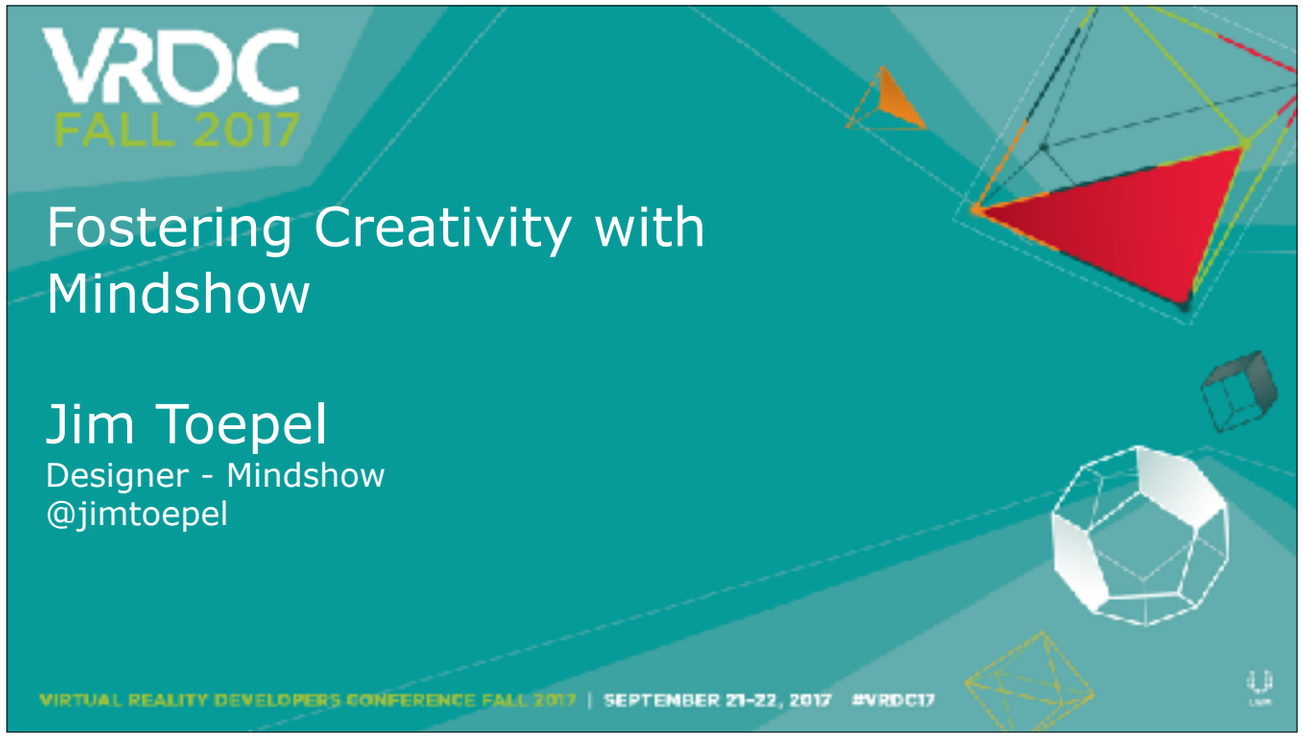
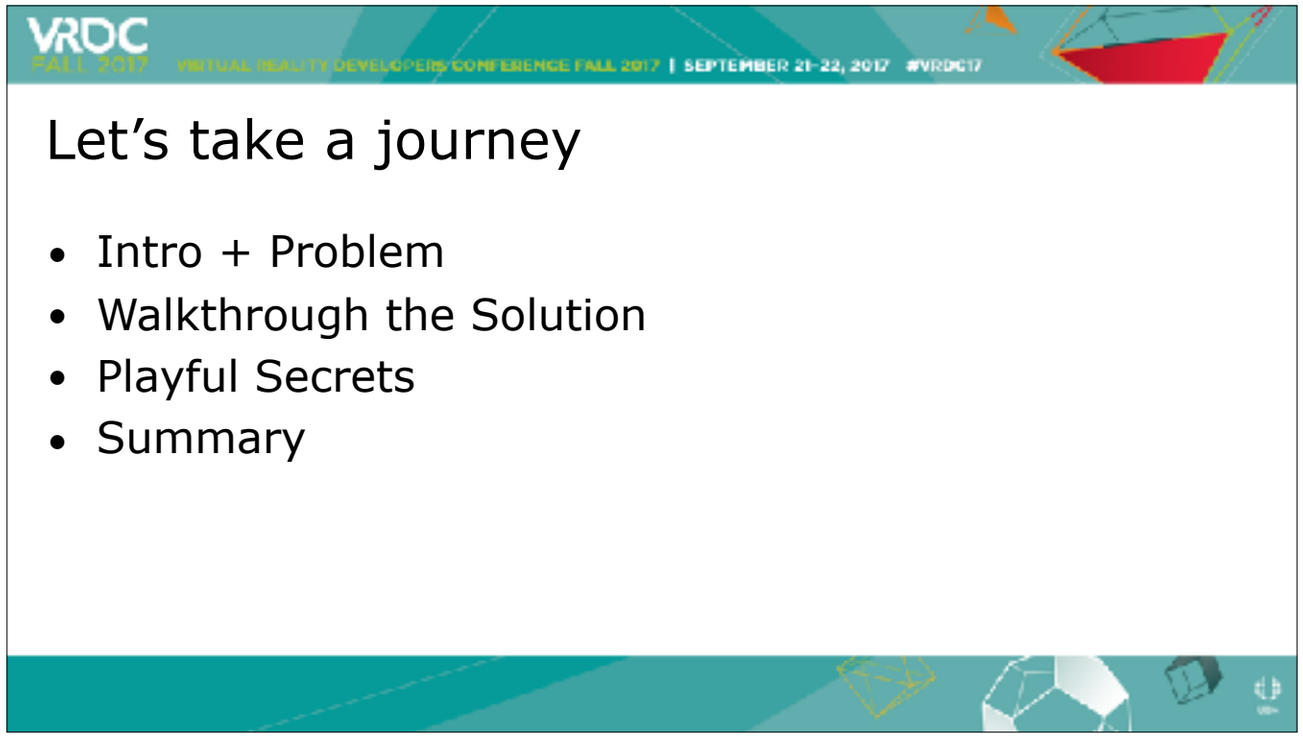


Hi, I'm Jim Toepel, the senior reporting member of the design commune at Mindshow. I’m going to talk about some of the things we’ve learned over the past year while building Mindshow.

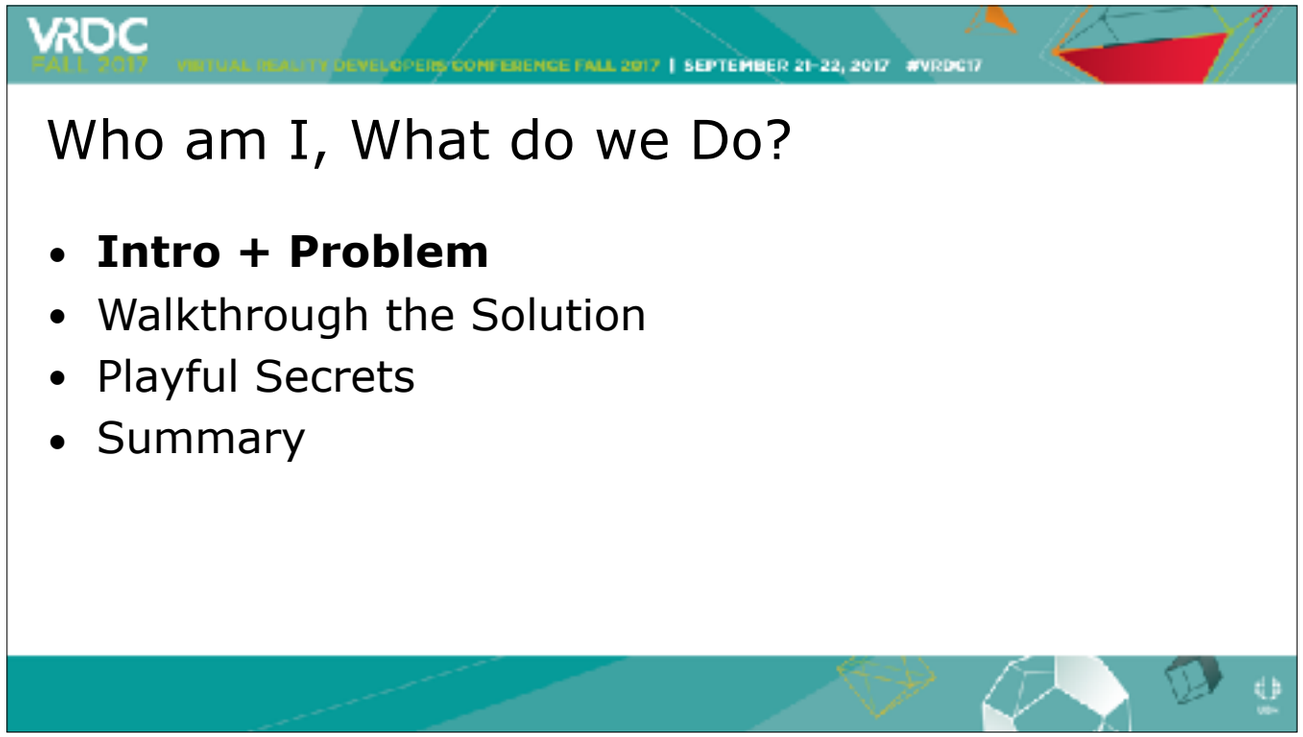
Before I begin I wanted to give a quick shout out to the rest of the design team; Luke, Sydney, Jeff, Arya, Kevin for helping with this effort.

Collectively, along with the artists, programmers and leaders at Mindshow, we believe that there is latent creative potential in everyone and are determined to use VR to make a product that unlocks that creativity in all of us.



Today I'm going to walk you through the

- first 10 minutes of Mindshow and
- Leave you with a bunch of takeaways you can apply to your VR/AR application to help make it more powerfully playful.



