, just just where it is, just where it is.

Maybe you know turn, spin or something like that's been around to indicate that something is going on, cause then you know the difference between it's a static thing that's ready to start and then you have this thing that is moving because you know it's ongoing.

But that's not, I guess, that's not exactly what you're asking, because you have it.

It's all we also need to indicate it's ready.

It has moved to been activated once and it's ready to be activated again, right?

Researcher 1:05:21

Yeah, that's that's the the.

It's still kind of the the it's it can still activate, but it hasn't activated yet, right?

And I don't know what the the best metaphor there is.

Right.

Because I guess the metaphor of it being kind of pristine and untouched is kind of cool or kind of comes across that, you know it's it's and the particles that is kind of like shiny uh.

And uh.

So.

Ideator-02 1:05:55

I was actually thinking for that one Researcher.

Now they'll look at it.

Maybe it makes more sense to have it like a a beam of light on it to indicate to indicate.

Researcher 1:06:04

Yep.

Ideator-02 1:06:05

Ohh, look over here there's something.

And then maybe there's some, you know, some God race around the like.

Ohh, you want to go and touch it?

That would also change it from what you have on on the right.

Researcher 1:06:14

Yep.

Ideator-02 1:06:17

So they actually look different.

Researcher 1:06:19

Yeah.

Ideator-02 1:06:22

Could be an idea?



Researcher 1:06:23

Uh, OK.

Yes. Uh.

Yep, what I could do is I could I could.

Ideator-02 1:06:29

To like.

Researcher 1:06:30

I could like just make more particles and I can reverse the direction and speed, so it's essentially just like you God rather.

Ideator-02 1:06:38

Or what if you took a like a a big cylinder and you gave it an alpha value?

Researcher 1:06:46

Ohh right.

Ideator-02 1:06:47

And get made it white.

Researcher 1:06:47

So it's a, yeah, I guess.

Ideator-02 1:06:49

I don't know.

Researcher 1:06:51

Yeah, sure.

If you wanted not stress your GPU to the limit, you could do that fine.

Ideator-02 1:06:56

What?

Researcher 1:07:00

Yeah, you can totally do that.

Yeah, that's good idea.

I'm just.

Ideator-02 1:07:03

So it looks like there's a big UFO up there.

Researcher 1:07:03

I I'm I'm.

Ideator-02 1:07:05

You know it's not.

Researcher 1:07:05

Yeah.

Whoa, look.

OK.

So, OK, so God raise on the untouched particle.

And then I'm sorry, the untouched activity and then keep the what do we do with this then do we keep like the keep the the discrete part, the the kind of the the less intrusive particles or do you replace it with something uh, what we're doing that has been activated but can be activated again?

Ideator-02 1:07:27

Yeah.

So that one just in so wins.

Yeah.

Then I think we can actually use those particles you have on the other one, and maybe it should start.

It should move a bit.

You know, maybe turn around itself just slowly.

Uh, you know, so it indicates something then.

Researcher 1:07:45

Yeah.

Ideator-02 1:07:46

Oh God.

Race because why have it not?

Then you already know it's a thing and you, you know.

Researcher 1:07:52

What about the the, the, the this guy over here?

Is he animated?

Is he turning around or is he static when before he he?

Ideator-02 1:07:59

I think he should just so he's he's pristine, right?

So he should slowly, you know, it's like going into church and seeing those things up there, you know, the chalice or whatever, have you.

Researcher 1:08:07

Yep.

Ideator-02 1:08:09

It's like, Oh my God, it's holy.

But when we in the video game so we can also turn a little bit, you know to to indicate it's not dead, it's a liar.

Researcher 1:08:14

Yeah.

Focus on this.

So this rotates slowly.

How?

How quick?

What does this do to see rotate fast?

Does he jump up and down?

Does he?

What do you do?

What do you what?

What's the difference between him and him?

Wrote like animation ones.

Ideator-02 1:08:29

Maybe you should pop be bopping.

You know a bit.

Researcher 1:08:33

OK.

Ideator-02 1:08:34

Then there was bought was a part of now.

Researcher 1:08:34

But so OK, so this guy is slowly turning within this kind of God ray, and this guy is, uh, has a particle right?

Instead, and is is is slowly kind of bobbing up and down.

Ideator-02 1:08:49

Yeah.

Because what I'm thinking is I I would I assume and that's because it's been a while, but the one the gold coin, when you tap it then it would become the same state then as a potion, right?

Researcher 1:09:02

Exactly right, yes.

Ideator-02 1:09:03

Good.

So we need to make sure that the transition is obvious to people. Right.

Researcher 1:09:07

Umm OK.

Ideator-02 1:09:08

Uh, that's why I think it makes sense to change like then the God rate disappears and then you know it starts shining and starts bobbing instead.

So you can see it went from this to boring.

You know, it makes like a bounce effect cause you you started it and then sparkles shoots out and.

Researcher 1:09:22

OK, so it makes a big bounce when it's activated for the first time to go like wee and then it kind of like slowly kind of loses its balance and kind of just starts popping right.

Ideator-02 1:09:30

Yeah.

Researcher 1:09:31

So there's they, they do the same animation, but this one does a big one once and this one.

Then just kind of settles into a into a kind of a slow up and down and my work.

Ideator-02 1:09:43

Something like that, yeah, yeah.

Researcher 1:09:44

Yeah, play around that.

So.

So that's those are included and yet to activate and activated activities now.

Excluded activities.

I think I'm just gonna.

I will make.

They're gonna be like probably static and maybe transparent or maybe removed entirely from the from the game.

Right.

Because the idea, the whole idea is that that like excluded activities don't have any impact on the process, right then any.

Ideator-02 1:10:22

Until.

Researcher 1:10:24

Yeah.

When when they're included, then they're they're they're they're active and and any rules that they have assigned to them yet also get activated.

And when you exclude and the process.

Sorry, when you exclude an activity from the process, then any rules that it has either outgoing or ingoing or like taking out it's it's essentially just like it never existed.

Umm so so.

But I don't know if there's merit in keeping it around like just like super with like an opacity of 0.1.

Ideator-02 1:10:55

What?

Researcher 1:10:56

Or do you?

Ideator-02 1:10:56

Thank you.

Researcher 1:10:57

Or do you complete your movement?

Ideator-02 1:10:59

I think you should keep it in because it's important for me to understand the workflows even if it's included excluded and need to know it exists, right.

Researcher 1:11:06

Right.

OK. OK.

Ideator-02 1:11:06

You understand how it works, but since we just agreed, you know that the active ones have a light source and all of that, that is very obvious everywhere we remove that and make it static.

Researcher 1:11:13

Yep.

OK.

Do we make it opaque or transparent?

Ideator-02 1:11:20

Umm.

I'm not sure.

Researcher 1:11:27

Think about that I after when out for just like 30 seconds.

I'll be right back.

Ideator-02 1:11:30

Sure.

Researcher 1:11:31

You you have a, you have a good thing.

Ideator-02 1:11:32

I don't think.

Researcher 1:12:40

Hola.

Ideator-02 1:12:42

Hola.

Researcher 1:12:43

Did you reach a conclusion?

Ideator-02 1:12:47

Think that?

So we agreed there is a difference between a an activity being excluded and disabled, right?

Researcher 1:12:57

Yes, very important to be very important difference in that disabled activities are still in the process and rules still apply.

Ideator-02 1:12:58

But yeah, exactly.

You hmm.



Researcher 1:13:06

Exclusive activities are God.

Ideator-02 1:13:09

Yeah.

So if we farther just thinking so we can't, we can't kind of have to think about the disabled one as well because you know the enabled one we give God lights and everything.

So the disabled one shouldn't have that.

Researcher 1:13:23

Yeah.

Ideator-02 1:13:24

But it's just still exist there, so the this the excluded one should we need to know it's there but we shouldn't care about it until then.

So yes, throw a passenger on it.

Researcher 1:13:35

Transparency.

Ideator-02 1:13:36

A lot.

A lot of it.

Researcher 1:13:39

Opacity is is when you can, when you can't, can't see through it and and transparency is when you can't see.

You mean opacity or transparency?

Ideator-02 1:13:48

Ship.

Change the alpha value.

Ohh.

Researcher 1:13:54

Up or down?

Ideator-02 1:13:56

Down.

Researcher 1:13:58

Alright, wait now.

Alright man, cool.

That sounds like a good idea.

OK, so as and then as as you probably realized, yes, if it's shrouded in fog and mystery, it is disabled.

Ideator-02 1:14:08

Umm.

Researcher 1:14:12

I'm thinking what do we?

My intuition is that we also kind of maybe the button is do we remove the button the the active element like when something is disabled?

Ideator-02 1:14:24

Yes.

Researcher 1:14:24

Should still be able to see it, or do we just kind of keep the the the kind of mood graphic and remove the the the icon?

Ideator-02 1:14:33

I mean, it's not. It's yeah.

So I mean.

If you look at good old user experience rule sets, you always need to inform the users of what they can and cannot do so they don't get confused and I don't know break the laptops or something like that.

You know, the last the last thing I mean.

Researcher 1:14:50

Yeah.

Ideator-02 1:14:52

But the point is that if you want to indicate you know you can't do anything here, and obvious way of doing that is I'm talking in other terms is disabled the button, not nothing about the activity that is disabled, but from your perspective I would disable the button if you're not.

If you can't use it right, I would do that by making it grayish and tone down the obesity.

Yeah, not transparency, but opacity.

Researcher 1:15:17

Uh, well, OK.

So essentially we're doing the the same thing with that we're doing with the excluded.

We're we're we're toning down the opacity making it stop animate essentially it's there, but it's it's kind of like the ghost of itself.

Ideator-02 1:15:35

Yeah.

