Controlling Objects in Mixed Reality

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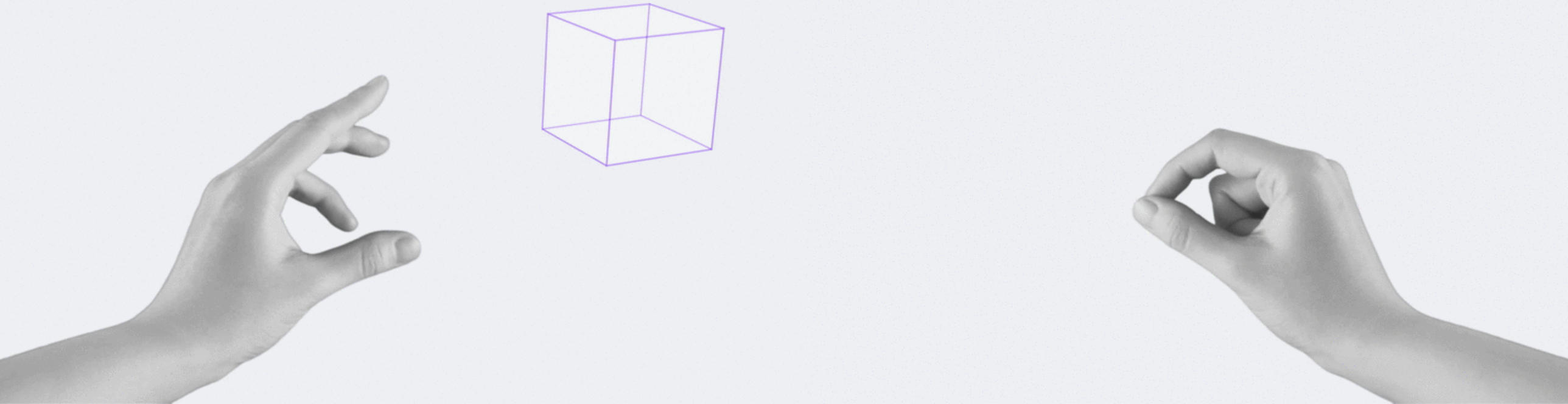
Let’s talk about interactions



Physical interactions

Tactile Feedback, Approachable, Immediate Visual Feedback, Intuitive

Digital Interactions

Versatile, No physical space limits, Adapts to different contexts

MR/AR Interactions

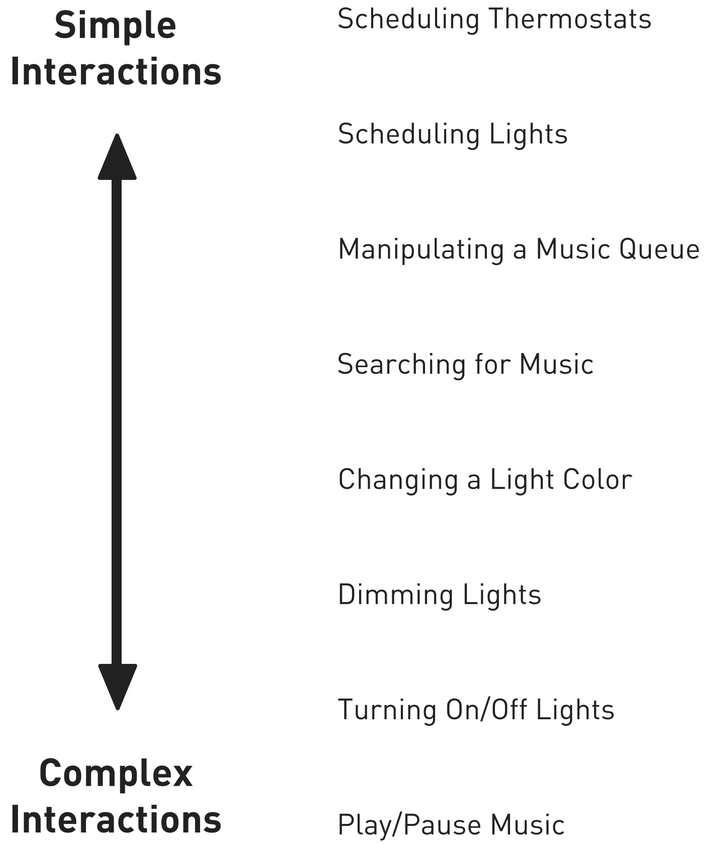
Layering digital objects into the real world

We can leverage both physicality of objects and the versatility of software

Design Opportunities

1.