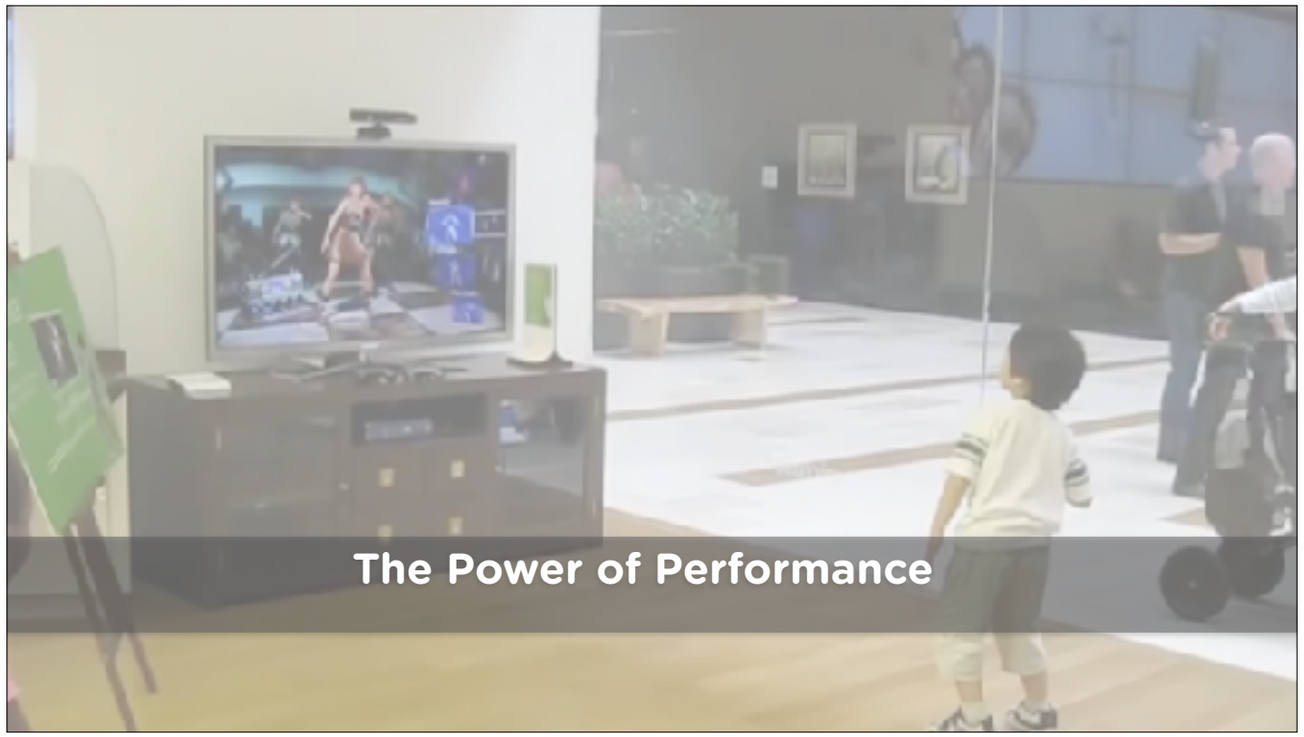
But First: A little about me and our problem set for those who are seeing Mindshow for the first time.

Power of Social Creativity

I guess it all started out in school when I was a drama nerd who made almost all of my life-long friendships around rehearsal and Mario Kart and AP calculus. (Joke)

On reflection, it wasn't about the quality of the show. It was about the process of creating it. We weren't going to broadway just like not everyone posting to youtube is going to get that sweet million views. We did it because it felt great to put something out into the world.

I've always enjoyed creating with my friends and **have been seeking a way to give that magical gif**t to others ever since.



After a brief stint in the space shuttle business with Boeing, I cut my design teeth at Harmonix where I worked Rock Band Hardware, the Dance Central sequels and a game adaptation of Disney’s Fantasia. Almost all of my work was rooted in providing the player with the feeling of having created a musical performance.

We specialized in celebrating the process and experience of “creative performance” either through fake plastic instruments or through gestural cues on the Kinect. I’ve been working on weird body interfaces for a long time now.

And overall, I’d say that I’m driven by the smiles of people when they finishing doing a thing that they thought they couldn’t.

Rihanna’s Distrubia is the song that this kid is currently crushing, btw.

That's where Mindshow comes in.

I was first introduced to the company when I had a chance to try the proof of concept tech demo (Cop v Donut)

The scene is set on a city rooftop.

Suddenly the door busts open, a donut rolls onto the roof, police officer close behind and they draw their weapons.

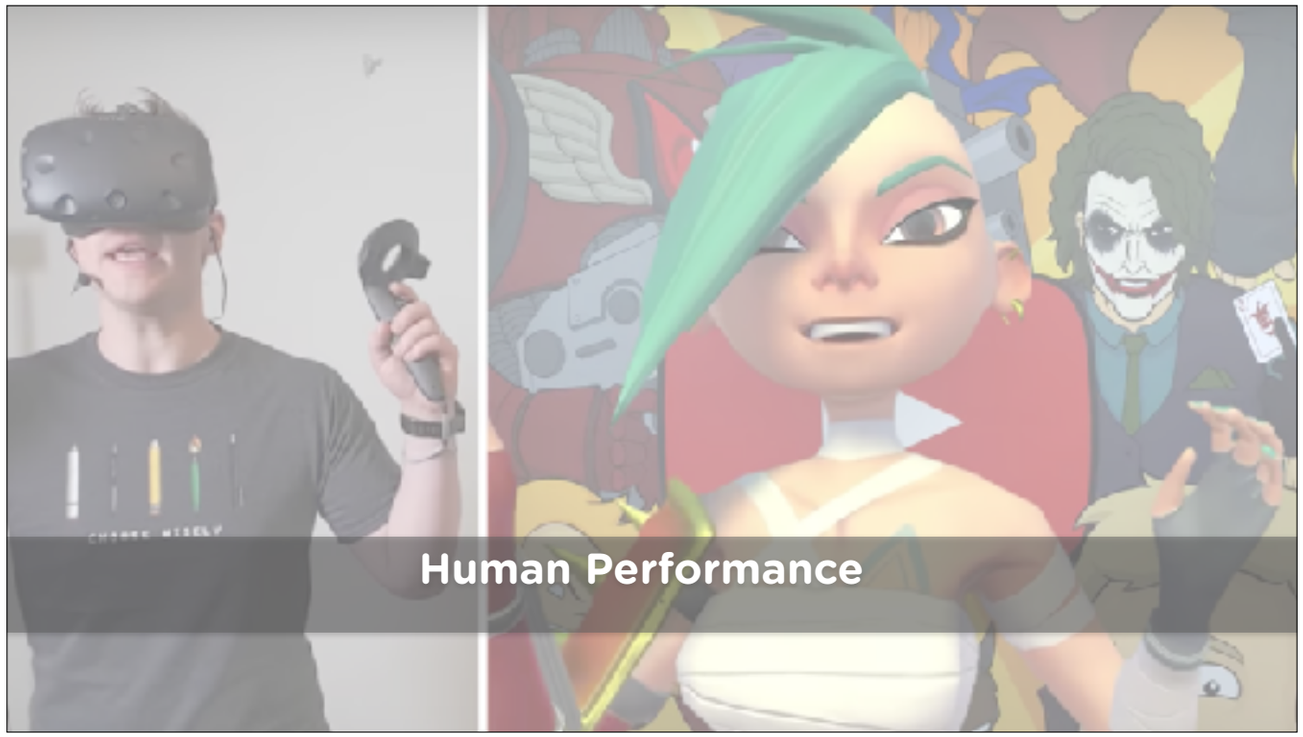
Then time stops.

I was able to walk around inside the scene and change it. I stuck my head in the donut. I grabbed the officer’s gun and knocked a few bricks off the rooftop for good measure. I had completely upended the context of the scene.

This was a revelation to me. The focus wasn’t on the output of the scene, (that’s work) but rather on my experience bringing it to life. I had found kindred souls once again.

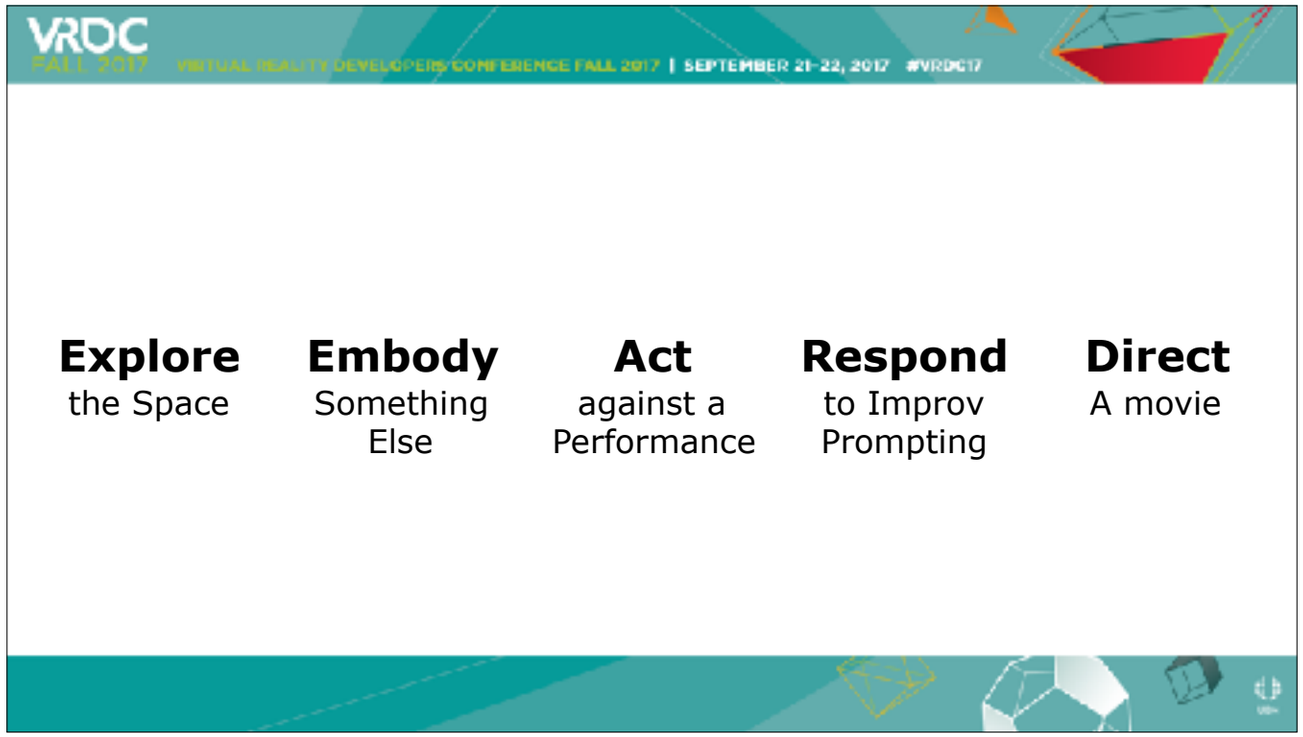
This was play. I was the unseen animator in the Looney Tunes classic Duck Amok.

I knew this was the project I've been wanting to work on since my early days with Kinect.



Using the 3 points provided by the headset + controllers PLUS some real good IK, Mindshow allows you to act out entire scenes recursively with yourself playing every part. It is a playground for human performance and digitizes aspects of verbal and gestural play that we tend to downplay as game designers because they aren’t easily systematized.

Participation requires a substantial ask on the part of the player...