Researcher 1:15:35

Uh, so the difference visually between then disabled activity and a excluded activity is that the disabled activity is shrouded in fog and the flu activity is not.

In both cases, the the kind of little skinny icon is static and transparent.

Ideator-02 1:15:59

Yes, because in this case you would say that the since it's disabled right, the button is kind of excluded from the world because you can use it could say.

Researcher 1:16:04

Yeah.

Yeah, yeah, yeah.

Ideator-02 1:16:10

So I I think, yeah.

Researcher 1:16:10

The only?

Yeah.

Continue.

Continue. No.

Ideator-02 1:16:13

No, I think that the the of God was about to say I think that the the issue might be that.

Make it stop work.

Make it stop spinning and no, you know what?

For the these buttons, make it grayscale instead and make it stop spinning.

Researcher 1:16:38

When it's disabled, when's disabled and or excluded, or both.

Ideator-02 1:16:38

So there's no line.

When it's disabled, the button is disabled.

Researcher 1:16:47

OK, so it's grayscale.

Ideator-02 1:16:49

Yeah.

So it's so you know when it's when it's enabled, it has color, it has life.

When it's disabled, it's Gray and boring and practically depth looking.

If it's excluded, it's a ghost over here.

Researcher 1:16:59

And it's.

Ideator-02 1:17:02

That's not part of the world, but it will become part of the world.

Researcher 1:17:04

Yeah.

OK.

And the uh the excluded has is transparent, but the disabled is still solid right?

Ideator-02 1:17:16

Yes.

Researcher 1:17:17

Because it's not a ghost, it's just kind of frozen in time.

Ideator-02 1:17:21

Yeah, it's frozen in time.

Yeah, yeah, yeah.

And life has been sucked out of it for now because it's disabled.

Researcher 1:17:23

Yeah.

Umm.

Ideator-02 1:17:25

And then it'll come back.

Researcher 1:17:27

It's frozen in carbonite.

Ideator-02 1:17:29

Hey, three in June.

Researcher 1:17:30

Hello.

Ohh Judas so low.

Ideator-02 1:17:34

Uh, it's the world with that.

No, and that's on the regular.

Researcher 1:17:37

Thirds.

I do.

We do, we do, we do, we do, we do, we do.

We the do we make the excluded 1 grayscale or does it just transparent?

Ideator-02 1:18:06

I don't know.

That's a good question, I think.

Researcher 1:18:11

If I may, if I may, I think, uh, no.

Ideator-02 1:18:11

To be excluded, yeah.

Researcher 1:18:15

You know what?

No, I'm the scientist.

I'm not supposed to voice an opinion.

Please continue.

Ideator-02 1:18:18

Make it 3.

Make it great.

Because then then what do we do now is that we indicate anything.

Grayscale is not a part.

Is not actively doing anything.

Researcher 1:18:31

Umm.

OK, ohm, so moving on.

So this guy's disabled, right?

Ideator-02 1:18:42

Listening what is with a bit of work.

Researcher 1:18:43

It's guys.

It's not.

Daddy's drunk, dead.

Ideator-02 1:18:47

Ohh.

Researcher 1:18:47

Drunk.

I just got moonwalking goats.

I love it.

So if you recall, so this is we are now covered.

The excluded the included and the disabled because of an unmet condition.

Ideator-02 1:18:59

OK.

Researcher 1:19:03

Ohm, we also have the pending activities and the interesting thing about the pending activities is that they actually have kind of a global effect.

Uh.

Ideator-02 1:19:14

Umm.

Researcher 1:19:15

Which is that it activity is pending the the state of the process is what is called non accepting and there's essentially the only time that it that it like a declarative process is is in the like a state words not allowed to be or in the state word can't complete right?

Ideator-02 1:19:19

Umm.

Umm.

Researcher 1:19:36

Because the DCR process or the declarative process never really completes right?

Cause it's ongoing, right?

Ideator-02 1:19:42



Umm.

Researcher 1:19:42

There's no token moving from A to B, there's just activities and you can either, you know, perform them or not.

You can of course write a process that goes in and like when the when you're reach an activity that like then shuts down the process.

Then you could like maybe just exclude every single process in the in the activity in the process and and do that right?

But the the basic state, the ground state of the of a declarative process is that it it can keep going.

Sorry, I'll shut up now.

Point is just that when something is pending, it is actually kind of a big deal and the way we figured that we could indicate that is by changing the.

Uh, the global state of the light?

Ideator-02 1:20:37

Umm.

Researcher 1:20:38

Previous over there and the way we then draw attention to the pending activities is we light them up.

So that it's no question that there's something about this activity that is not about that activity, big dip right then when you then activate this, the light would disappear and assuming that there are no other pending activities, then the light would return to daylight, right.

Ideator-02 1:21:00

Mm-hmm.

Researcher 1:21:14

But we have one more activity or state which is the milestone activity and that's related to the penny activity.

Ideator-02 1:21:18

That's done.

Yeah, yeah, yeah.

Researcher 1:21:22

So the the milestone activity is actually kind of related to both the is the the effect that we have going on over there with the disabled activity and the effect that we have going on over here with the the pending activities, right.

Because the milestone activity becomes disabled when there is a pending activity that has a milestone motion with it, right?

So what I kind of thought of was to combine the two and just put to differentiate them.

Uh, just change the light.

Essentially, right just to I I guess I could have made it and I guess that's something that you you can weigh in on, right?

So this is a milestone activity which is disabled because that guy over there is still pending and signal to the user because by a the fog is there the little night here would be sound animated and Gray and then it's lit up to differentiate from the normal UM disabled activity over there.

Ideator-02 1:22:25

Disabled.

Researcher 1:22:26

Yeah.

And the reason I just I chose Red was to also differentiate it between from from this.

So it's not like nobody's cause.

It's not pending, but it's not in the pending state, it's it's in the block state.

So I chose different color from the pending lights to differentiate it, but I I chose to light it to kind of create this kind of mental bridge between ohh these guys probably have something to do with each other because they're both both lit.

Ideator-02 1:22:44

Hmm.

I have an idea.

It's a suggestion.

Researcher 1:23:04

Sweet.

Ideator-02 1:23:05

So would it be possible to a workflow to have multiple milestones that depends on different?

Uh, pending activities.

That's possible, right?

Researcher 1:23:22

Yeah, sure.

Ideator-02 1:23:24

So and in that and is it also possible for multiple milestones to depend on the same pending activity?

Researcher 1:23:34

Sure.

Ideator-02 1:23:35

All right.

OK.

I was just thinking maybe if you color code of the light between the the pinning activity and the milestone then you get an immediate 1 to one you see oh, this is red, this is green like this is like.

Researcher 1:23:45

Uh.

Yeah, that makes sense.

Yeah.

Yeah, because and again because we're working in the digital realm, we have basically in the entire spectrum of color to choose from, right.

Ideator-02 1:24:03

Yep.

Researcher 1:24:04

So we don't need to, we don't need to do like a specification like if you're drawing a like a specifying the 2D diagram, then yeah, you you kind of need to to to choose a finite number of codes.

Ideator-02 1:24:11

Nope.

Researcher 1:24:15

Here we can just start like roll a dice and pick a color.

Ideator-02 1:24:19

Yeah. Yep.

Researcher 1:24:20

And I just need to put in some kind of God that makes sure it doesn't look well.

Choose two colors that are like right now.

They don't.

Well, this is slightly less red than this one, but they're still different.

Ideator-02 1:24:31

There will be people who who react like that.

You are I.

I know from experience.

So you're absolutely right.

Researcher 1:24:36

It's yes, we can have that.

They'll they'll come to our house and and throw paint at it.

Ideator-02 1:24:40

You should different shade of blue.

Shut up.

Yeah, I've seen it.

Researcher 1:24:44

Yeah. Alright.

Makes sense.

Also kind of like that I the I I put a I put spotlights on the I put spotlights on the House to kind of lit it.

Light it from beneath, but I also put a point light within it, so the cobblestones around it are are lit up.

Ideator-02 1:24:57

This.

Researcher 1:25:03

So you kind of create this kind of, uh, what you would call it the a framing effect, right?

Ideator-02 1:25:07

It's like a PM file.

Researcher 1:25:10

So just to to, you know and and I guess you could that actually also kind of works with the using different colors that's?

Ideator-02 1:25:18

You just add more color, right, different color sources, maybe start, you know, plotting it out.

So if for example, if it's, if there's pending activity influences free of four milestones, then you should have three or four light sources on the activity, right?

Researcher 1:25:31

Yeah.

Ideator-02 1:25:35

Eat with their own light and when of course, when you when that so that would never go out there like because it's part of the pending activity. Right.

Researcher 1:25:36

The.

Ideator-02 1:25:43

But let's say that you have.

Multiple pending activities toward one milestone right.

Researcher 1:25:54

Yeah.

Ideator-02 1:25:54

Then you could start turning off the lights as they actually become as they become, you know, non pending.

If they start executing and that all that we also solved the thing that we talked about earlier was showing progression, right with multiples.

Researcher 1:26:03

Yeah, that's that's sorry.

Yeah, yeah.

Ideator-02 1:26:10

So we actually saw ohh.

It's like there are three lights.

I need to turn off the three lights because then you know, when that's done.

I know that I've completed this and then there will be sunshine again in the world.

Researcher 1:26:21

So where was the three lights?

Where?

Where did you want to place those?

Ideator-02 1:26:24

I want to put I want to place them all in the activity like you have one light source now or maybe a couple light sources.

Put them next to each other, but make sure they are easy to distinguish from each other.

Researcher 1:26:33

Yeah.

Ideator-02 1:26:39

So you know, if you have a, if we have a pending activity that then impacts 4 milestones that pending activity will basically look like a disco party with the four lights, you know they're going there, you could even.

Researcher 1:26:39

So.

Yeah.

Uh, yeah.

