



No text, no tutorial

Fully embracing human-centered design in VR

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Hi, I'm Kayla!



Quick Audience Check

Today's Agenda

UX Challenges in VR

Part I: Framing the Problem (and Opportunity)

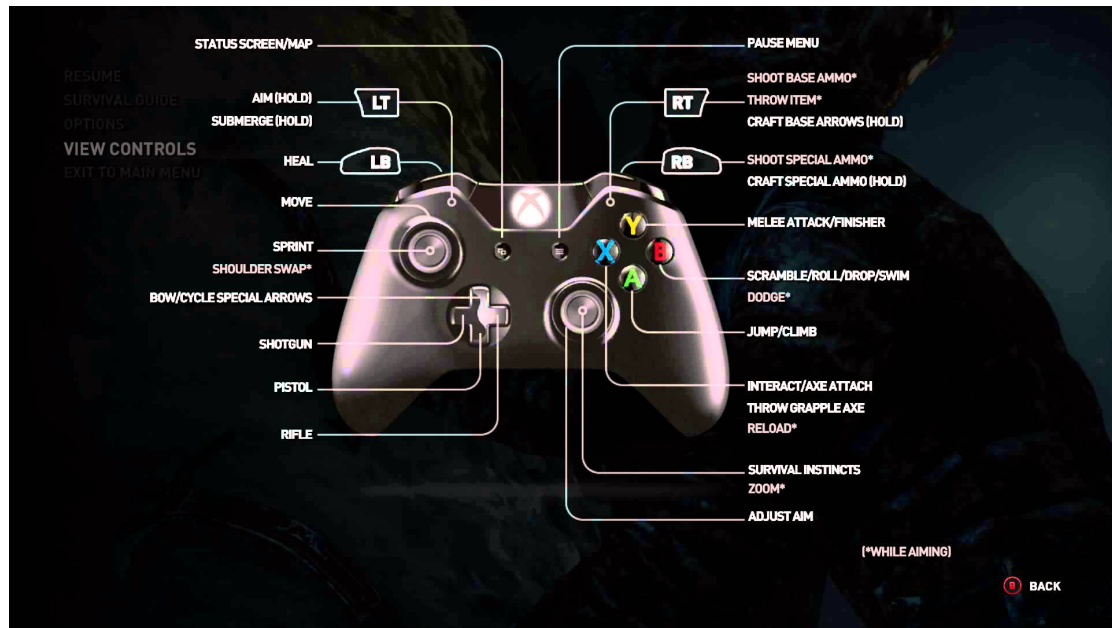
Part II: Human-Centered Design Principles and Examples

Part III: Applied Learning on our Prototype

Framing the Problem

And the opportunity

Our existing
interaction models
evolved to solve
problems that VR
doesn't have.

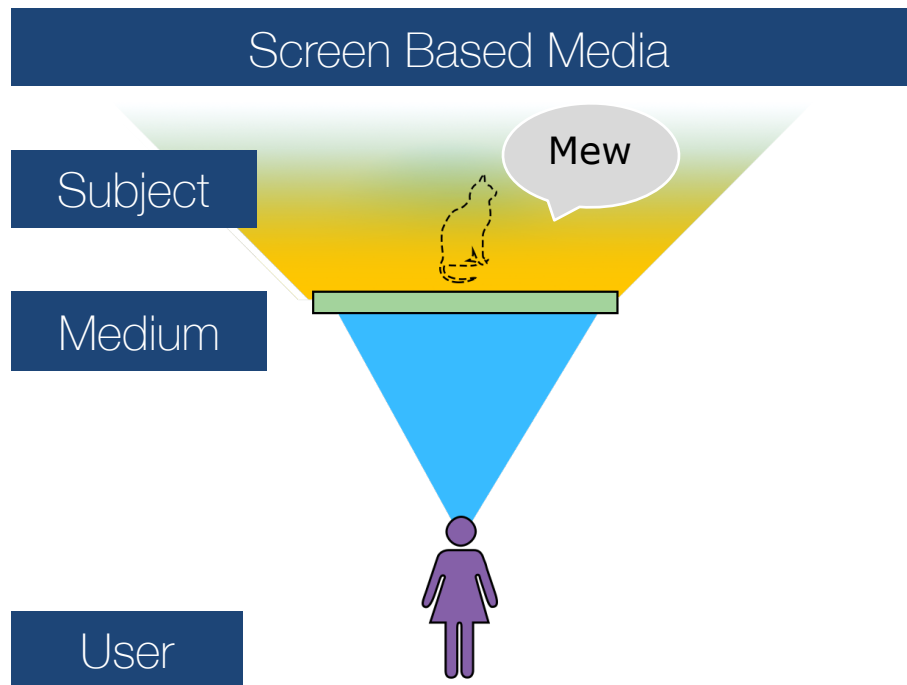


Example Time

Game Setting: Cat Café

As a user, I want to pet the cats.