In order to mindshow good, we need you do

- [P]**Explore** the Space around you, taking advantage of the room scale for performances. The best shows are made by people who are not standing still.
- [P]Confidently **embody** another character/entity/alien/dog/cat thing. Being someone else is hard for most people
- [P]We need you to **act** against pre-recorded performances. Being in a play is tuff enough, being in a play where you are all of the parts? Tougher
- [P]The only way to pull this off is through an understanding of improv call and **response**, the ability to read a room and roll with the punches
- [P]Finally, people need to be able to build a sense of framing and blocking so they can **direct** a creation they can own

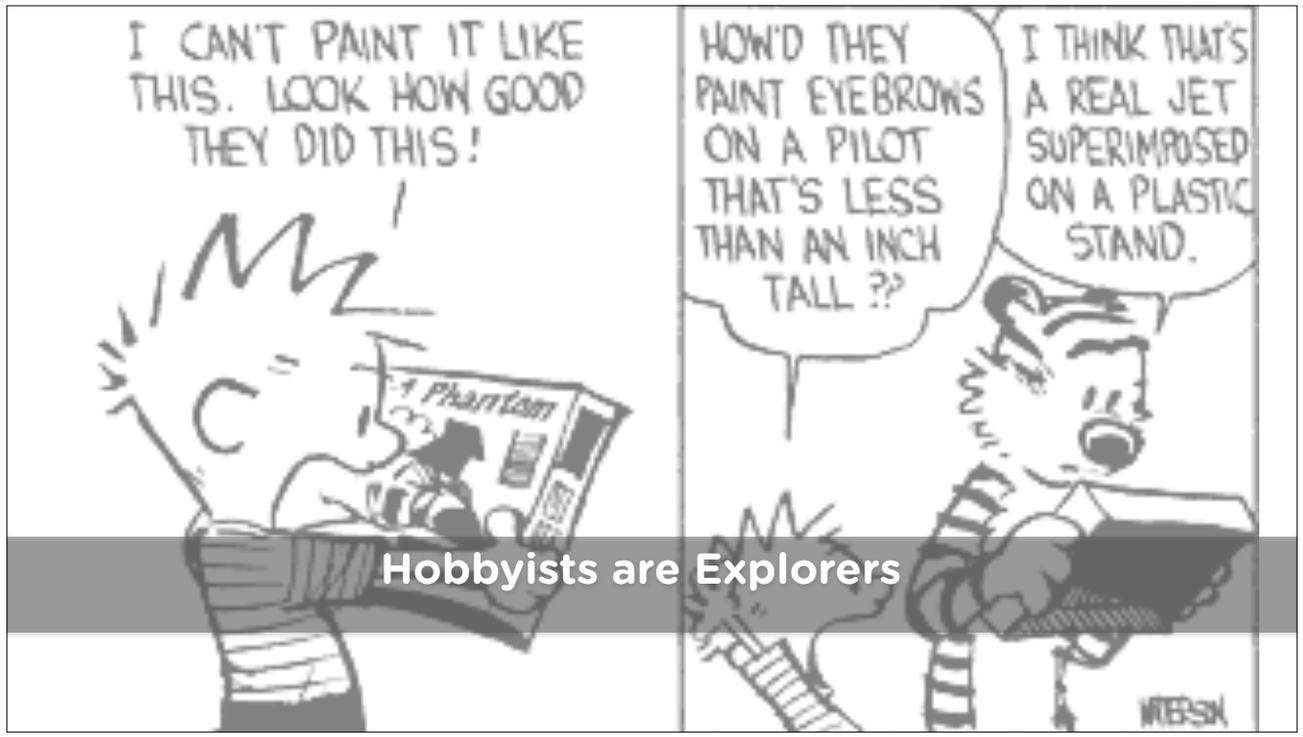
That is a lot.

Thankfully, we’re working with a brave group of souls here. VR explorers are asked to deal with driver weirdness, invisible tracking hiccups, cable management and novel locomotion systems everyday.

At least for now, we’re dealing with people who want to participate. VR is their hobby.

Which is great. Hobbyists are awesome, they intrinsically look forward to new problems, they love new tools and abilities, they are ready to learn and best of all they LOVE talking to people about the thing they love and displaying their work.

This is a natural fit for Mindshow. We just gotta get folks into the headset and they are going to make awesome stuff, right?

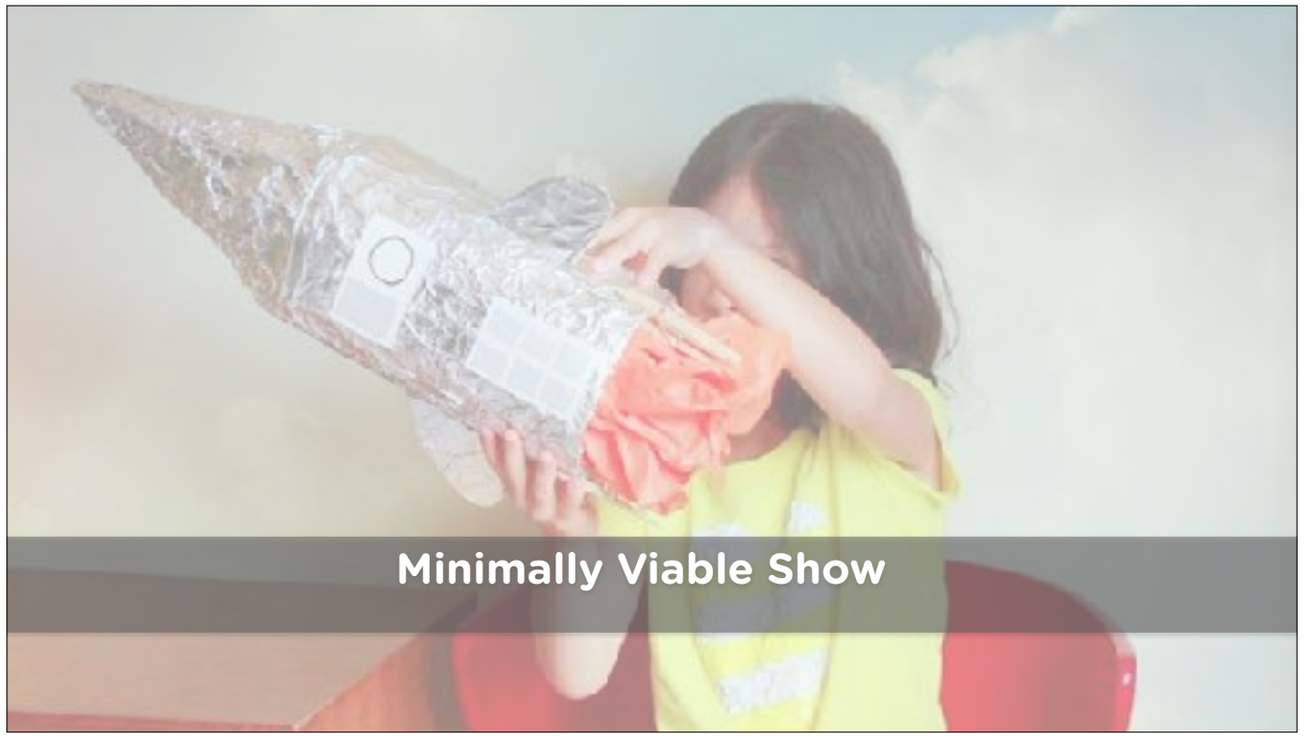


Hobbyists are Explorers

Everyone in this room knows the terror of being a creator. Specifically at the beginning.

Ira Glass from This American Life says: *"All of us who do creative work, we get into it because we have good taste. But there is this gap. For the first couple years you make stuff, it's just not that good. It's trying to be good, it has potential, but it's not. But your taste, the thing that got you into the game, is still killer. And your taste is why your work disappoints you. A lot of people never get past this phase, they quit."*

I don't want you to quit. I want to you run **Will.E.Coyote** style over that cliff, never looking down until you realize that you've made something.



Well, So our mission becomes clear.

How do we get **Jane.Q.VRPerson** through the “creation” cycle as proudly as possible?

It’s not going to be the best show in the world…

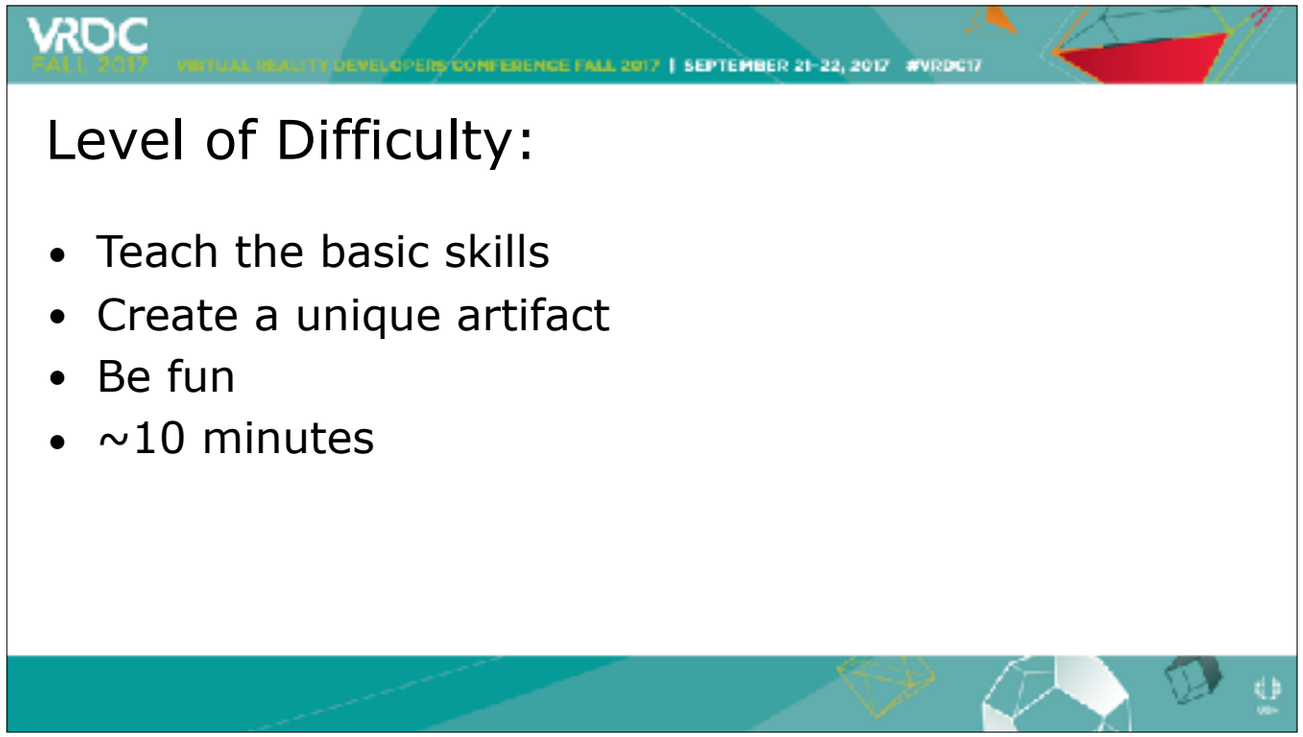
but it’s going to be YOURS and darn it,

you’re going to have a good time making it.

Onboarding Creators

- Intro + Problem
- **Walkthrough the Solution**
- Playful Secrets
- Summary

Enter The Mindshow 1st User Experience.



So… We need to:

- Teach all of the basic skills I mentioned earlier so you can
- Create an artifact that is “unique” to your experience
- In a fun way
- In 10 minutes.

When we broke the skills into sections and ended up with a 5 Act structure.