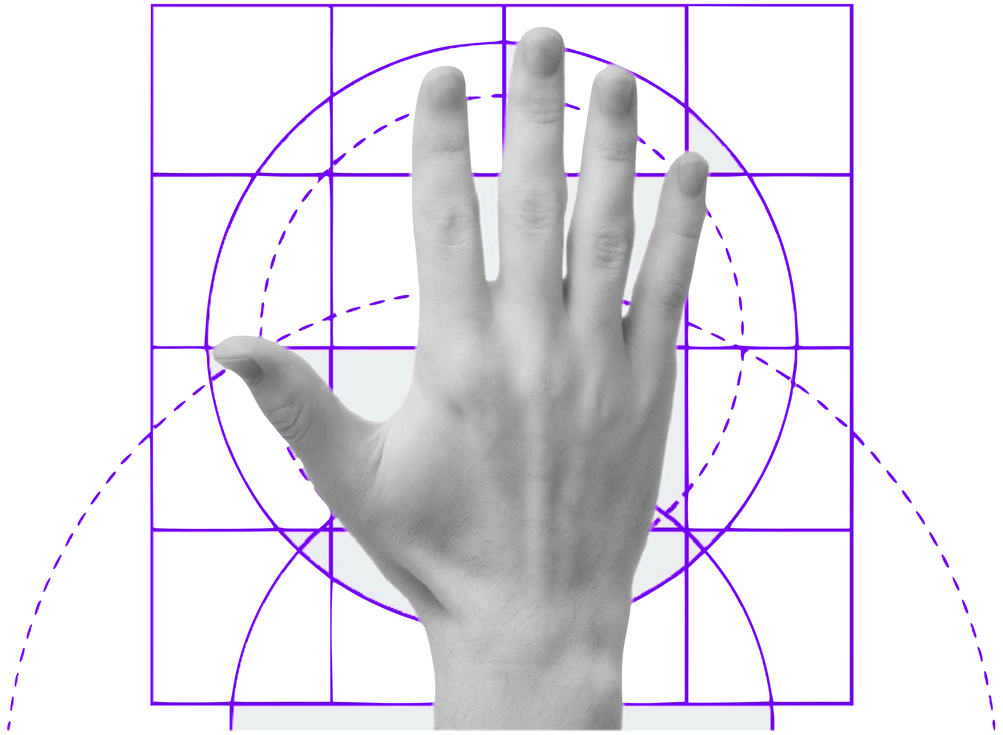
Thinking about the different complexities of objects and their designated actions



Design Opportunities

2.

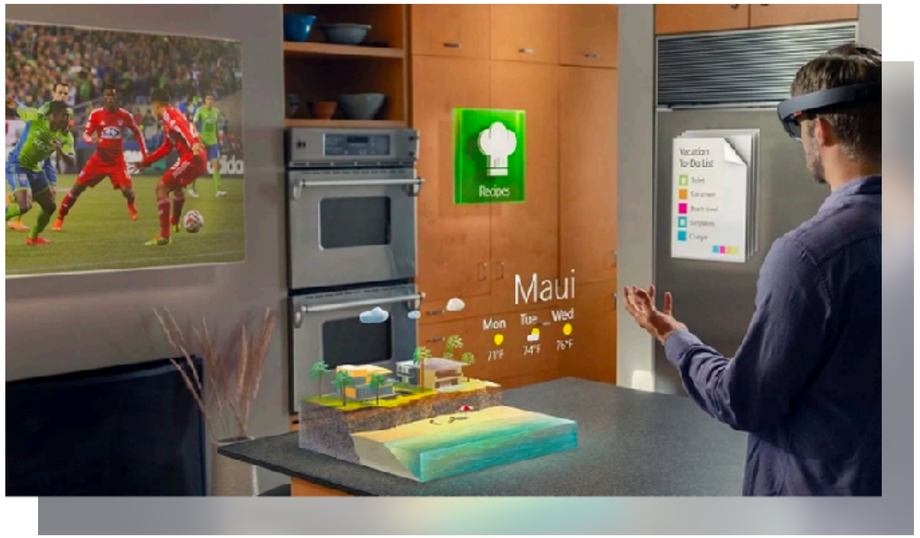
Finding new ways to interact that are more appropriate to what MR offers us