Ideator-02 1:26:53

Out of this is a good idea, but I think it's fun.

You can even have it like disco laser lights that are lighting up and standing like, but that might indicate fun to you.

Don't want to do anything about it, but you know that that that principle of of indicating that. Yeah.

Researcher 1:27:04

Ah, Just Dance.

Yeah.

Yeah, that's a good.

Ideator-02 1:27:07

Yeah.

Uh and you?

Researcher 1:27:09

It's gonna take a hell of a lot of programming, cause you're gonna have to place the light programmatically and and kind of but around the house.

So you can do it.

You can totally do it.

It's, but it's a.

Ideator-02 1:27:20

I mean.

Researcher 1:27:21

It's a good idea and it's very it.

It is very user front.

I think I heard somewhere I read somewhere that you should never use light as like a primary.

Ideator-02 1:27:30

Correct.

Researcher 1:27:30

Uh, kind of way of differentiating.

You could use this to to kind of accent already.

Ideator-02 1:27:34

Correct.



Researcher 1:27:37

Kind of existing iconography.

So, but I guess even if you're, if you if your color blind, you can still see what's going on and and it's not a step down from what we're doing here already, right?

Ideator-02 1:27:43

That's.

You yeah.

Researcher 1:27:50

It's just you, you know that.

Ideator-02 1:27:51

I mean.

If you want to make it accessible for color blind people, then you need something more than only color indicators.

That's just how it is.

Researcher 1:28:00

Yeah, it's.

Ideator-02 1:28:01

That's also why now, for example, meaning games that don't even apps when you have like a yes and the no button is not only red and green, it also says yes or no because we need to help these poor people.

Researcher 1:28:11

Umm yeah.

Yeah.

Really.

Right, you're right.

Right.

Well, well, I'll leave that to the pH, you guys cool.

Ideator-02 1:28:16

Uh.

But that would have, I mean, if I so that would be something you could write in a thesis, write further work, make sure it works for blah blah blah blah.

Researcher 1:28:25

Yeah, yeah.

Definitely.

Ideator-02 1:28:29

Then you're home free.

Researcher 1:28:31

You.

When I when I was talking about the this.

Uh, this kind of Rd sign guy.

You said you had a solution.

I I can't remember if we covered that like how you, uh, how you you trigger that you don't wanna execute the activity but you wanna see the effect and executing the activity.

Ideator-02 1:28:57

Yes, mouse over.

Researcher 1:28:59

Mouse over so it kind of goes press left to do this.

Ideator-02 1:29:01

Yes.

Researcher 1:29:03

Plus, right to do that.

Ideator-02 1:29:06

Well, actually more when you.

So when you mouse over then we get the effect from Ideator-03's image.

Researcher 1:29:14

Ohio.

So just pre yeah goes like pre renders when you mouse over and then you when you mouse away and you go they do and then you move your mouse away and you see that the thing goes away and you're like oh, thank God, I thought I'd I'd broken something and then you you muse over and it's like Oh my God it's back.

Ideator-02 1:29:18

Yes.

Yes, yes.

Researcher 1:29:29

And then you realize ohh, it's just prerendering and then you you relax and then you click it and then you realize that done something permanent.

Ideator-02 1:29:36

Yes, as long as it's only a small area where your mouse.

If you get this effect, not the entire, you know square that you've made for this activity.

Uh, but yeah.

Researcher 1:29:45

Yeah.

Yeah.

So you can just, yeah.

OK, but what?

Your mouse over the would you would you mix the?

Would you remove the OHG?

My God, I can't think of words right now.

Would you remove the road sign completely and just mouse over the the the the axe?

Ideator-02 1:30:04

I don't know what the road sign does.

Researcher 1:30:07

OK.

Well, we'll delete it.

So you mouse over, you, you mouse over the axe and you see you.

You see the the potential results of pressing it in the current state.

It kind of like pre runs the.

The next state pre renders that and then when you move back it kind of bounces back to the previous state.

Ideator-02 1:30:27

Yes, that could be aware of doing it.

It could also be because then when you click it, you activate it, right?

Researcher 1:30:33

Yes.

Ideator-02 1:30:34

And it also gives us more options if we want to with the right click, which is very often either panning or more information.

So you know.

Just an idea, if you if we when we started working on this more we need more options.

We have it available to us.

I really like mouse over interactions.

Uh, because it's very simple.

You get immediate feedback on what you're doing, but you're not committing.

That's a.

That's the most important part.

Mouseover never commits.

Researcher 1:31:03

But.

Ideator-02 1:31:04

And it says what will happen.

Researcher 1:31:05

Umm do.

The one downside of mouse over versus kind of switch on switch off in this environment is that you're limited by your field of view.

Like if I do a mouse over and the thing that is interesting to me happens behind me.

Uh, I need to, like, turn around to see it.

Ideator-02 1:31:30

True.

Researcher 1:31:33

But then I stopped mousing over and then I go back and forth and back and forth and back and forth.

So I'll I'll have to like do like a kind of a 360 while mousing over to see what's.

See what's up?

Is there a clever way to get a think think think a way around that?

Like.

Ideator-02 1:31:57

That's an argument for right clicking it right to get that effect, because then you could have the mouse over shows.

What does left do?

What does right do?

So you learn how to interact with it.

Then you can right click, then you get the effect.

That could be a way of going about that.

Researcher 1:32:12

So and then if you just left click, it'll just make the change permanent.

Ideator-02 1:32:16

Activate.

Yes.

Researcher 1:32:19

Uh, but if you right click them, then it doesn't.

Ideator-02 1:32:23

Yeah.

So it could be like so if you're going to have like a some kind of pub over reflect or whatever, have you that explains it then if it would be activate or what you call it and the right click would then say preview.

Researcher 1:32:37

OK.

Well, that's my weekend.

Spoken for?

Then I'm gonna be in state management there. Ah.

Ideator-02 1:32:42

Yeah.

But there's another issue with this solution.

Researcher 1:32:48

Yeah, yeah.

Ideator-02 1:32:49

Let's say that you right Click to get the preview.

Researcher 1:32:53

Yeah.

Ideator-02 1:32:53

What happens if you walk away but you need but you need to be able to get away from it, right?

Researcher 1:32:56

Ohh.

Ideator-02 1:32:58

Otherwise you won't be able to tell all this stuff that's going on.

Researcher 1:32:59

Yeah, yeah, yeah.

Ideator-02 1:33:01

So that means when you're away, you need to indicate that you are still in preview mode.

Researcher 1:33:05

Yeah, yeah, yeah.

Ideator-02 1:33:08

And.

Researcher 1:33:08

Maybe that was, uh, maybe you, Gray out or, well, I don't know if you can do that, but you you could, like, put a filter on any, any, anything that isn't kind of affected by it.

Or you could like put like preview mode like in text or something.

These are all terrible ideas, but yeah, how do you do?

Ideator-02 1:33:23

You could do that again.

Researcher 1:33:27

Type doesn't timeout after a while ohm.

Ideator-02 1:33:31

Or.

I think what I would do and then you can disagree with it with what we are doing, I would say previewing the activity name and then I can navigate as I want wherever I am, I'm able to cancel the preview.

Alternatively, when you preview an activity, you get to fly up.

Tie.

Then you can see get the overview.

Researcher 1:34:09

That's actually a thing that I was.

I was gonna implement because essentially it's, it's just a matter of putting a a another camera up here and then.

Moving into map mode, whenever you whenever you want to see what the the is, what the consequences of your actions are.

Ideator-02 1:34:29

Yeah.

And I mean from so from this perspective, right, also the mouse over to then get the preview works very well, right.

You can easily imagine you can see how everything changes state and all of that.



Researcher 1:34:38

Yeah, yeah.

You might even ship man.

You might even.

Sorry, I'm I'm swearing on the transcription, but you might even just just skip the middleman and just make like a.

Make the the graph.

Beat up Jesus.

You might be like able to interact with the graph like from here.

So it's simply just two different kind of.

Uh, the views, right?

So you there's like a switch view button or something and you can switch between first person, third person and or Birds Eye or whatever, right?

Ideator-02 1:35:15

Yeah.

Researcher 1:35:15

And then you, but you can still into, you can still.

I mean, it's just not the camera, right?

So any any, any hot spots or whatever that you have active are still active.

Ideator-02 1:35:19

But.

Researcher 1:35:23

You might then need to increase the radius of the hot spot to the entire kind of area, because it's gonna be really difficult to kind of hit the little guy from up here.

But you know, it's it's really easy to hit the the buildings.

Ideator-02 1:35:32

Yeah.

Anything but Researcher with that with that point then if if we're able to see it from up here, why would I ever want to watch it in first person?

Researcher 1:35:44

Uh, it's a good question.

Uh, I think maybe that's the.

Ideator-02 1:35:47

So I think it's not, it's a matter of figuring out which one do you want to be.

You know what's most important here, right? Yeah.

Just an idea.

Researcher 1:35:56

For me, for me, for the user.

Ideator-02 1:35:59

For you, what are you?

What are you finding out?

Should it be first person, can we make it work in the first person view?

That could be very exciting to find out because third person I think is we can use this.

We have now and we're pretty much there now because you have the overview, we can easily see what what Ideator-03 show with the picture, right?

We can see the past.

We can easily see what is active, what is not active.

We got the big light, we got the effect.

The state pretty much then you always have the overview which I mean I personally like uh.

When I'm working with workflows but first person is also interesting I think and the fun way of doing it.

Researcher 1:36:39

I agree, and it might, and maybe there's a cause.

I mean, The thing is it's.

This is gonna.

It's not gonna be any challenge to implement this right, because once all the once all the like all the the ray tracing or whatever used to kind of mark the the things you want to activate all once all that's a little scripts are in place.

It's really just a question of moving hammer up here. You might implement both of them.