-> [P]**Calibration**

-> [P]**1st Recording**

-> [P]**Collaborative Recording**

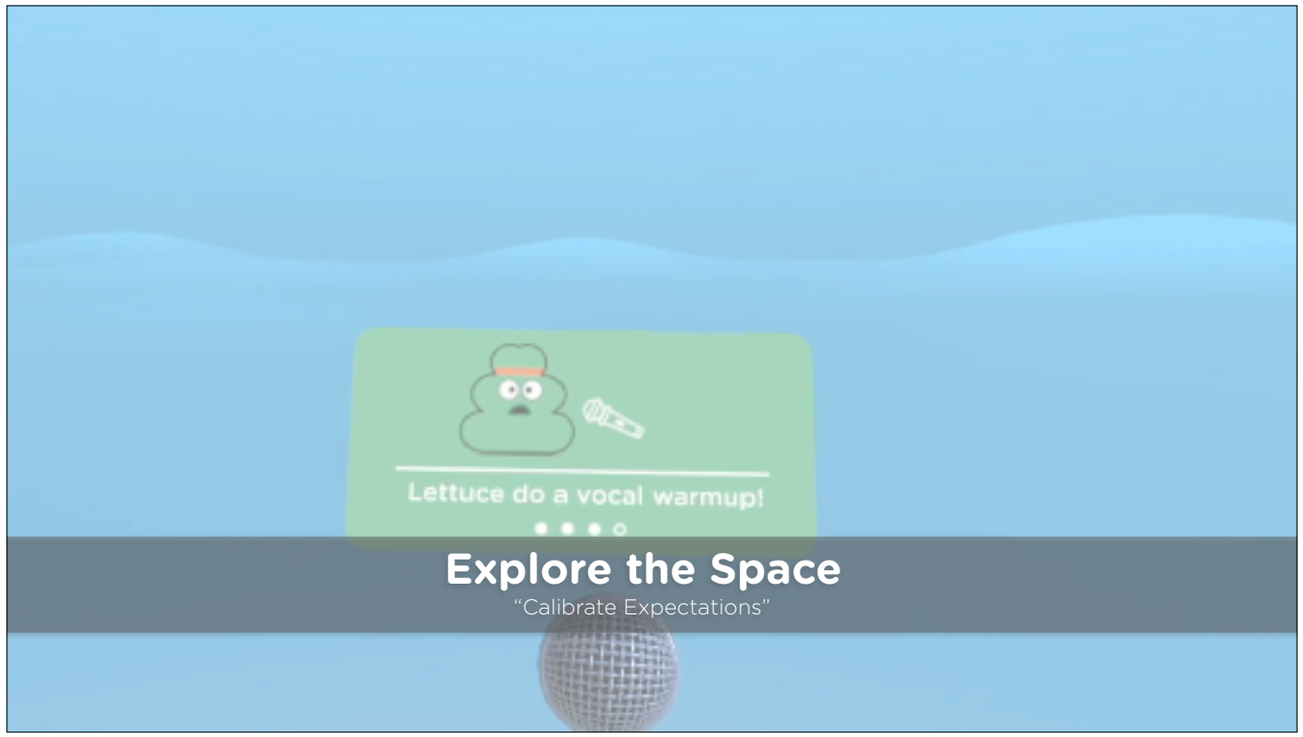
-> [P]**Finish a Scene**

-> [P]**Capture + Export** a movie to take home

First, we need to calibrate to the player’s dimensions.

That doesn’t sound fun. This was explicitly called out as a story beat so we made sure to devote the time to make it feel great.

GOAL: Make a visit to the tailor as fun as possible while we start breaking down the **fear of the perfect**.



Mindshow has some boring technical requirements about wingspan and mic levels. We also want to make sure that you are centered and facing a consistent direction to start.

This is a room scale experience, however. Placing the mic just a few steps away “encourages” the player to walk up, breaking them from the bad habit of standing in the middle of the space with their “ice cream cones”.

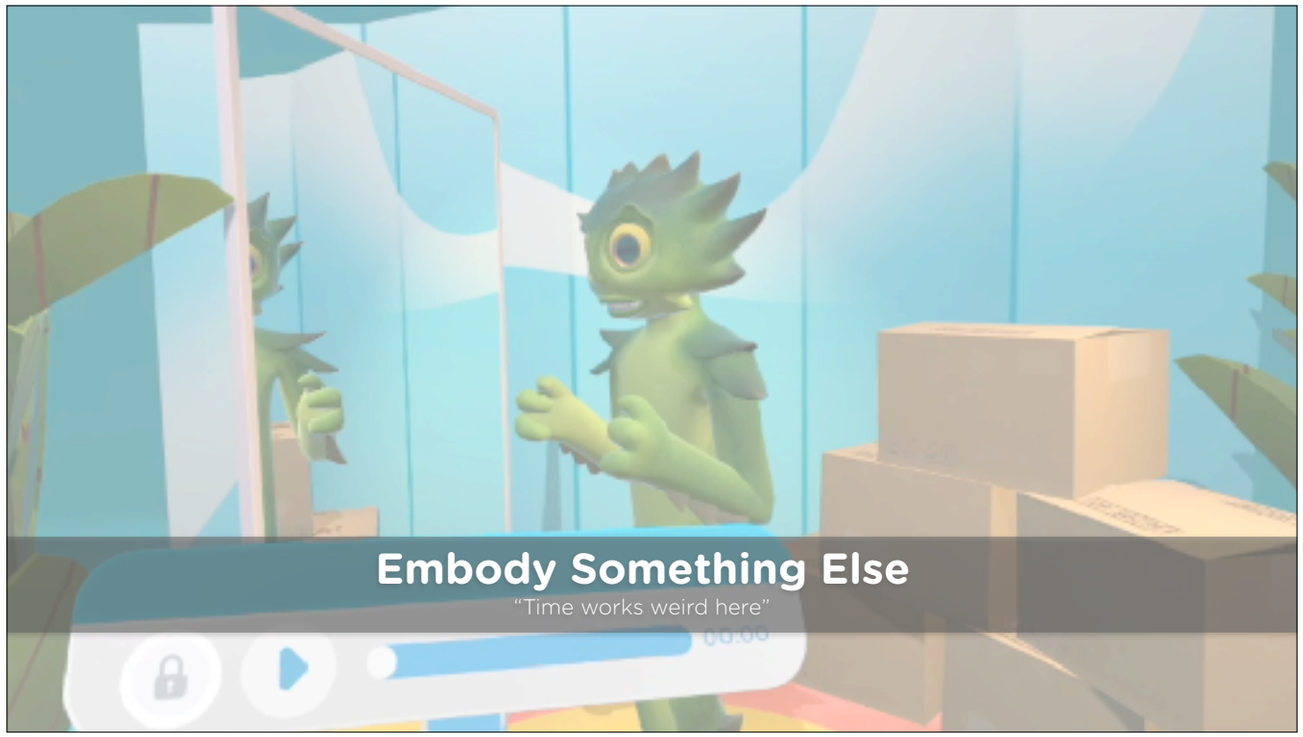
As an added bonus, we immediately found ourselves hamming it up while talking into a microphone that doesn’t exist

To further encourage this play, we added a pool of random prompts as a message from the dev team.

This is going to be silly. You can be silly. Please be silly.

Next we have the first recording where we want you to:

- Learn about how the core of mindshow works
- Get you to giggle



- We created an exhaustive list of all of the skills you need to know in order to Mindshow effectively and the most aberrant one is that time can Start/Stop. That weirdness is the first thing we teach.
- Unlike most “games” time is at your control in Mindshow. Characters are locked to a timeline and only move when you say they can move.
- The player watches a non-specific humanoid move in mindshow.

The **next** most important thing a player needs to know is how our tool system works.

With light prompting, we teach them to change tools.

(NOTE: we will continue to ask them to perform this action throughout the tutorial with ever decreasing specificity)

Here we ask the player to click and then swipe and then point. The player has now learned almost all of the interface verbs for mindshow **with the exception of one modality change**.

Finally the player hops into the puppet. This is the core experience and if I get a giggle here, I know we are going to be a good time.

I can hear the graphic programmers out there gasp. No, Mirrors are no performant in VR. Yes this is that important.

The player gets a quick rundown of hands, emotions and remind you to actually use the microphone.

We then ask the player to record into the mirror, and years of early morning bathroom grooming spills out into the metaverse, we’ve seen to get some pretty wacky first recordings out of people.

The barriers to creation are tumbling.

One of the core values of mindshow is collaborative conversations yield unexpected results.

After watching themselves playback for the first time we take them into a new scene to learn how to work with another actor.

We drop you in with a pre-recorded performance. The user has already learned that they control time and can initiate playback.

You’ll note that we don't center the user on the captain, but on the most boring part of the scene. In fact, the captain is looking away from the player, seemingly off into the distance for the majority of the performance.

You watch the performance and it doesn't make sense. Something is missing. This is intentional.

I believe that the best way to make sure someone retains knowledge is to help them figure it out themselves.

So when we pop the alien into view, that curiosity vacuum is filled in. Almost everyone "knows" how this scene is supposed to play out.

We tell you to use the tool (recalling previous lessons) in order to hop into the alien.

MOST people play it this way but don’t find the boxes yet. Some more proprioceptively strong individuals connect the subtle hint from the beginning that props are reactive and they are pleasantly surprised.

We chose this first scenario specifically because it has conflict, a clear role to play AND it absorbs almost any off-nominal performance.

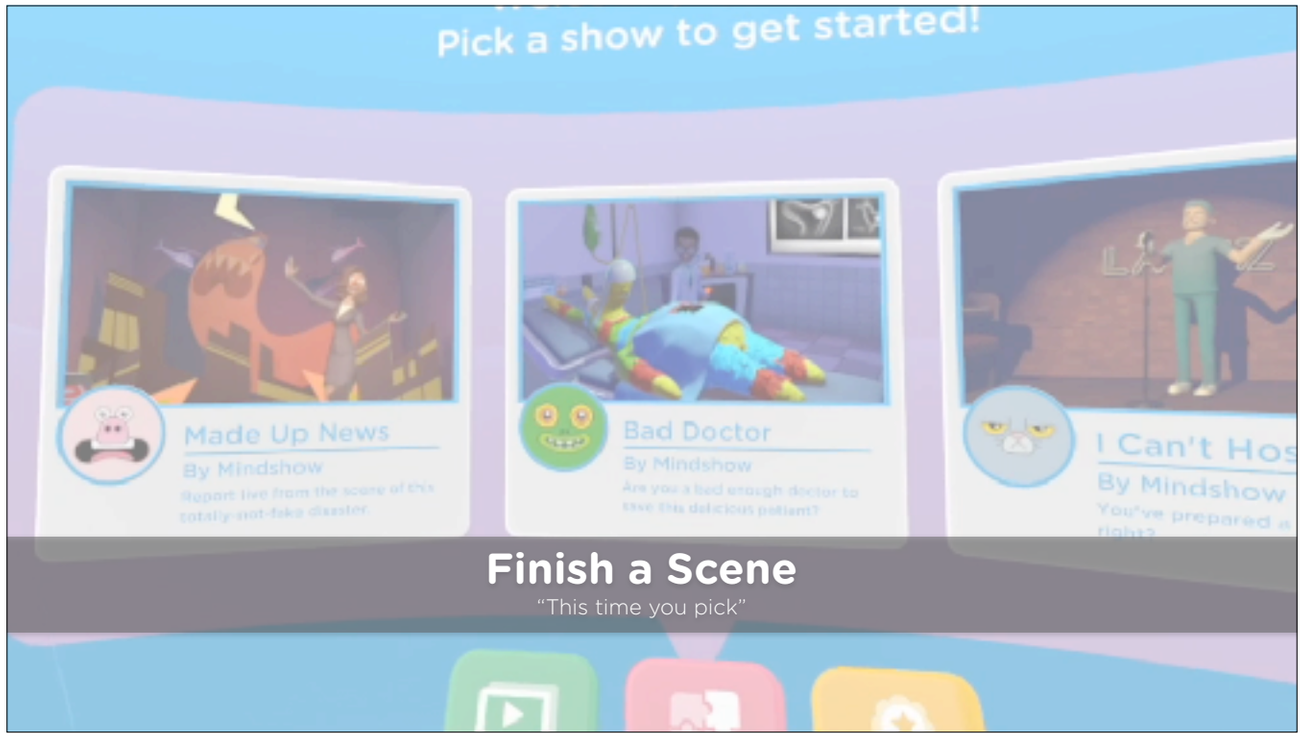
Hugs? Funny.