Layers of abstraction exist between the User and Subject.

Tracked Controllers give **agency** in VR
that is **natural** and **instinctive**.



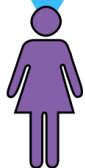
VR allows for more direct Cat interaction.

Screen Based Media

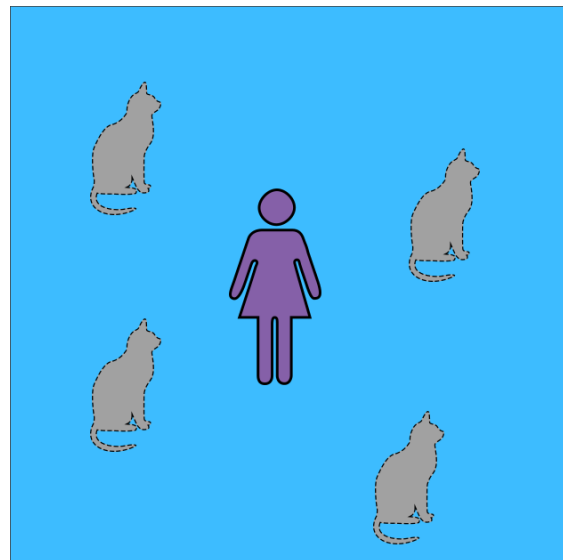
Subject

Medium

User



VR Media



Where **mobile** allowed for natural **touch** interaction on a **2D plane**, **VR** allows for natural **touch** in **3D space**.

But VR Creates New Problems

- “There aren’t enough buttons on motion controllers!”
- You can’t control the “camera”
- Text input sucks
- “Menus suck” – Colin Northway, VRDC 2016
- How the hell do we get the players to do what we want?

How do we solve UX challenges in VR?

We use Human Centered Design principles to make the virtual world work for the player.

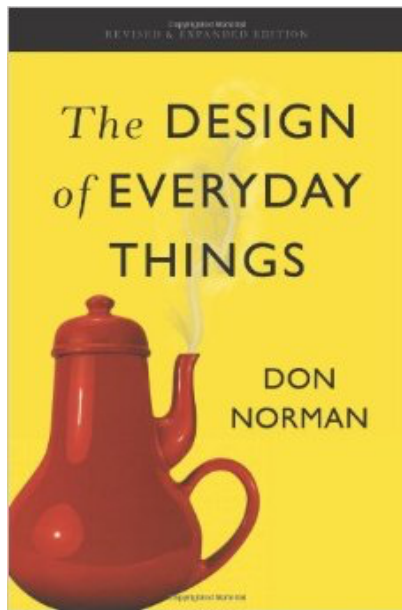
Human-Centered Design Principles

Human-Centered Design is an approach to development that focuses on the needs of the user.

Push or Pull?