Then maybe do like a like a a exported test say hey man, you can.

Uh.

Here's the thing I made.

You can use it like this or you can use it like that.

You know, what?

Do you what do you feel?

Ideator-02 1:37:19

I couldn't even.

I would suggest you one of it and actually get like.

I don't know four different people, two test and first person and two people tested in third person.

Then you know you get you, then you can see what the peel lacks would prefer.

Then you get an extra, literally an extra dimension on it.

Researcher 1:37:38

Hello.

Ohh, so yeah. Yeah, yeah.

Ideator-02 1:37:40

Well, it's just just an idea, but that's not why we're talking.

It's just.

Researcher 1:37:44

So you do like an AB test and and see.

Ideator-02 1:37:46

Basically.

Researcher 1:37:46

I mean, yeah, I don't know.

Yeah.

Yeah, I'll, I'll.

I'll have to.

I'll run it by my my my supervisor and see what he does.

But I mean I'm I'm gonna implement this.

I'm gonna implement the map mode because there's no reason to not do it, and it might open up some interesting avenues of exploration.

Ideator-02 1:37:58

OK.

Right.

Researcher 1:38:06

Excuse me.

Ideator-02 1:38:07

But also yeah have to limit.

You know, we also need to be able to write the thesis.

Researcher 1:38:12

Yeah, yeah, yeah.

No, man, I've got five weeks.

I'm good.

Ideator-02 1:38:15

That's.

I just remember.

Researcher 1:38:18

I I do have.

I do.

I do have to finish this in the weekend, though, so that's gonna be interesting because I'm but I'm armor.

That's probably good.

Ohm, what else?

What else is there?

Ohm. Ohm.

Yeah.

One thing I'd like to get your input on is what I should, how I should run the validation test because the way I'm building this is, uh, in such a way that you can essentially what once the the once the semantics are are down right.

Once we know that well, that just needs to be a big kind of graphic in the middle.

Ideator-02 1:39:00

Umm.

Researcher 1:39:05

There needs to be a little button guy here, but in any case there are these in.

In all cases, there are in these you know, light up possibilities.

And there are UM, box systems and blah blah blah blah blah and there are these kind of grids.

And once that's in place, there's kind of no limit to what asset packs you, right, you could say, well, I would like to bottle a daycare center.

So I'm gonna bottle.

Ideator-02 1:39:35

Hmm.

Researcher 1:39:37

I'm gonna use assets from the daycare center packet or whatever, so it's it's all gonna be kids and swings and roundabouts or I wanna model an AI.

And accidents and emergency ward process.

Well, then, we're just gonna build a hospital and would like a little hospital accents running around, right?

I chose to go this route because it's frankly very easy to find decent assets for fantasy Realms, and I thought it would be a little more interesting to model like to to for people to explore these processes in the fantasy realm.

Then in like a Super Bowl in office, but the downside again, it's that you put that when you once you put that layer of metaphor between you and the the the process that or the user or the process that you're trying to teach them.

Ideator-02 1:40:20

Umm.

Researcher 1:40:34

While it probably.

Adds to the engagement.

I think it's it's.

It's more fun to explore a 3D realm of a like what kind of cookie fantasy characters and explore process through that lens.

Yes.

Then it is to run around an office and click on like ring binders.

So you get.

I think you get more engaging, but you also get the maybe.

Umm.

Well, I don't know, man.

I mean there there is like, some some papers I've read argue for the use of metaphor when explaining concepts.

Uh, but again, maybe that's just when the concept you're trying to explain are really difficult.

You know, like a process of how you a process of how you like probably file a you know the tax form might not necessarily need a bunch of metaphor for you to understand.

Ideator-02 1:41:23

Yes.

Researcher 1:41:37

Maybe all you really need is to see the process and play it out.

So I guess I'm asking.

When I run the validation, should I?

And I think we've talked about this before, but I would, I would like to get some more input on it, but should I use this fantasy realm and find some like fantasy metaphor?

So like instead of you going to.

Excusing like an activity which is symbol symbolized by a book and is symbolized by you scroll and instead of like a something symbolized by a waste paper basket and symbolized by a dump heap.

Or should I go hunting for office assets and, uh, kind of reimplement this using office assets and and and you closer to the the the domain of the process?

Where we're trying to model.

Ideator-02 1:42:36

So I think that putting a fantasy world into it is a way to learn about the States and the way you know this is a good training tool.

Researcher 1:42:36

Pros and cons?

Ideator-02 1:42:50

Maybe to understand to learn what the states looked like cause it's very, you know, clear, I think you want to validate it as a tool.

Researcher 1:42:56

Yeah.

Ideator-02 1:43:00

We can all actually use for working.

You know, you should probably try and get as close as possible to a real situation.

I think the example you brought us for the initial session we had with making a sandwich, I actually think that was really good because then we start then I start seeing, OK, I can I see how I can use this to model real life situations.

I could feel this gets a little too abstract because then if I think I think that, but I don't know.

Researcher 1:43:26

Hmm.

Ideator-02 1:43:31

But I think that if we go with a fantasy world, those people you're using to validate it on will need to learn and and you know the abstractions of the system itself, but also need to spend time trying to figure out, OK, how can I apply this to a real life situation?

Researcher 1:43:50

Umm.

Ideator-02 1:43:50

Maybe that part can be shortened down by using a real example with real assets you know, so you're lead by example, so to speak with something that's relatable to people.

Researcher 1:44:01

Umm.

OK.

Yeah, that's good.

Ideator-02 1:44:05

Unfortunately for based, so I say not unfortunate, I think so based I think both can be used, but they can be used.

It depends on what you want to use it for, right?

So the you know? Yeah.

Researcher 1:44:15



Yeah, I I think maybe maybe the you know for as a teaching tool, this is probably more interesting.

I'm pretty sure that if if I if I gave like a bunch of 20 year olds in a school scenario, the option between learning DCR like the DCR kind of rule set in this world and like you know tax world, then they they'd learn more from this because it's more fun to explore but also then if you're trying to teach a bunch of accountants like a new tax.

Ideator-02 1:44:36

Yeah.

Researcher 1:44:48

Tax.

Uh.

The process?

Yeah, you you probably do better off using that tax assets, right?

Ideator-02 1:44:54

Yeah, because I think it's too, it's too abstract.

Yeah, yeah, yeah, it's it's too far from what?

So I I was just so as a previous consultant who went and did consulting work for different companies.

I found that.

When I was trying to use examples, the more close I could get to their ways of working and their ways of understanding the world, the better results, right?

Researcher 1:45:20

Yeah.

Ideator-02 1:45:22

Umm.

That said, I could still use these sort of different abstractions for people to to to try and prove a point right and learn to my ideas.

Researcher 1:45:35

Right, yeah.

Ideator-02 1:45:37

So I think it depends on where you want to.

If you want to teach people about DCR, this could probably work.

If you want to use DCR as a workflow tool in a company setting or what have you might needs to get at least a little more a little closer.

Researcher 1:45:52

Do you think the uh cause the?

These, uh, these kind of symbols that Ideator-03 has has has has given us UM to to just kind of signal state changes stuff.

It's very color based.

Very natural.

Umm, just from a practical like implementation point of view, if you were to stick to the stick like close to well, I need to model a like some some office process that would require like well office iconography, but it will also require that this kind of world, you know that the player moves around it is an office, right?

And does fog and sunlight and God rays and spotlights and stuff belong in an office?

Ideator-02 1:46:51

I think that's not the biggest problem right now.

I think that can work.

Uh fog is something.

Maybe the only thing that doesn't necessarily fit.

I think the risk can fit fine.

I mean, the forest setting could probably just be building, you know, just go for a building like a floor in a build, a building.

That's it.

Something like that instead of a nice forest which which is bordered by these trees, it could just be a wall.

I think it's fine to have the light.

We also talked about that last time we actually because then it would be the light, the weather or sorry, the day night cycle goes through the windows, right.

I can easily see how that can work.

The natural light, the colors we just discussed works just fine when I was mapping out process flows.

So you use colors as well for my arrows to indicate different flows that were intertwined so people could follow it.

So I wouldn't be that worried about that part to be honest and disabled, we have, we actually talked about another way of indicating disable is just to make it great and not you know make it grayscale and not animated.

Researcher 1:47:49

OK.

Ideator-02 1:47:59

Then we have something we can we can we can use perhaps.

Researcher 1:48:05

Perhaps ran all well.

The good news is that once the the framework is done in shipping mode.

It's too.

Ideator-02 1:48:13

Yeah.

Researcher 1:48:14

What about the assets?

But yeah, it'll be it'll be an interesting weekend.

I think I'm gonna have to call it.

I don't, and I also don't really think I have anything else.

Ideator-02 1:48:23

Sure.

Researcher 1:48:24

I I need help with.

You have talked about symbolism.

We've talked about Umm how to enable kind of, you know the links, talk about the symbols, how to how symbolize unmet conditions and response by reducing the the the fog and the light gradually.

And maybe using umm come on screen element.

Ideator-02 1:48:47

Umm.

Researcher 1:48:50

So yeah, I think we're we're good.

Ohh, we need to do code the damn thing.

I'm gonna kill the the transcripts and.

Ideator-02 1:48:56

It's just.

All right.

Researcher 1:49:02

Ohh, second to talk dance again though.

Ideator-02 1:49:05

Do up test unit causing.

Researcher 1:49:07

Better, no.

Colonial at the the the gate was still let me see.

Ideator-02 1:49:17

No fina. I.e.

Researcher 1:49:19

And time and say like English.

Ideator-02 1:49:21

Right.

\subsubsection{Ideation Session 5}

00:00:02 Ideator-05

What I would ask myself is.

00:00:05 Ideator-05

Right now, how do you make sense?

00:00:08 Ideator-05

Of it this year.