Political Diatribe? Funny.

“Hey what does this button do am I recording?” Funny.

Finally You watch back something you did, paired with something someone else has made. You've completed a scene.

Right now there is some tension. Any good performer knows that this is the time to ratchet up the excitement. However, testing showed that people weren’t quite confident yet with their performances to be Minimally Viable yet and I want you to leave Mindshow with something great. On the other hand, doing “the same thing again” is BORING.

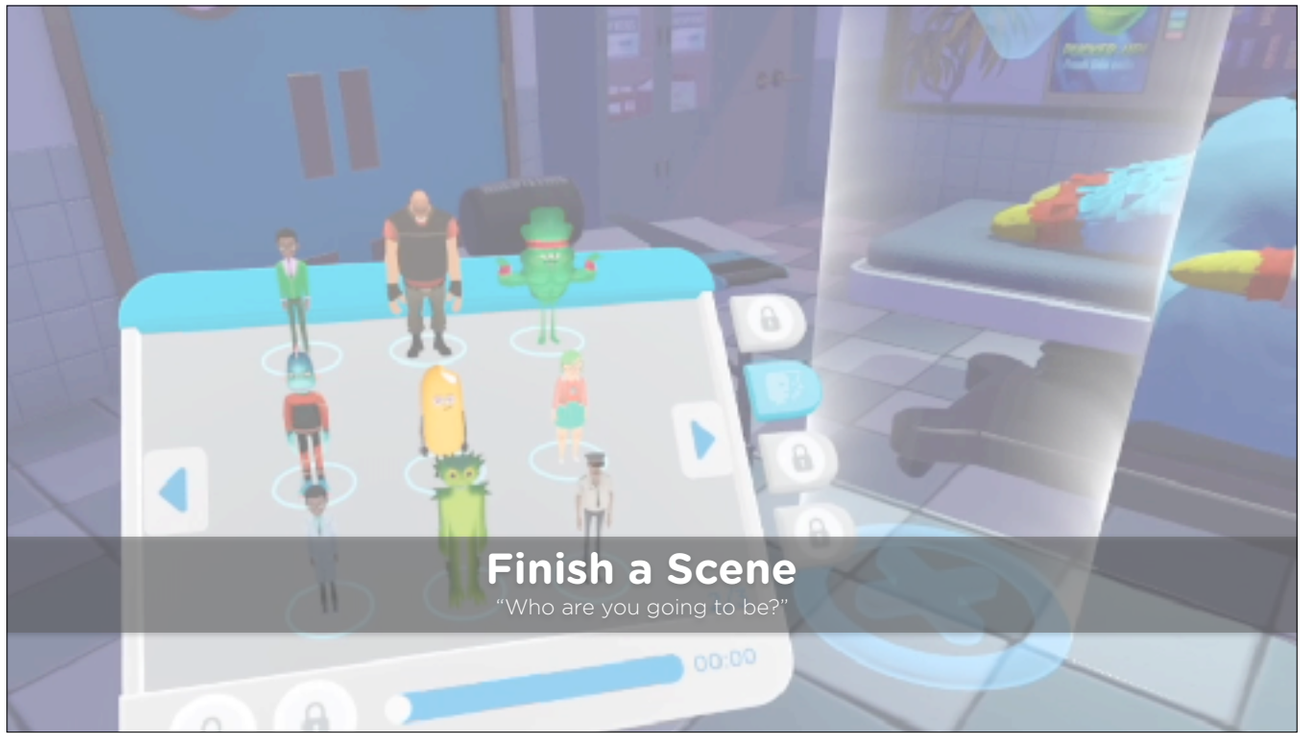


Because we’re going to be capturing an intimate performance fairly soon, we didn't want to add a complex skill here, so we opened up player agency.
First we let you chose a scenario from a couple of items…

It's functionally similar to the previous level, but you've some ownership in the outcome now.

(FUN FACT - The “Made up News” one was a bit too close to home for some and a lot of people avoided it)

You'll notice that we took care to avoid placing the characters where they would be direct addressing "you". They almost always emote away from the audience spawn location reminding you to take stock of the whole scene.



An additional creative layer (and a primary skill) is that you then get to pluck and place your character into the scene.
This choice moment is an incredible insight into the human psyche. Spoilers: People love the freaking cat and Jerry the Snack Cake.
After placement, we gently remind you to “hop-in” and record.

You watch the completed show back and we're ready for a celebration.

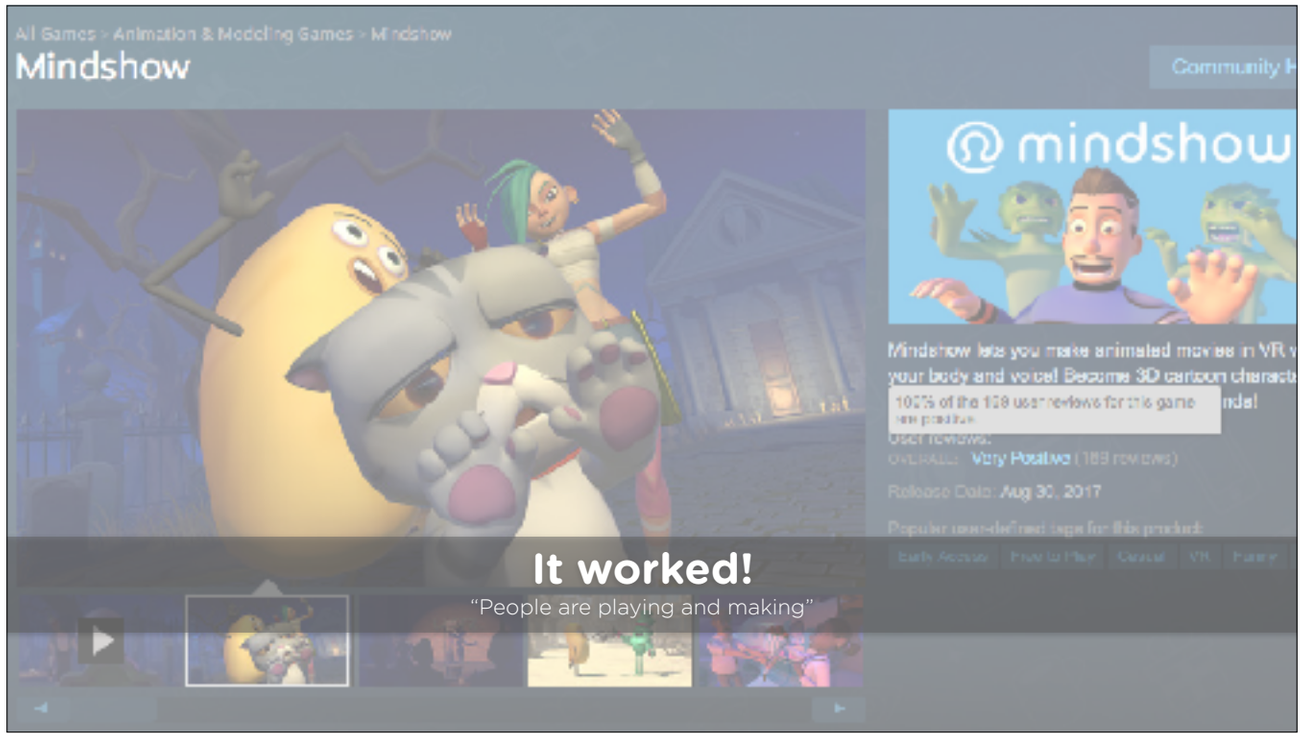
You’ve done a lot of good work and now we pull a fast one on you and ask you to film the scene.

The Venn overlap of people who have access to a Vive and people who have used a glowing rectangle to capture footage of the world is approximately 110%.

Using a simple, ubiquitous tool we add variability to the output of your starter shows which (as someone who has seen them all 300 times) can grow same-y after a while. Almost every capture is unique and the authorial control is a great ownership moment for the player.

Its a moment to sit back and revel in your act of creation.

Then we kick them out the door.

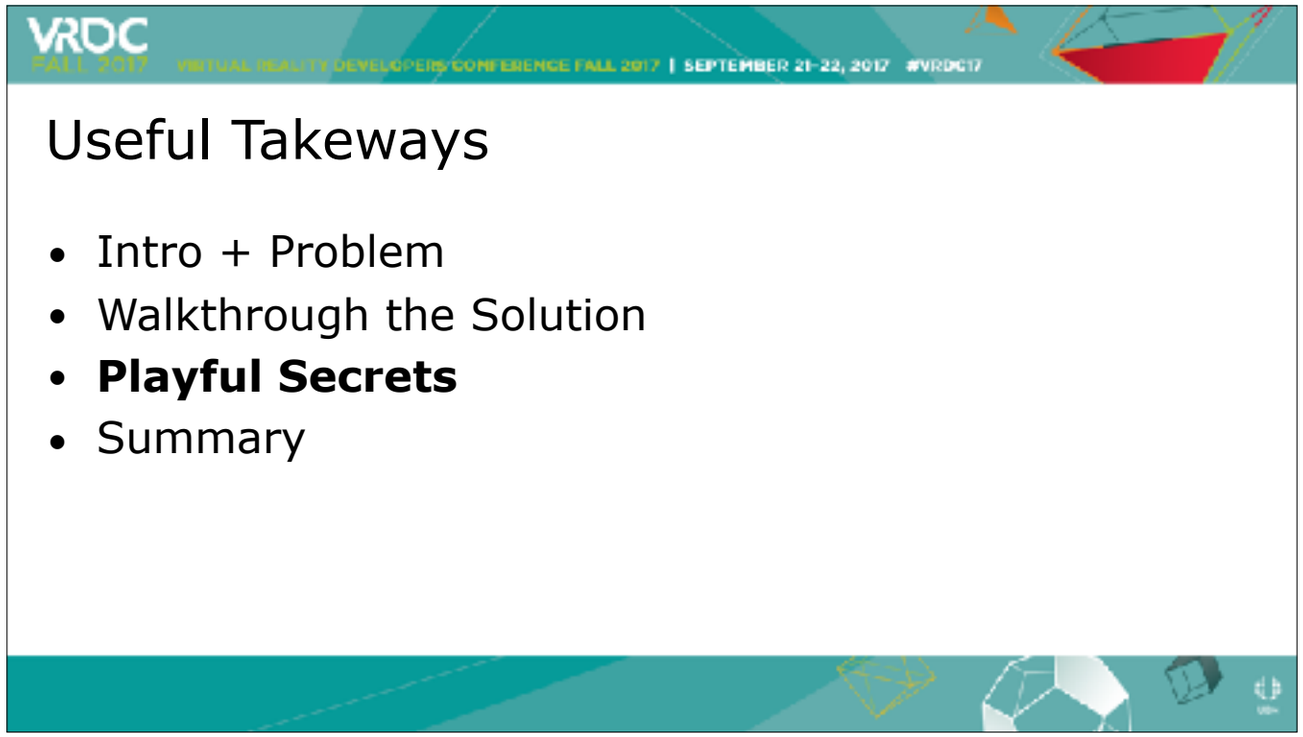


So far it's worked. Not only have people responded in a more positive way that I hoped, they are actively and proudly sharing "my first show" right in their reviews.