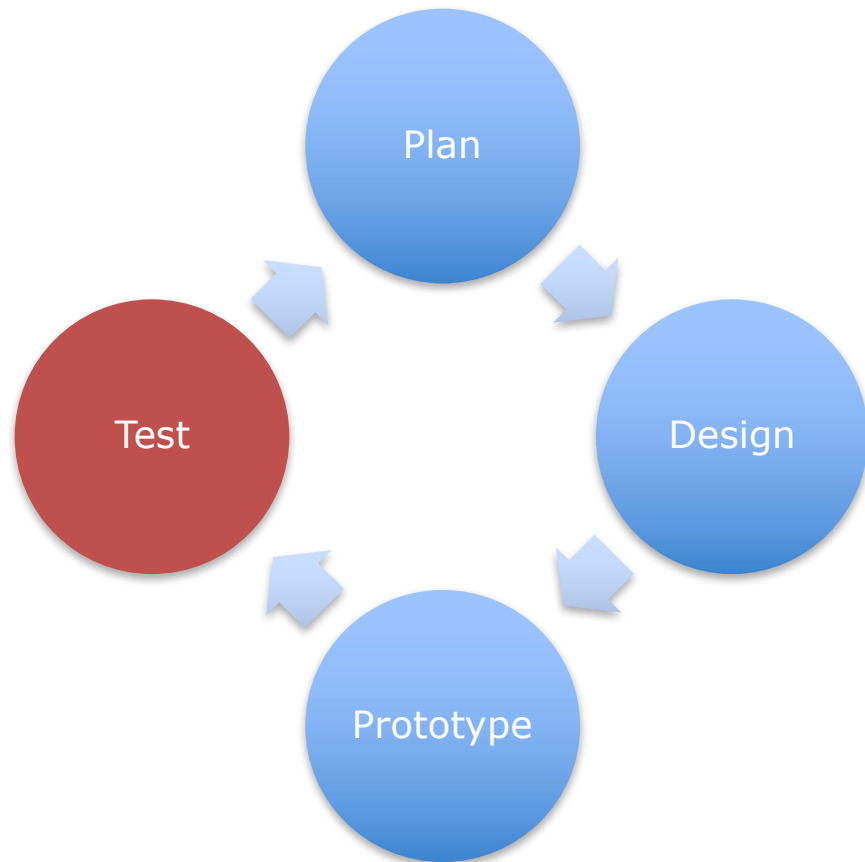




Discoverability
&
Feedback

A diagram consisting of two blue curved arrows. One arrow starts from the book cover on the left and points towards the central text. The other arrow starts from the central text and points back towards the book cover, creating a circular flow.

To nail
discoverability
constant testing
and iteration is
key.



In VR we have the freedom to create worlds and objects with 1:1 interaction mapping.

Therefore we can follow principles used by designers of everyday things.

Job Simulator is a game about discoverability & feedback. Its joy and comedy comes from meeting and breaking player expectations.

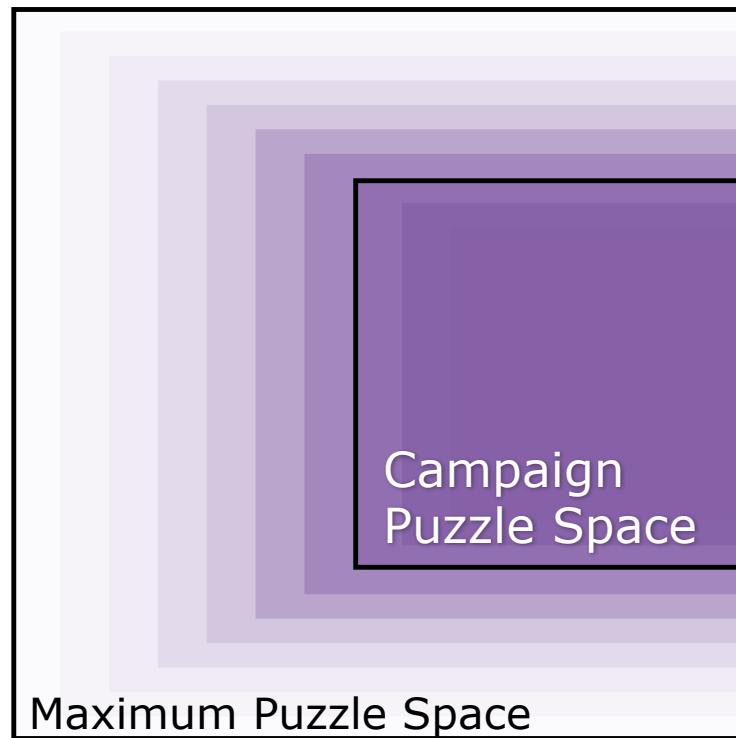
video

How we are applying these
principles

A stylized illustration of a person standing in a forest at night. The scene is dominated by tall, dark tree trunks and a vibrant, colorful sky with shades of purple, pink, and blue, suggesting a sunset or sunrise. The ground is rocky and uneven. The word "PROTOTYPE" is overlaid in large, white, sans-serif capital letters across the center of the image.