00:00:10 Ideator-05

That is, that is a question that I would need to answer.

00:00:15 Ideator-05

And the way I.

00:00:18 Ideator-05

The way it makes sense of a the CR depends on whether this DCR is for execute. If it is in a simulation mode or is not simulation mode, right, if it is in simulation mode, no. Well yeah, if it's in simulation mode I.

00:00:37 Ideator-05

I will basically look at the.

00:00:41 Ideator-05

Derived property of is enabled, so that's the. I would direct my attention to.

00:00:55 Ideator-05

To the visual clue.

00:00:57 Ideator-05

That tells me whether an event is enabled or not.

00:01:06 Ideator-05

If I don't have that.

00:01:09 Ideator-05

That's basically what happens when I am in the.

00:01:14 Ideator-05

At the level of.

00:01:18 Ideator-05

The modeler then I need to compute manually that is enabled.

00:01:28 Ideator-05

Takes me considerably more time because I need to explore the whole graph.

00:01:37 Ideator-05

And explore all for each of the for each of the nodes all the relations so.

00:01:44 Ideator-05

So I think the most important, the most important thing to me for a simulation mode is really to be able to make sense of what activity is.

00:01:57 Ideator-05

Enabled or not?

00:01:59 Ideator-05

Then the next thing that happens is when I'm executing the model, I would like to know what are the consequences the the consequences of.

00:02:09 Ideator-05

Of a given execution. So if like I ask myself if I execute.

00:02:18 Ideator-05

Cute a what would it happen?

00:02:31 Ideator-05

Because I know that I can execute a for the for the because of have the enabled.

00:02:38 Ideator-05

But I can also ask.

00:02:42 Ideator-05

When can I execute B?

00:02:53 Ideator-05

Provided that like well, this is immediate in the case that this is already signal with a visual clue, but it can be something in in, in in in the future. So like to know well I have this simulation model I would like to.

00:03:11 Ideator-05

Or like to reach that goal and this goal I'm in, I'm in a state in which I not, I cannot really execute it right now. So how do I get there? These are kind of the the two questions. I am mostly interested when I'm doing simulations in this year across and these are the kind.

00:03:30 Ideator-05

Of things that I would like to.

00:03:32 Ideator-05

You have help.

00:03:33 Ideator-05

On a three-dimensional model, I guess.

00:03:39 Ideator-05

I guess to me.

00:03:43 Ideator-05

I'm much more.

00:03:46 Ideator-05

Gold driven when I'm reading a graph then exploratory to be honest, but but not a.

00:03:56 Ideator-05

Not not goal driven towards everything.

00:04:00 Ideator-05

Just gold driven on a surrounded.

00:04:04 Ideator-05

So. So in this case B is somewhere in the middle and then I am between A and. Then there are a bunch of other activities in between that my influence might be. So I I'm interested in all the activities that somehow.

00:04:26 Ideator-05

Are are affecting.

00:04:35 Ideator-05

Are affecting me. So like if I have seen here.

00:04:40 Ideator-05

It's not really something that I'm very much considering, but in the but anything that is related to it I need.

00:04:50

OK.

00:04:53 Ideator-05

And for this thing.

00:04:54 Ideator-05

A2 dimensional representation is pretty good.

00:04:58 Ideator-05

Because I see the network of dependencies.

00:05:05 Ideator-05

But it also limits me because I might have.

00:05:09 Ideator-05

More possibilities of doing something in safe, for instance.

00:05:15 Ideator-05

That I I never really considered because I'm very gold driven.

00:05:21 Ideator-05

For another type of user for another case worker, then you would think well, this is completely legitimate. I'll do this and then later I move something, do something else.

00:05:35 Ideator-05

Uh now so.

00:05:41 Ideator-05

So for me, yeah, for for me enabled Ness.

00:05:45 Ideator-05

Effects. And then the question is.

00:05:48 Ideator-05

Enable Asia drive property.

00:05:52 Ideator-05

That is composed by inclusion, pending, executing and not disabled. What?

00:06:02 Ideator-05

Are good metaphors for that. That's what you want me to do, to go? Or where do you want me to go?

00:06:10 Researcher

I would like you to.

00:06:16 Researcher



Because you're saying you're very goal driven and I'm thinking so if you're running in like in a simulation, that's that's reasonably.

00:06:27 Researcher

Easy, right? You click on something, you see the immediate results you might implement like a pre visualization. So if you mouse over then you see the immediate result, but you don't execute it so.

00:06:40 Researcher

You have time.

00:06:40 Researcher

To pull back if you if you don't.

00:06:44 Researcher

If you don't want to do it.

00:06:47 Researcher

I guess if you're really fancy, you could also incorporate history, so you have the option to undo what you did and step back. Or you could if you can't undo it, then maybe at least you can.

00:06:54 Ideator-05

Yeah, that would be nice, yes.

00:06:58 Researcher

Replay what you did and kind of step backwards and forwards.

00:07:06 Researcher

Are you is? Is it relevant for the user?

00:07:09 Researcher

To know what happens not.

00:07:11 Researcher

In the immediate future, but.

00:07:12 Researcher

Way down the line, how? How important is the?

00:07:16 Researcher

The the overviews the the clear the context right, because you're just seeing a small percentage, a little area of your immediate surroundings, you're exploring your your street.

00:07:30 Researcher

But is.

00:07:35 Researcher

Is it important for you to know every single St. in your city?

00:07:39 Researcher

Or is that just unnecessary clutter or might it be useful to be?

00:07:45 Researcher

Able to toggle on and off.

00:07:47 Researcher

Every single St. in your city.

00:07:48 Researcher

And would you need that?

00:07:52 Ideator-05

That's a it's I think it's a good question. So I think I do not need the full path.

00:08:01 Ideator-05

But I need.

00:08:05 Ideator-05

I need some indications that I'm not.

00:08:08 Ideator-05

Going over and over in the same loop, I need some indications of what are the next two or three stages, whether the these two three stages are somehow helping me to come to lingbi.

00:08:26 Ideator-05

But I don't need every single step on the way.

00:08:30 Ideator-05

So somehow.

00:08:33 Ideator-05

I think if if you.

00:08:34 Ideator-05

Give me all the data.

00:08:37 Ideator-05

I get a I get too much data that I would get that that I would get.

00:08:42 Ideator-05

Clutter. So it's like my my attention would go plop.

00:08:48 Ideator-05

Instead, I would like to what are the neighbors, what are like this is what I can do right now. I have all the possibilities and and and this somehow relate to something next and I can query I could say well.

00:09:07 Ideator-05

I could make it very message. Can I? Can I execute B right now? No, you cannot get, you cannot get B now before you have to do A and C. OK, but I'm at D. OK, well then go back.

00:09:25 Ideator-05

Away I'm. I'm providing visual clues for me to know why I.

00:09:30 Ideator-05

Can't do that.

00:09:32 Ideator-05

That's important.

00:09:33 Researcher

So not only you don't need, but you not only need to know if I do this.

00:09:41 Researcher

What reaction would?

00:09:42 Researcher

That have you also need to do?

00:09:45 Researcher

Need to know why can't I.

00:09:46 Researcher

Do this, what do I?

00:09:48 Researcher

Need to to execute for that if I execute.

00:09:51

OK.

00:09:52 Ideator-05

A. Why would it happen, right and when can I execute B? Or why I cannot execute B? So I go back to B and then I see that there has.

00:10:05 Ideator-05

3 padlocks. OK, where do I get?

00:10:07 Ideator-05

This padlocks from.

00:10:09 Ideator-05

Where do I?

00:10:09 Ideator-05

Get the keys from these padlocks.

00:10:14 Ideator-05

I mean they they don't have to.

00:10:16 Ideator-05

I don't need to get all the information right away, but perhaps if I go to B and then I I see that it has three padlocks, then I can ask query, say to the little elder that is next to.

00:10:30 Ideator-05

It where do I?

00:10:31 Ideator-05

Get the keys from from me. Ohh yes.

00:10:36 Ideator-05

You can go to the shrine and then in the shrine there is one and then there is. The other is next to the ocean.

00:10:45 Researcher

Do you need uh? How? How?

00:10:47 Researcher

Many degrees of separation is is relevant to you, right? Let's say that.

00:10:51 Researcher

You you need to.

00:10:54 Researcher

Let's say that.

00:10:54 Researcher

Before you go to, you can activate B. You need to activate C before you can activate C you need to activate D and so there's potentially this very kind of complex network of dependencies. Yeah, so.

00:11:06 Ideator-05

China's not dependencies.

00:11:11 Researcher

Do you need to know what what would be?

00:11:14 Researcher

Kind of more.

00:11:17 Researcher

Intuitive and at least like cognitively taxing for you, would it be to press B or query B?

00:11:28 Researcher

And then see like.

00:11:30 Researcher

1° of separation 2° of separation, 3° of separation.

00:11:34 Researcher

Uh. Or is it better just to mouse over B or query B and say OK well you need to do this. This and this and then go to this, this and this and investigate what you need to do in order to. Cuz if you do that, you do kind of run the risk of going kind of like forgetting why you went into the room in the 1st place, right?

00:11:56 Researcher

And and need to go back and retrace your steps.

00:11:59 Researcher

But on the other.

00:12:00 Researcher

Hand sorry I'm interrupting, but the other hand it might be suddenly you have this spider work of spider web of interconnected restraints that you also can't process. So yeah. What if it's kind of like a, you know?

00:12:16 Researcher

You know Brian Pan or fire?

00:12:17 Researcher

Situation or passed to the court level, what would?

00:12:20 Researcher

What would the the optimal kind of DCR way?

00:12:23 Ideator-05

To do that.

00:12:24 Ideator-05

I think there's there's two different pragmatics there, two different objectives on your simulation analysis mode. So I think when I am exploring, when I'm executing the process, I want to answer these two things and therefore I would basically would like to query.