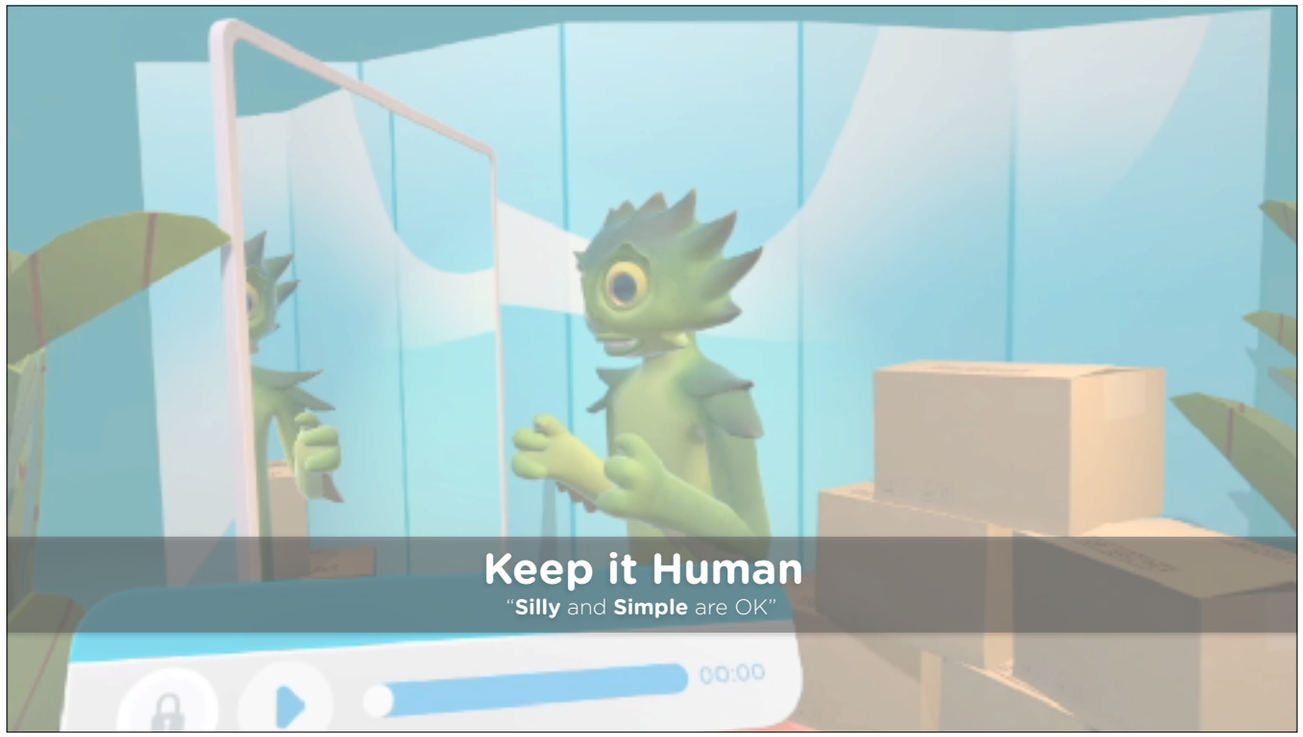
Heck, I don't know if I ever would have posted my childhood movies to youtube. I'll take that as a win.

We can't wait to get even more people creating and add more tools to the system.

But that's another talk.



So what did we learn along the way?



We intentionally set our initial content to be simplistic. Our first recording is intentionally something you can improve. We spent a lot of time talking about this moment and it turns out that the placeholder talk talk talk talky talk talk talk talking int he mirror making stuff up was accidentally perfect.

We had to fight our instincts to show off the incredible awesome magic of the product. High production values = high standards and high standards are intimidating.

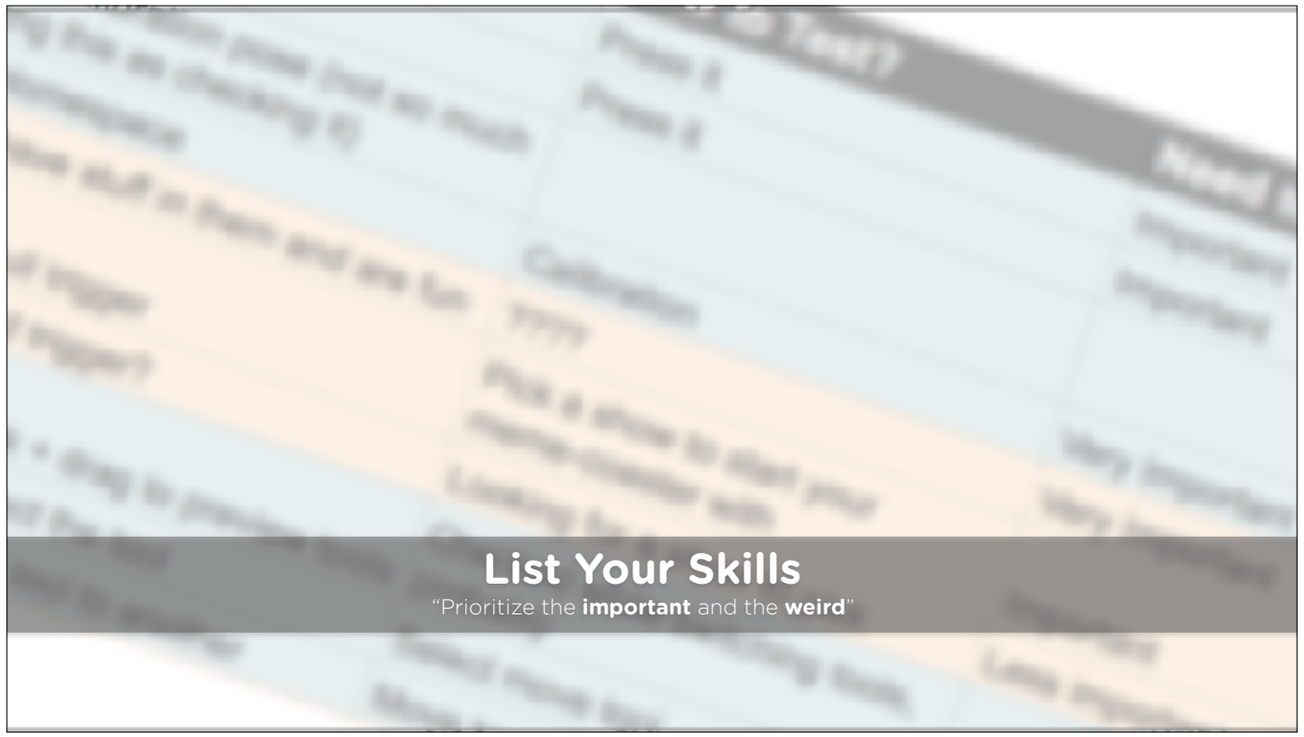
Blocks' ice cream cone tutorial is a great example of something I could make.

Don't show me what I MIGHT make one day. Show me something I CAN make now. Set that first bar low.

"Mean time to Giggle" is my personal metric for successful creative play. Giggles are people at play, they are having fun, and their expectations are being subverted. This is a great sign that you are going to get something “new” out of them.

So much so that we tried to move this mirror moment up as early in the demo as possible. At one point it kicked off the experience. This didn’t work.

Because it gives the player opportunity to build incorrect assumptions on how time functions in our world. It’s metaphysically important to not start you in the puppet. Which brings me to my next point.



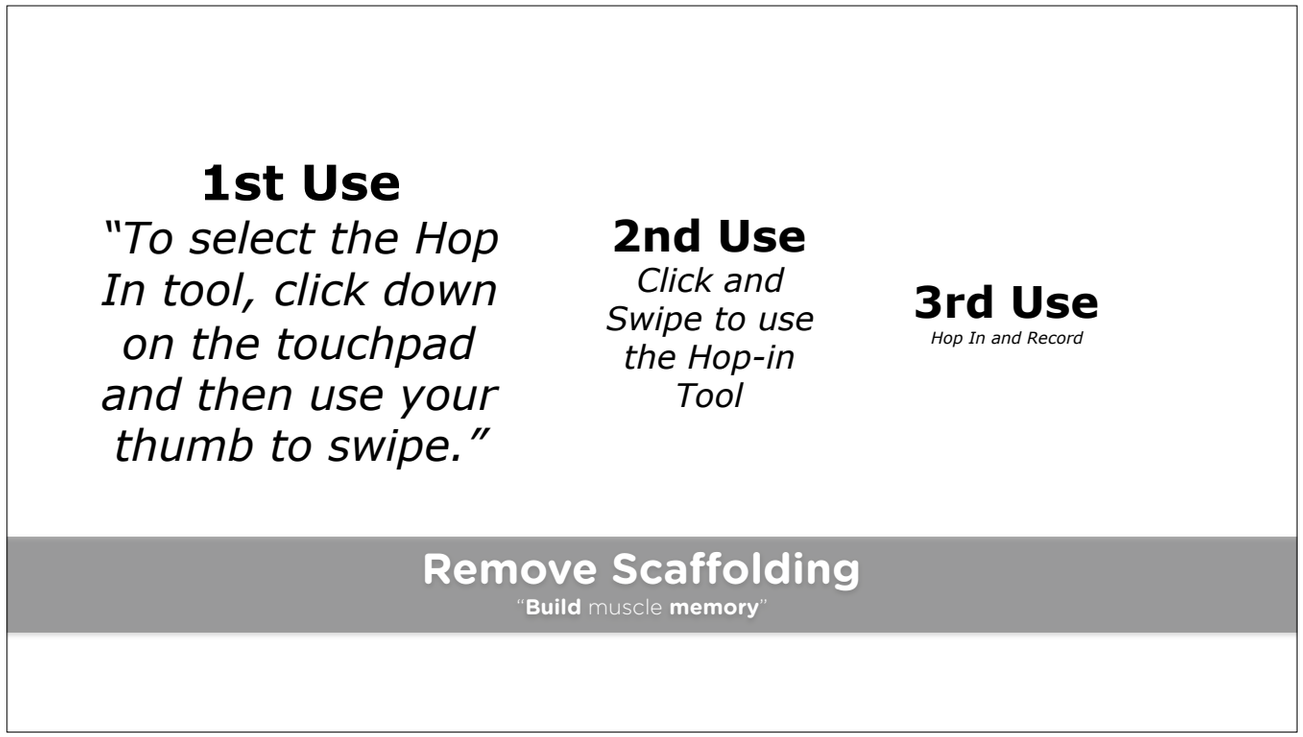
List out all of the skills from Beginning to End.

Introduce the strangest, core ones first.

Part of the fun of VR is that you are empirically deriving the rules of a new existence. Like a baby. Make sure that you are aware of how things are the same and how they are different.

Find the things that are sorta aberrant and cut them/simplify them. These are the things that confuse players the most.

Ignore the rest. Props and emotions are fun parts of mindshow but they are advanced techniques that are rewards for experienced players. We don't focus on them right away.