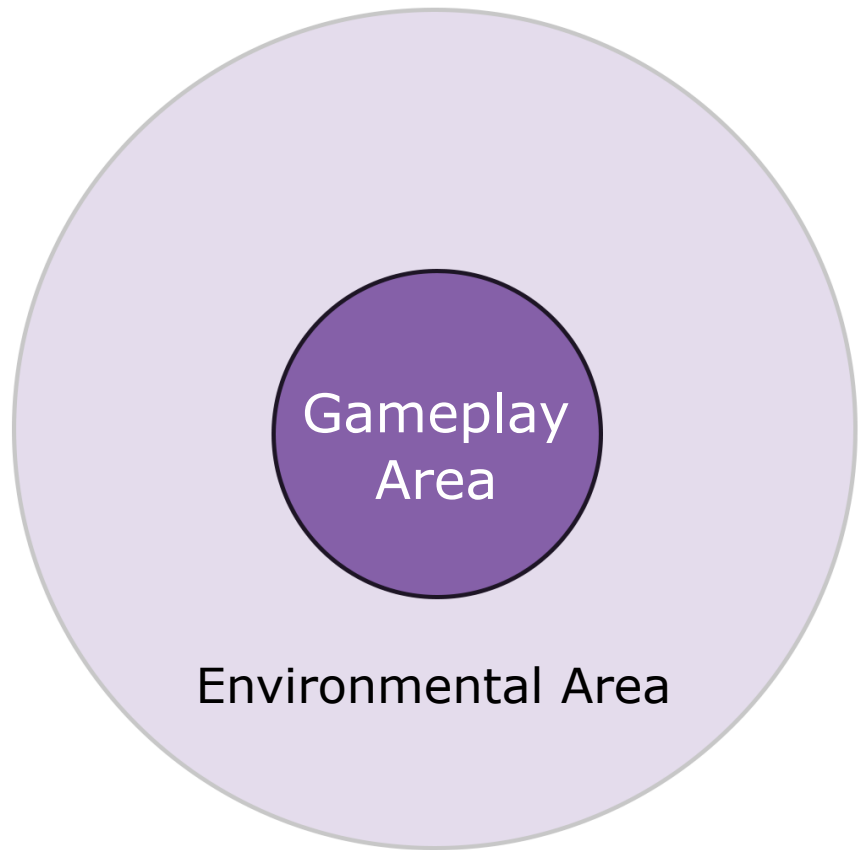
PROTOTYPE

We strive for 1:1 player movement and object interaction mapping wherever possible.



We constrain player choices by limiting the objects within their immediate space.

All gameplay elements are always visible.



First Interaction

Teaching goals:

How to **grab**

How to **release**

How to **progress**

video

First Level

Teaching goals:

Puzzle **System**

Object **Interaction**

Success Criteria

video

Individual parts should
be easily understood.

video

Even parts that are
incredibly complicated

video

Closing Thoughts

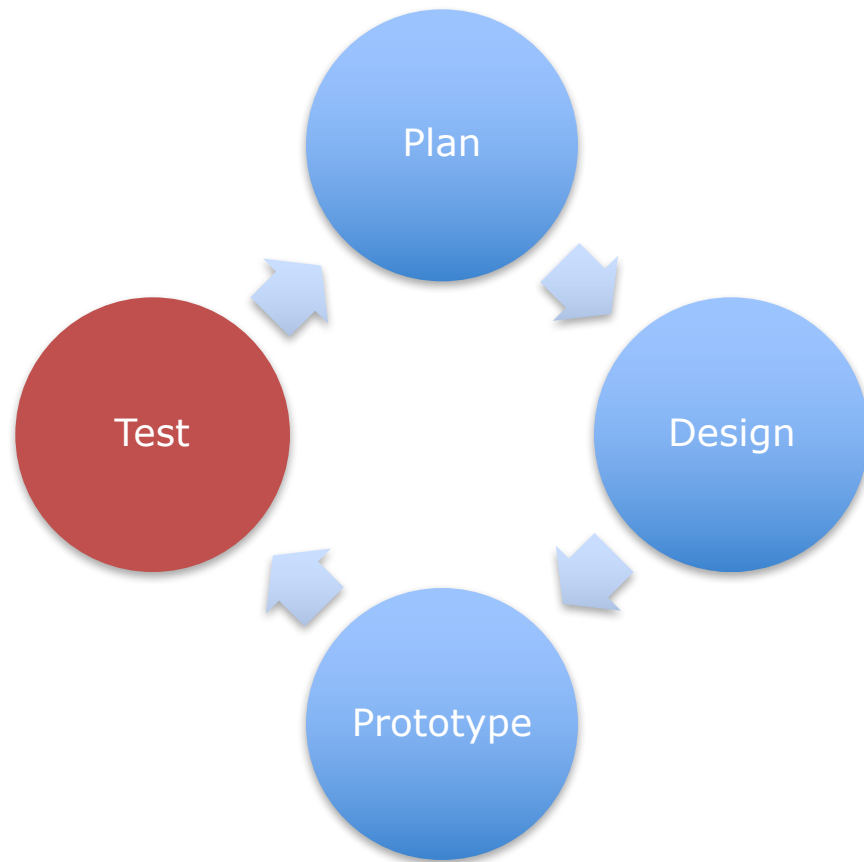
Physical Accessibility has been a big design driver for us. Both hands have **symmetrical** controls.

Left handed, right handed, one handed, we have you covered.

This further forces us to keep our interaction models simple

The players you test with matter.

How close do they match your intended audience?



Eventually VR will develop interaction standards

video

As we work towards mass-market adoption it's important we apply human-centered design principles to welcome new players.

- VR is a new medium, don't be constrained by ports
- Design for discoverability & give good feedback
- Play-test and iterate tons!

Thank You

Q&A

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