00:12:47 Ideator-05

Alpha here and then say, well, what's what's happening with alpha? OK, if you have if.

00:12:55 Ideator-05

In order to execute L alpha, you need to consider what's the state of.

00:13:02 Ideator-05

Delta and a A and. Oh my God.

00:13:12 Ideator-05

But if you're if you're able to execute alpha, then the consequence of alpha is that.

00:13:25 Ideator-05

Yes. Then then Sigma.

00:13:30 Ideator-05

Would have would have an impact. I'll basically combine these two things together.

00:13:37 Researcher

And now you're exploring, you know, simulating.

00:13:40 Ideator-05

Yeah. Yeah, right.

00:13:40 Ideator-05

Now I'm just querying what happens with a OK and but, but as you mentioned there is a degree of a chain of dependencies and I think in general I can scope this to two levels of separation. That is because I have milestones. So when I have.

00:14:00 Ideator-05

I don't know. Let's say one because I don't remember which ones I have there.

00:14:04 Ideator-05

Then I have. Let's say I have a milestone here and then this is no sorry, this was a this is a.

00:14:15

And then this is.

00:14:17 Ideator-05

Like this? Then I know that the consequence is for a.

00:14:23 Ideator-05

Or for alpha.

00:14:25 Ideator-05

For that.

00:14:26 Ideator-05

I think it is. They are also related implicitly.

00:14:33 Ideator-05

To 1.

00:14:35 Ideator-05

Just because this is a response.

00:14:37 Researcher

So that that brings an interesting question. You know that because you know the DCL semantics.

00:14:44 Researcher

What if you don't?

00:14:45 Researcher

Know that how can and now it's. It's really interesting how. How could you.

00:14:52 Researcher

Kind of signal that kind of indirect relationship.

00:14:58 Researcher

UM.

00:15:00 Researcher

If you remove the the constraints as.

00:15:03 Researcher

They, if they exist there.

00:15:05 Ideator-05

So if.

00:15:07 Ideator-05

I mean hidden dependencies are dependencies.

00:15:12 Ideator-05

But they're hidden so.

00:15:15 Ideator-05

How do you represent that?

00:15:20 Ideator-05

There is a.

00:15:23 Ideator-05

You can you can use textures and you can use.

00:15:29 Ideator-05

You can use lightning as well, I think. I think when you take a look at the physics of notations, for instance, say you can.

00:15:39 Ideator-05

Let's say you have.

00:15:41 Ideator-05

Bright yellow and dark yellow to the note that this is still yellow.

00:15:47 Ideator-05

It's not as it's not as it's not as immediate, for instance. So for instance, if I if I am here.

00:15:58 Ideator-05

Like what? We're what we're discussing is the implicit dependencies. Yeah. Then you know that. What time?

00:16:04 Ideator-05

Is it 5?

00:16:05 Ideator-05

Minutes. Alright then you know that.

00:16:10 Ideator-05

If you're looking, if you're zooming in and then you're all your attention is in this. You can like the. You can equate the ones that are neighbors but not the ones that are neighbors of neighbors, right? However, you can also point like paint these in different ways.

00:16:30 Ideator-05

And you have a different color, you have a.

00:16:36 Ideator-05

With all the with with all the dependencies, this could be a feature you could implement for instance.

00:16:44 Researcher

Are there any other kind of hidden like hidden dependency patterns in DCL that I should be aware of because milestone related that response milestone is?



00:16:53 Researcher

Pretty obvious, right? There's 123.

00:16:55 Ideator-05

Yeah, but I mean in.

00:16:56 Ideator-05

The moment that you start extending this.

00:17:00 Ideator-05

You know, like, yeah, so because there's also a composition here like you, you can also have a composition of milestones.

00:17:09 Researcher

But, but The thing is then that once you begin.

00:17:15 Researcher

If if every single combination of constraints has its own semantic meaning, you if you need. If you try to communicate that in the visual language you you would have again, you'd need a semantic like meaning for everything. So you, I guess even even though you're communicating.

00:17:33 Researcher

In a 3D kind of.

00:17:35 Researcher

World where you may be working.

00:17:36 Researcher

With light and shadow and stuff.

00:17:38 Researcher

You still need combinations of.

00:17:41 Researcher

Like so, if you have say if you have both a response and a condition relation right you this you you can't make up an entirely third.

00:17:52 Researcher

Visual representation for that I think.

00:17:54 Researcher

You you would.

00:17:55 Researcher

Have to combine the existing representation of the response relation and the condition relation and then leave it to the audience to figure out.

00:18:02 Researcher

The user to figure out what that means.

00:18:03 Ideator-05

I mean, I think the the point here is that.

00:18:08 Ideator-05

You want to want that this.

00:18:13 Ideator-05

That your that your model.

00:18:17 Ideator-05

It's a explorable without overloading, like basically all these things are.

00:18:26 Ideator-05

Putting a lot of increasing cognitive load. Either that by these ones or by this one. So you would like to you would like to show this only.

00:18:34 Ideator-05

When is necessary.

00:18:35 Ideator-05

So only when I.

00:18:38 Ideator-05

I'm pointing to one activity and say execute. Then you like to do to make changes or only when I'm asking querying what's happening. With this I would like to visualize the chain of dependencies.

00:18:54 Researcher

Maybe you could one could implement like a.

00:18:56 Researcher

An explorer mode where you can switch.

00:19:01 Researcher

You can mark.

00:19:03 Researcher

Activities, right, so you say, OK, you.

00:19:04 Researcher

Mark this activity and.

00:19:06 Researcher

It highlights all ingoing and outgoing yeah relations and then you go. That's interesting. It's related to that one. What happens if I activate that one? Then you increase the spider web and then you're like, well, I'm exploring in this direction now. I don't actually need this stuff over here, so I switched.

00:19:22 Researcher

That off and.

00:19:22 Researcher

All these little constraints, they blink.

00:19:24 Researcher

Out and then when you run a simulation.

00:19:27 Researcher

Then you then you only. Then you do that, but only once in the time one at a.

00:19:32 Researcher

Time you're actually exploring.

00:19:33 Researcher

The graph one activation at.

00:19:35 Researcher

A time, right?

00:19:36 Researcher

So you could do exploration as a kind of pre.

00:19:40 Researcher

And you can use the.

00:19:41 Researcher

Exact same kind.

00:19:43 Researcher

Of visual language, it's just a matter of.

00:19:45 Researcher

Of switching activities kind of on and off, yeah.

00:19:50 Ideator-05

And I think I think we discussed a little bit about the nesting and the processes. I think nesting is not really as interesting in here because it's syntactic sugar. What you.

00:20:02 Ideator-05

Would like to see.

00:20:03 Ideator-05

Is only the the real events.

00:20:06 Ideator-05

Because see like.

00:20:09 Ideator-05

Nesting is only used to decrease the number of relations.

00:20:13 Ideator-05

That you have.

00:20:14 Ideator-05

But in here you're talking.

00:20:16 Ideator-05

About about the semantics and how to represent the semantics. But some processes, though it's an interesting question that we didn't cover today.

00:20:27 Researcher

Yeah, I don't know.

00:20:29 Researcher

If I have the time to implement some processes.

00:20:34 Researcher

Just a matter of.

00:20:34 Ideator-05

Workload, I think.

00:20:36 Researcher

Cuz this alone is like.

00:20:39 Researcher

It takes a lot of work to to make.

00:20:40 Researcher

It look good. Oh, done with two minutes there.

00:20:45 Researcher

Get your meeting.

\subsubsection{Ideation Session 6}

00:00:00 Researcher

Quick, this is just a test to make sure.

00:00:02 Researcher

That you can hear that.

00:00:04 Researcher

OK, so super duper quick. The thesis deals with something called declarative process modeling. The difference between declarative process modeling and imperative process modeling is that in an imperative process model you set out.

00:00:20 Researcher

Very specific rules for what the process can do and when, and usually the process moves from a begin state to an end state.

00:00:31 Researcher

Declarative process modeling is a little different. It doesn't. It doesn't define what you can do, it more defines what you cannot do and then it leaves the rest to you. It also means that there are no restrictions unless you put restrictions on it.

00:00:50 Researcher

How often an activity can be executed?

00:00:54 Researcher

So the basic syntax of DCR is that if you imagine that these are two processes, sorry two activities in a process you can have the response constraint which dictates that if one activity executes.

00:01:13 Researcher

It places a responsibility on another activity to respond essentially.

00:01:19 Researcher

If I do a.

00:01:21 Researcher

Then at some point in the.

00:01:22 Researcher

Future I must do B.

00:01:25 Researcher

Conditions are a little different. They dictate that B cannot be allowed to execute until a has executed. OK.

00:01:33 Researcher

So if yes.

00:01:35 Researcher

A happens, then B can happen if A hasn't happened, then B cannot happen.

00:01:40 Researcher

The milestone relation is related to the response relation in that if a activity is in what we call a pending state IE that it has a response responsibility to activate, then if that activity has a milestone relation to 1/3 activity.

00:02:01 Researcher

That activity cannot execute until the pending activity is executed, so an analogy could be you walk into a restaurant and you order a burger that is your in signing activity. The pending activity is then you're receiving your burger cuz you have to do that. Otherwise something has gone terribly wrong with the process.

00:02:22 Researcher

And the milestone the milestone could be the the restaurant closing or the sale closing. This cannot happen until the last customer has gotten.

00:02:34 Ideator-06

This burger OK.

00:02:36 Researcher

There are then the include and exclude activities which essentially removes or inserts activities into the process and the interesting thing about the exclude relation is that if you execute an activity which then imposes an exclusion constraint on another activity, that will effectively.