We remove scaffolding throughout the first user experience, slowly reminding you how to perform each step and then eventually concatenating the prompts. This asks the user to remember how to perform actions and (in our artificially constrained tutorial space) allows them to stumble into the solution, helping them retain the skill.

Don't center everything, make them work for it.

If you put something exciting in the center of the view, people will hold that viewpoint. We use this for menus.

But if you put something boring in the middle, their eyes start to wander. Just like when a traditional videogame’s vignetted cutscene opens up to interactive gameplay, we use off-centered spawn conditions to encourage the user to wander.

In VR, the mechanics, characters and scenarios are there to put THE PLAYER over. As a designer I am the late-night-talk show host who is paid to make sure you have a great interview and sell your movie/book/etc. The actual human in the headset is the real hero of the story.

It is tough to build content that is good, compelling but still cedes the centerpiece to the player.

Roller coaster photos are awesome. Your players are either noobs who are doing something new or they are veterans who are stressing the boundaries of the system. Give them the tools to share that outside of VR and your product advertises itself.

These hobbyists want to advertise for you they want to tell other people about the stories they had. Help them!

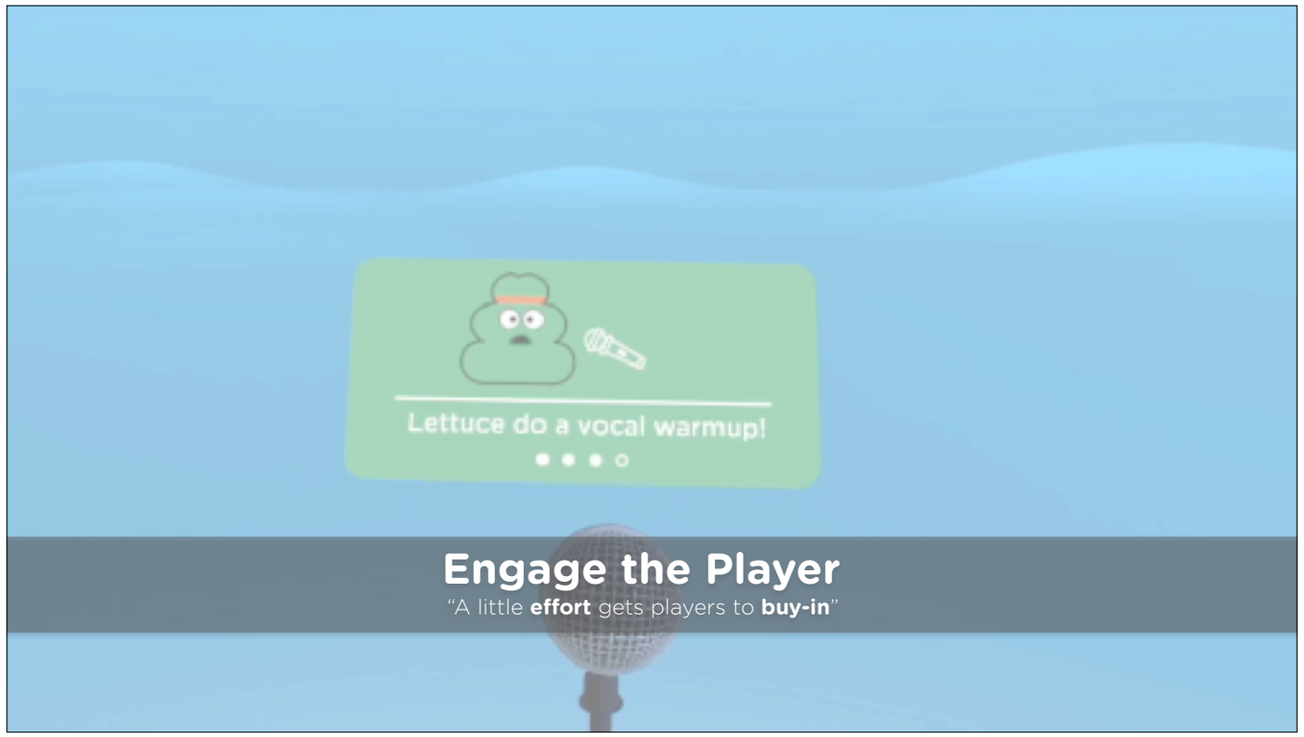
A wise designer once told me that only three things in life are actually intuitive.

- Nursing
- Crying
- Pooping

Everything else is learned behavior.

Especially when it comes to using a physical object as an abstract stand in for hands, tools and inputs inside a virtual world manifest from a bunch of mathematical concepts and running on a silicon chip, displayed on diodes that shoot photons into your brain-ports.

You have to take the time to teach the basics to the player and if you’ve designed your app well, those limited basics lead to more complex, rewarding combinatorial actions.

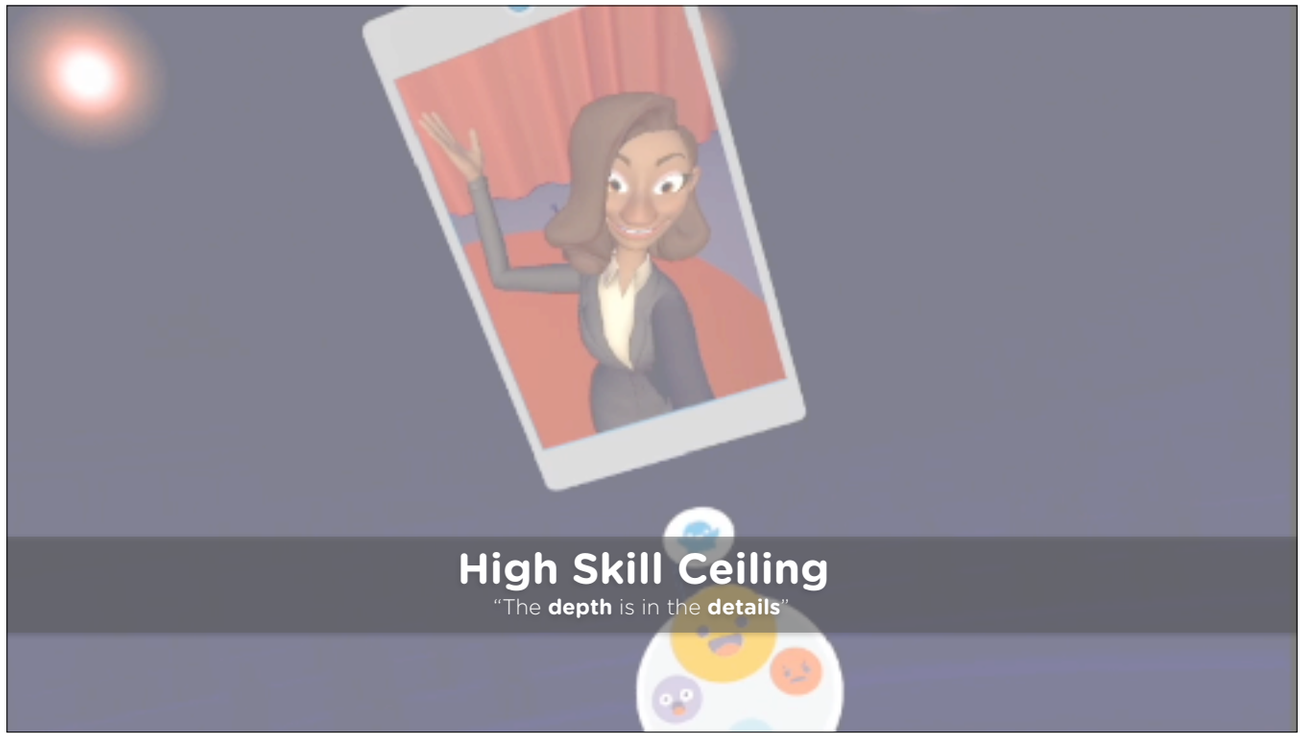


Now we are getting controversial.

The UX-led designer in me typically seeks to reduce the burden of an interaction so the user can get to content.

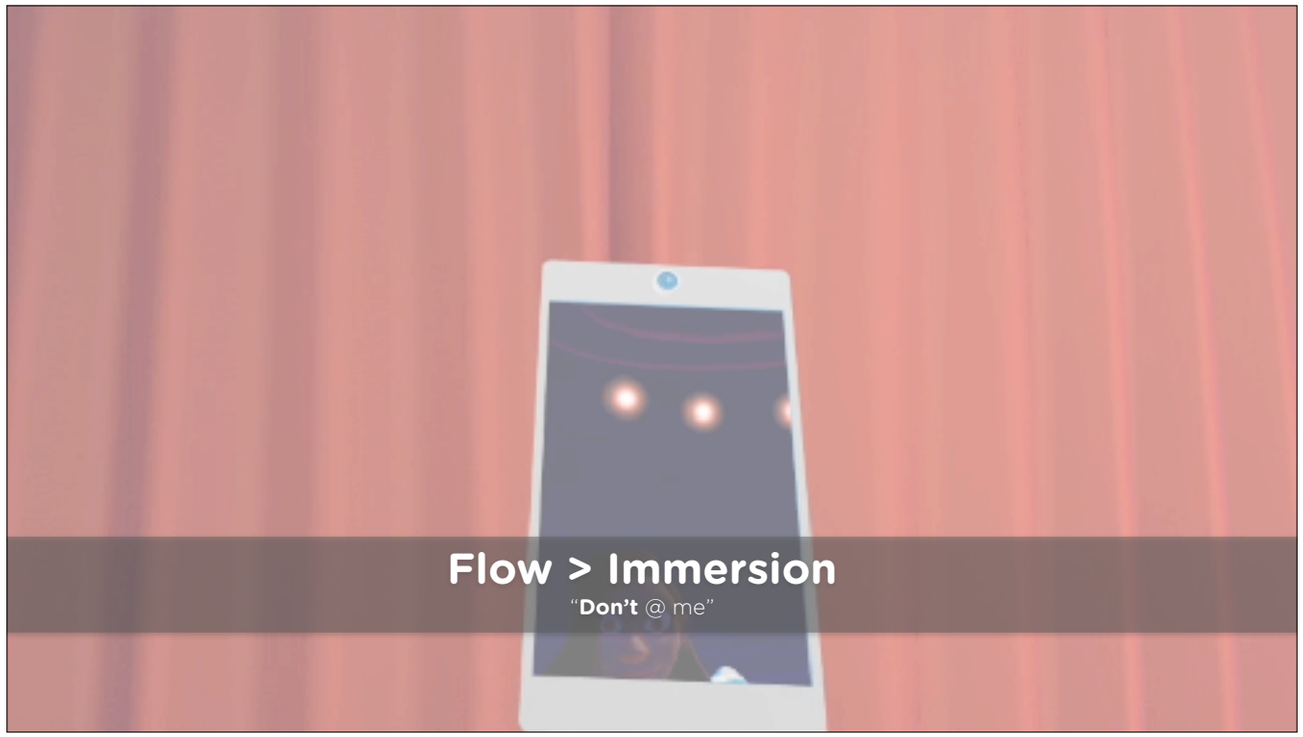
The game designer in me thinks that playful interfaces can be rewarding in an of themselves. The interface can be the content.

By placing the microphone a little outside of what feels "intuitive" we've gotten players more performative than had we simply placed it right in front of them or just threw up a card and a sine-wave.