00:02:56 Researcher

Effectively negate any other rules that this activity imposes on 3rd rules. So in our analogy, if there is an exclusion constraint with the get burger activity.

00:03:11 Researcher

That could be customer runs out the door and is never seen again.

00:03:15 Researcher

If that happens.

00:03:17 Researcher

There's no real point to.

00:03:19 Researcher

Giving him the birth? Yeah. And that then excludes the get burger activity and you can then move on to the milestone activity, right, because the restraining activity has been excluded. So these are the six basic.

00:03:30 Speaker 3

OK.

00:03:35 Researcher

Constraints that you have to play with and.

00:03:37 Researcher

You can do combinations and so on.

00:03:39 Researcher

And so forth and that then results in an activity being in a certain state, it can be not pending or pending depending on whether the constraining can be executed, enabled and disabled. Again milestone is enabled and disabled.

00:03:56 Researcher

And an activity can be included or excluded and then finally there is whether an activity has executed or has not.

00:04:05 Researcher

Executed. Yeah. OK.

00:04:06 Researcher

UM, and if you Remember Me saying an activity can effectively execute again and again and again again, unless there's some kind of restraint, say a self execute constraint on it. That's the equivalent of an untouched plate of sandwiches that hasn't executed or a.

00:04:28 Researcher

A plate of sandwiches that has been touched, but it's unlimited. You can just keep keep eating those sandwiches.

00:04:40 Researcher

Is awfully similar to the rules that.

00:04:46 Researcher

Governed quests and an RPG.

00:04:50 Researcher

Yeah. OK. So I a response activity could be the.

00:04:57 Researcher

Activities that you need to perform in a quest.

00:05:01 Researcher

A milestone is you getting to exit the.

00:05:06 Researcher

Cave after you've completed all your quest items.

00:05:11 Researcher

An enabled or in disabled condition can be a quest that you cannot start until you have.

00:05:19 Researcher

Performed some other quest include and exclude can be joining factions. If you join one faction, it might exclude you from joining another faction and getting a sword versus joining the Barbarians and getting a an X and that's basically.

00:05:40 Researcher

What the idea is?

00:05:42 Researcher

What if we can take something as?

00:05:46 Researcher

That requires a certain amount of pre-existing knowledge like a DCR process model.

00:05:53 Researcher

Abstract away all the symbols like. If I gave you a symbol that said, look, here's an arrow. There's a little dot at the end and an exclamation point. Mm-hmm. You would have no idea what to do with that. Yeah, I would have to spend time.

00:06:06 Researcher

Then Gene you.

00:06:07 Researcher

Would have to.

00:06:07 Researcher

Spend cognitive energy learning DCR graphs before you can even begin to learn the.

00:06:13 Researcher

Process that the DCR graph models so the our idea is can we create a?

00:06:21 Researcher

Open world Game space, which kind of intuitively communicates these rules through not arrows and iconic iconography, but more cause and effect and changes in the game environment. So I've been working with some.

00:06:40 Researcher

UX people and artists to try to come up with some symbolism for this, but I haven't actually talked to anyone with game making experience, which is why my thesis advisor thought.

00:06:49 Ideator-06

OK.

00:06:53 Ideator-06



Of you, OK.

00:06:54 Researcher

And mainly I would like to get your input on the the user interface. How to best?

00:07:03 Researcher

Cuz the actual kind of gameplay mechanics are more or less all already in place. The idea is that you as a player move around this game environment. There are a series of.

00:07:16 Researcher

Of activities you can perform, it is essentially just go there, press on the activity and see what happens IE other activities light up. Other activities are excluded. There's possibly a little cursor.

00:07:24 Ideator-06

OK.

00:07:31 Researcher

That points to.

00:07:32 Researcher

That way, go explore over there, but.

00:07:39 Researcher

I would like to get some input on how to best give the player control in this environment. Considering the this requires a bit of bit of imagination on your part because I don't actually have a game play environment to show you, but based on the gameplay loop that.

00:07:58 Researcher

I've described I you go around, you perform activities, some activities are blocked and some activities open up other activities.

00:08:08 Researcher

What are the pros and cons of of the?

00:08:12 Researcher

The kind of, let's say, normal ways of interacting with such a game system as a gamer myself, I can think of first person which is very point kind of look and click or it could be a.

00:08:31 Researcher

Third person.

00:08:32 Researcher

Where you don't, where you don't need the mouse to look around. So that kind of frees up the mouse, but you then control via the.

00:08:41 Researcher

And which then allows you to kind of click on the activities that you want to activate.

00:08:47 Researcher

Or it could be like an old school RPG. Sorry, an old school. Well, an old school RPG or adventure where you essentially just click and the character walks there and you click and the character, so the clicking is kind of context sensitive or context. Yeah, well sensitive.

00:09:10 Researcher

I guess the question is, given what we want to kind of achieve that we want to to allow these players to kind of move around this environment, what would you do? Essentially, I know that's a big question.

00:09:33 Researcher

What is your experience say with regards to this kind of sort of kind of gameplay moving around an environment clicking on activities because the the the pros of of being in a first person environment, I think is that it's more kind of immersive and you you kind of see?

00:09:55 Researcher

You you can, you can interact with the environment more closely, whereas if you pull back and see it from a third person or a or a bird's eye perspective, it gives you a bigger kind of a better overview of the process or the game environment in general. And it also again frees up the the.

00:10:15 Researcher

The cursor whereas if you go for the first person view then you essentially need a reticle in the center. You point it at an activity. The ray tracer activates it and then you that's that's the limit of your interaction.

00:10:31 Researcher

With the game space.

00:10:34 Researcher

And then I guess you could possibly do like maybe a right click and that would bring up maybe a context menu or something.

00:10:43 Ideator-06

Yeah, I mean like generally these.

00:10:49 Ideator-06

There is no right way of doing this like there is like it's often times either genre or device dependent.

00:10:58 Ideator-06

So depending on like where you expect this thing to actually be executed, it will actually.

00:11:03 Researcher

Well, that's. Yeah, that's a good question cuz I because the the focus of the I guess the, the the end user we expect will be either new, the people who are I guess domain like novice domain experts who need to learn a process an explorer.

00:11:22 Researcher

Process without actually having to learn the DCR graph language or it could be existing.

00:11:30 Researcher

Domain experts that need upskilling, that needs to explore a process that they may be very, very well versed in, but they need to explore it and they maybe there have been changes and they need to explore these changes and see how these changes affect this environment that.

00:11:46 Researcher

You already know. Also seeing is this is.

00:11:49 Researcher

These are the people who are gonna.

00:11:50 Researcher

Be using it. I expect that the.

00:11:55 Researcher

It will be running on.

00:11:57 Researcher

Work desktop PCs cuz I don't expect.

00:12:02 Researcher

People to to go out and invest in a in a 3D setup or a, you know, an Xbox controller if if they they simply it's just simply a business that needs to teach processes to its employees. So to keep kind of the barrier of entry low, it's going to be running on pretty basic.

00:12:24 Researcher

Yeah, work desktops I expect.

00:12:26 Ideator-06

Yeah. So starting from that assumption?

00:12:34 Ideator-06

I think that like the, the only way to make this decision in a scientific manner is actually to play test with the the target audience, which kind of metaphor are they more like comfortable with? Yeah, meaning that.

00:12:48 Speaker 3

Right.

00:12:54 Ideator-06

It's within that context. You can go with first person or third person or like Birds Eye view or whatever you want to call it. I don't think there is a any like I mean within the genre there are examples of all of these. And like with various levels of popularity. So without.

00:13:14 Ideator-06

Like so, there's no clear like standard in the industry. So I I think fair like given that the.

00:13:25 Ideator-06

The audience is very specific and the.

00:13:32 Ideator-06

And the context is the war context. I would argue that it's like the like. There is a necessity for play test like for actually an experiment like to evaluate like which one would actually have the more like the highest impact in terms of like people focusing on the content rather than focusing on the controls.

00:13:53 Speaker 3

Right.

00:13:55 Ideator-06

If I have to make an educated guess, I would imagine that like the point and click type of interface.

00:14:01 Ideator-06

Is probably going to reduce like the focus on the controls and increase the focus on the activities.

00:14:09 Speaker 3

OK.

00:14:11 Ideator-06

But because that's what you want, right? I mean, like, you don't want, like, it's not about the gameplay. It's not about the challenge within the gameplay. It's not about like being able to headshot somebody, like while falling through like the fire.

00:14:24 Researcher

Exactly. We want to reduce the.

00:14:26 Researcher

The the barrier of entry and the cognitive load required to actually get into learning this process.

00:14:29 Speaker 3

Except yet.

00:14:32 Ideator-06

So my educated guess is that like a point and click interface would actually be probably the the one which actually allows you to do that. To be sure 100% because like again target audience is shifting over time. People are used to certain metaphors, people.

00:14:52 Ideator-06

Like a there has been like a.

00:14:56 Ideator-06

Various like very popular games within like the quest kind of like you called them RPG genre, which have like used.

00:15:06 Ideator-06

All of all of these three like interfaces you can think of, like The Elder Scrolls series and the Ring or Baldur's Gate. Three example of these three different interfaces, and like their popularity, might have.

00:15:21 Ideator-06

Changed what people expect, like when they actually get into a game like this. So, but that is a that that is actually something that you can only either with play testing or we try to understand like the how versed in which type of games are.

00:15:41 Ideator-06

People within your target audience, which is also not something I think.

00:15:43 Speaker 3

Yeah, yeah, yeah.

00:15:43 Researcher

Ultimately, I think it would. You're absolutely right. There would need to be some like ABC testing and simply like implementation of all three. See.

00:15:52 Ideator-06

Or a survey.

00:15:52 Speaker 3

What people are?

00:15:53

Yeah. Or server, yeah.

00:15:55 Ideator-06

Where you actually sample the population, the target population, and try to identify like what? What is their level of confidence right with like different kinds of?

00:16:02 Speaker 3

OK.

00:16:06 Researcher

Controls. Yeah, but your educated guess is that.

00:16:10 Researcher

The less focus on the.

00:16:13 Researcher

Controls the better, great.

00:16:14 Ideator-06

Yes, yes. And in that using that principle, I would think that probably the point of click like kind of interface is the one which actually.

00:16:26 Ideator-06

People will be naturally if they work on a laptop and then use their computer like a keyboard and a mouse there would be.

00:16:35 Ideator-06

Familiar with it, even if they don't play games.

00:16:37 Speaker 3

Okey dokey. OK.

00:16:43 Researcher

Great. Another thing I've also kind of been, I wouldn't say struggling and again this is also something that probably is best explored via play testing, but we're dealing with process, the process we're dealing with are gonna be mundane.

00:17:00 Researcher

It's going to be kind of boring stuff.

00:17:03 Researcher

Mundane stuff like.

00:17:07 Researcher

File a report or.

00:17:10 Speaker 3

You know, go, go, go to.

00:17:11 Researcher

A meeting is is the boss. Here is the boss. Not here. So quite mundane things, whereas.

00:17:20 Researcher

Intuitively, to make.

00:17:24 Researcher

To make a a game world interesting.

00:17:29 Researcher

UM.

00:17:31 Researcher

To to promote engagement with the game world, I expect a certain level of of fantasy would be, would be, would, would be a good idea, I guess.

00:17:45 Researcher

A counter argument to that would be the immersion. If the point is to train people in a process that they will be expected to perform in real life.

00:18:01 Researcher

And an argument could be made that it makes more sense to mirror the the game as as much to the real world that they'll be performing the process in with the possible negative consequence that the game might become less interesting.

00:18:20 Researcher

So I guess.

00:18:24 Researcher

What would your recommendation be? Should we skew these the game towards fantasy and metaphor or towards kind of realism and and real world immersion?

00:18:38 Ideator-06

I mean.

00:18:45 Ideator-06

I I don't have the answer but like your.

00:18:51 Ideator-06

You have an objective within the game and that objective is not to be a commercial success or anything which is like a engaging beyond like people being given the tasks to actually perform, like to play, to think we need to move out because probably this place has been booked.

00:19:12 Speaker 3

It's probably right.

00:19:16 Ideator-06

OK, so my point with that is simply like if you add.

00:19:25 Ideator-06

Some levels of metaphor you risk like to fail on the the actual objective of the game, like or. You increase the risk of failure and like people will play the game anyway because they.

00:19:41 Ideator-06

Are tasked to do it right.

00:19:43 Speaker 3

Right.

00:19:43 Ideator-06

And he gets A and.

00:19:49 Ideator-06

Yeah, I just, I don't, I don't see.

00:19:55 Ideator-06

I mean, I'm.

00:19:55 Ideator-06

Not an expert in gamification and serious games, but I would be surprised or I would be worried that like people would have a hard time like relating back to the scenario that they actually need to apply those rules on if you.

00:20:14 Ideator-06

Create any form of like abstraction or metaphor which is not using.

00:20:20 Ideator-06

With like domain text or domain context.

00:20:25 Speaker 3

OK. OK. Correct.

00:20:37 Researcher

Speaking of domain contexts.

00:20:43 Researcher

Another thing I've.

00:20:44 Researcher

I guess we we may already have an answer to that because ultimately.

00:20:51 Researcher

We're thinking about implementing kind of elements to assist the user in this goal, which could be.

00:21:01 Researcher

Explanatory texts. It could be a mini map that can expand so you can see the the process from a a bird's eye perspective is the what would be the optimal way to kind of to to implement this?



00:21:23 Researcher

If we were to go with the yeah, if we were to go to with, like, an FBS situation where the mouse isn't freed up, how would you call up these, these, these other kind of on these other elements? Would it be through keyboard?

00:21:42 Researcher

Shortcuts. Would it be through pressing the escape key and getting access to the menu? Would it be by right clicking the mouse button when you're on the game elements?

00:21:55 Ideator-06

I I don't know my.

00:21:56 Ideator-06

God, this is like.

00:22:00 Ideator-06

Yeah, I yeah, I don't know that there's no right answer for this, right, like. And again, like we get back to the play testing and like so whatever like your own, I mean all of the alternatives that you talked about are.

00:22:11 Researcher

There there, there's no. There's no existing wisdom in the area.

00:22:18 Ideator-06

Like industry standards and.

00:22:22 Ideator-06

I mean it's this is a as a actually not as a game researcher, but like a as a as a person playing games. I don't recall many games using.

00:22:35 Ideator-06

A context menu like on the right click when pointing at things, but maybe people use highlights and then like you can perform actions like on again like it depends from game.

00:22:54 Ideator-06

To game like.

00:22:56 Speaker 3

OK.

00:22:57 Ideator-06

So it's no, I don't think there is. I don't feel there is like a right answer other than like a whatever you're doing, it should be.

00:23:11 Ideator-06

Visible to the user like using keyboard.

00:23:14 Ideator-06

Shortcuts, for instance.

00:23:17 Ideator-06

Like, given the types of user that we're talking about, like they are not like a pro players or like.

00:23:22 Ideator-06

They don't want to optimize their gameplay experience in that they want to perform better than, like than the competition. Keyboard shortcuts like have like they are fairly obscure. They're not like.

00:23:40 Ideator-06

Easily visible like they are very easy to access, but you need to know about them in advance. So like that that would be.

00:23:48 Researcher

Yeah. OK. So your recommendation would be if there is anything put it on the screen, put it where they can, they can see it, OK.

00:23:53 Ideator-06

Yes. Yeah.

00:23:58 Ideator-06

Again, because you're not.

00:24:02 Ideator-06

I mean, this is your this is not Dota, right? I mean, like and even Dota itself will have like components as a user interface. But then like people, pro players will probably go with the shortcuts.

00:24:12 Speaker 3

Yeah. OK. Great. OK.

00:24:23 Researcher

And you.

00:24:25 Researcher

What if?

00:24:28 Researcher

We're going back to the the, the the metaphor versus concrete example.

00:24:39 Researcher

What is there? Is there a way?

00:24:42 Researcher

To do kind of both.

00:24:45 Researcher

Is there a way to create?

00:24:47 Researcher

Or would that be like a fool's errand to try to create a an interesting environment, but to make the the objects that they're interacting with mundane, like let's say, again, let's say that the activity has to do with a.

00:25:08 Researcher

Like destructive activity like you know.

00:25:14 Researcher

Delete a file.

00:25:15 Ideator-06

Or whatever.

00:25:18 Researcher

Would it be like weird to put like a like a like a waste paper basket icon within like a like a cartoonish fantasy setting? Would that be too jarring? Do you think should?

00:25:32 Ideator-06

I mean, you have to like again. I'm. I'm. I'm no like a.

00:25:37 Ideator-06

I'm no game designer like, and. No, no, I'm not a writer, but you have to take into account.

00:25:45 Ideator-06

Aspects such as suspension of disbelief, suspension of disbelief. It's this idea where, like or it's this concept which describes the moment when while playing a game or like consuming any form of narrative or like entertainment, you're accepting the rules of the world you are actually involved in and like.

00:26:06 Ideator-06

Putting a waste paper basket like a in a fantasy scenario.

00:26:11 Ideator-06

Has like the high res.

00:26:14 Ideator-06

To actually break the suspension of disbelief because it breaks the internal rules of the environment you have created in terms of like what you're talking about there, it's like what you're describing is good writing. I mean, you can write.

00:26:28 Ideator-06

Good quests and good scenarios, even with mundane activities, and they would be.

00:26:35 Ideator-06

They could be interesting, but that's not.

00:26:38 Ideator-06

I mean, so it's not a full Ceren like is.

00:26:43 Ideator-06

A craft like that, like people have good skills for. So yeah, there might be able. I wouldn't. I don't see why you shouldn't be able to make interesting stories within an office.

00:26:58 Researcher

Yeah, but again, then you run the risk of.

00:27:02 Researcher

Well, yes you could. You could definitely make good. Yeah. Yeah, yeah, yeah, yeah. I just what I've been worried about is, is if you put too much narrative within a game, which is entirely about learning processes, then that might also end up distracting from the.

00:27:04 Ideator-06

I mean, think about the office.

00:27:19 Ideator-06

Yeah, but you need.

00:27:22 Ideator-06

Yes, you need like not a motivation to play because they have a motivation to play, but some sort of engagement leverage. It could be like within the gameplay or it could be within the context like so. It's either the gameplay having like a.

00:27:40 Ideator-06

Some puzzle elements like. I mean there are a lot of like narrative mobile games which have like this like very stark separation between.

00:27:48 Ideator-06

The narrative component and the fact that you actually are unlocking narrative opponent components through by playing like simple puzzles. So people are either drawn by like the narrative component and unlocking the story or unlocking the rules in this case, or by the the fun part of like playing the puzzles.

00:28:08 Ideator-06

And this is and they are completely extrinsic like to each other like so.

00:28:13 Ideator-06

And it doesn't break the suspension of disbelief like.

00:28:17 Ideator-06

So you have to decide whether it's the like. You can do both if you're good as a designer, but like you have to decide which one is the leverage you're using to actually like.

00:28:32 Ideator-06

Create an environment which is more engaging than just reading those rules on paper.

00:28:36 Speaker 3

Yeah, got you.

00:28:39 Ideator-06

Because otherwise it becomes just a cumbersome.

00:28:43 Ideator-06

Way of reading the rules on the paper.

00:28:45 Researcher

Yeah, exactly right.

00:28:47 Researcher

I think that's it.

00:28:48 Ideator-06

OK, I hope I've been help.