Try to have a high skill ceiling. Now if any of you in the room plan on shipping a headset with built in facial recognition, I’d really like to talk to you. But for now, we’re using a high cognitive load interface for emotions and we’re content with that. It’s bit like puppeting in real life requiring great control and skill and practice. This has the effect of stratifying performances that really take advantage of the emotions.

We do mention them in the opening moment of the tutorial and casually remind you that they are there, but we don’t really “require” them for new intro.



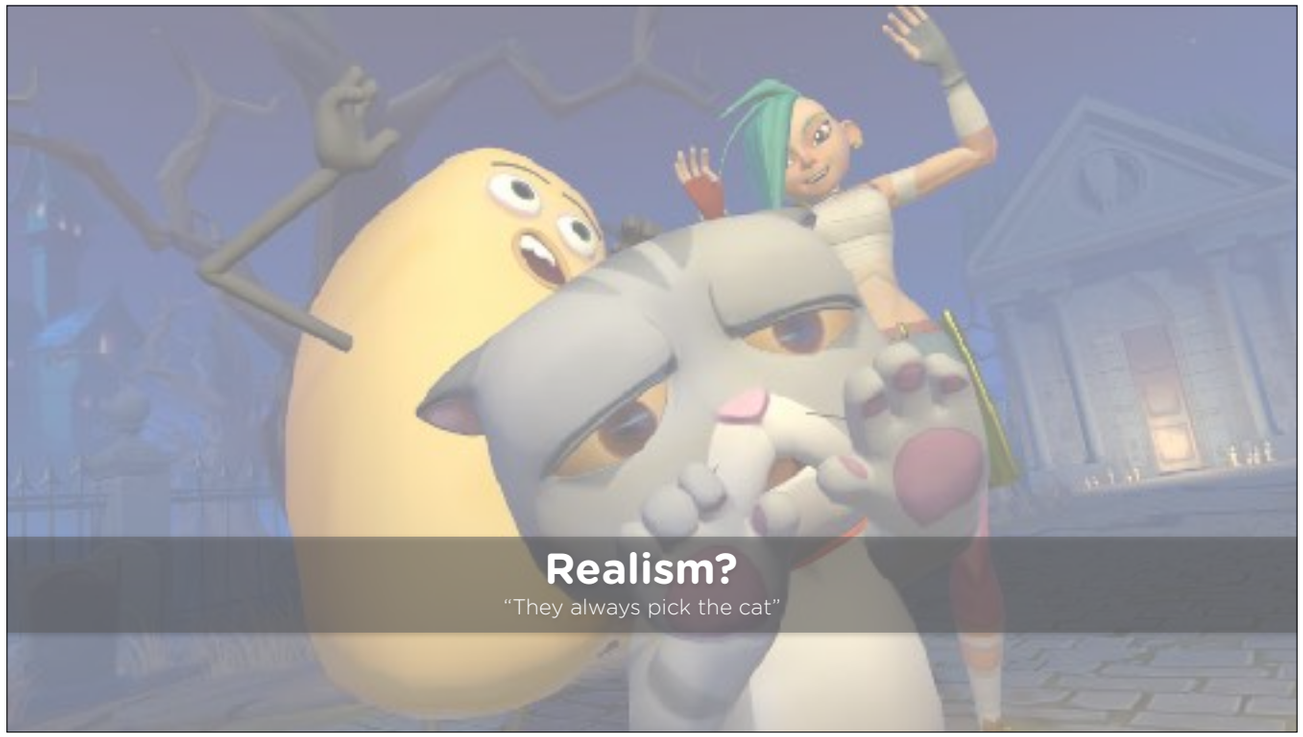
I’m inclined to break "immersion" if it helps players maintain focus/flow/concentration.

(For those of you unfamiliar, “flow” is the optimal state of harmony between one’s skill and the difficulty of a task. It’s the state where the world falls aways and you are operating at peak mental capacity)

Our playspace boundary reminds you that you are not on another planet and has been referred to as “immersion breaking”, but the omnipresence is important as the player needs to keep their real-world in mind while they are creating.

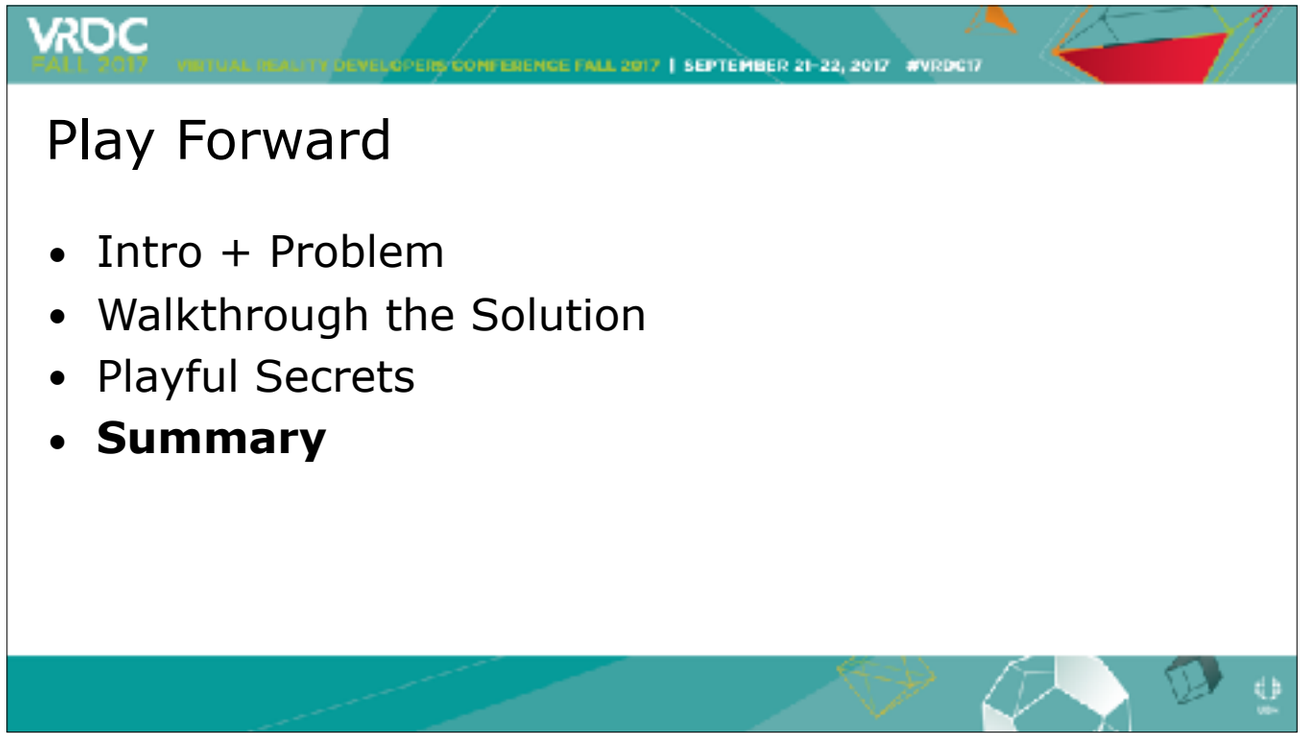
The same goes for “CAM” who is our in-scene surrogate for the audience.

I WANT you to be aware of the theoretical audience. You are making stuff for our world.



Finally a note about realism. We get a lot of asks for hyper-real avatars, “Better graphics” and while we hear those requests, I do want to offer up the stupid success of this Baked Good and Tiny Cat as a opportunity for surrealism. It’s virtual reality, there is room for the weird and the hyper real.

(I can’t wait until they get a hold of Senator Barkington)



That’s all we have time for now. I have so much more I want to talk about.

But this is how Mindshow is taking the natural exploratory nature of the VR audience, rewarding them letting them learn and working with them to push us all into a more creative future.

If VR and AR are going to really take off, we need people exploring with us, developers and explorers hand in hand. We're both risking a lot here.

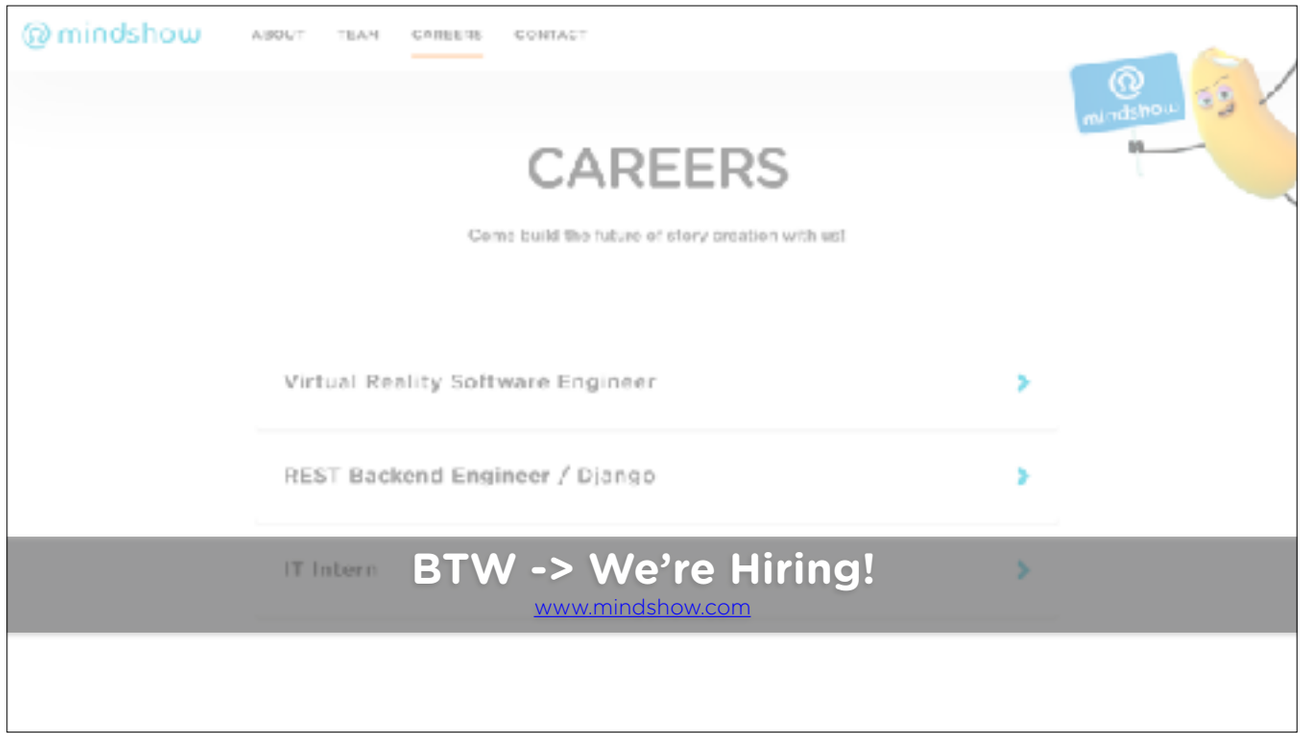
By providing places for creative exploration, we have a chance to inculcate the metaverse with goofy, semi-wholesome fun.

I seriously believe that play is one of the primary path towards success in AR and VR.

As John Cleese says in his famous essay on creativity: “Too many people confuse being serious with being solemn.”

If we can’t laugh about it. What’s the point.?

Questions?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