Design Opportunities

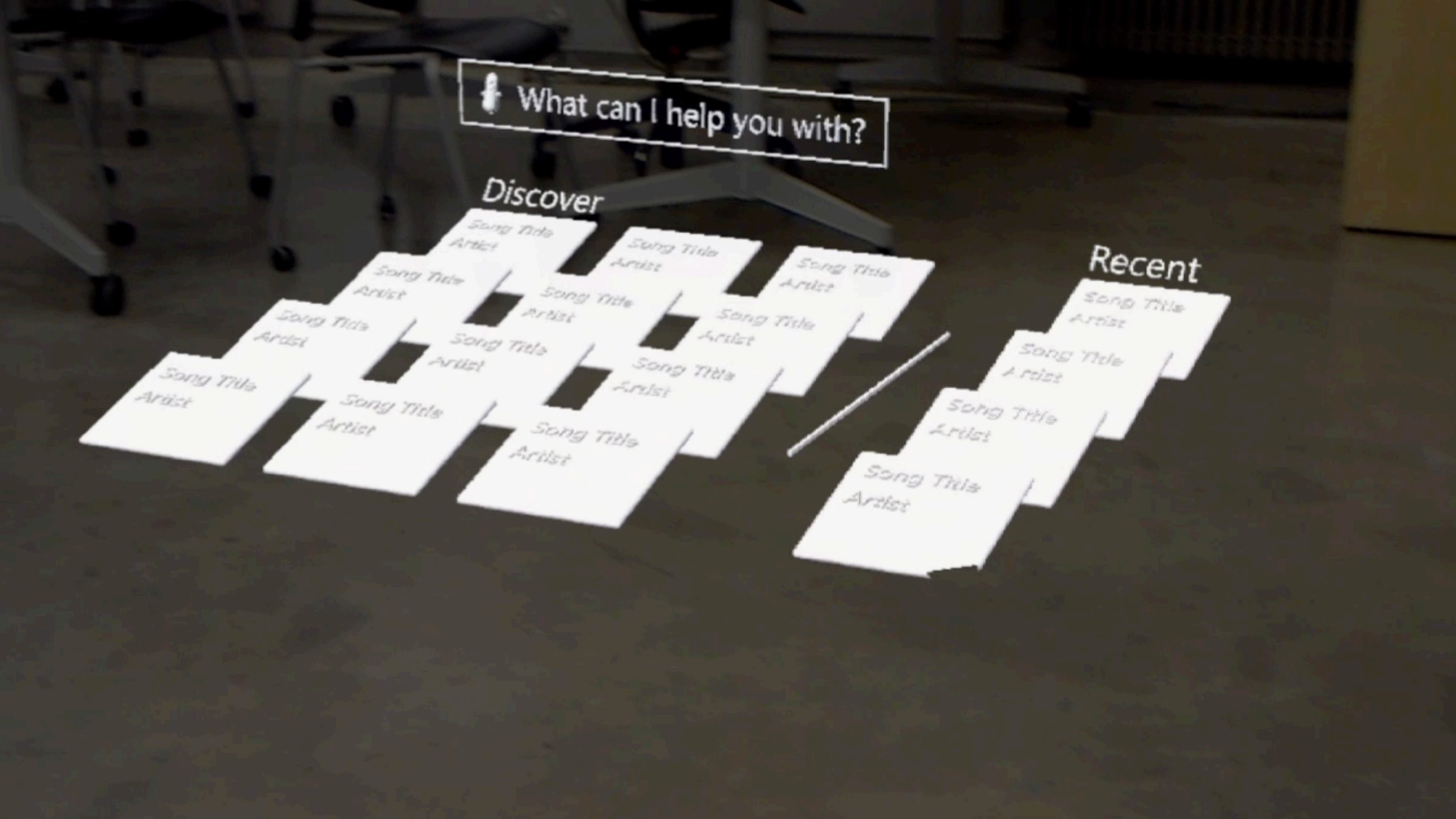
3.

Designing a solution that can be applied to object interaction as a whole. Controlling music is a case study for a framework that can be applied to different objects.



First Hit
Joe Sal

Hotel California
Eagles


What can I help you with?
Discover
Song Title
Artist
Recent

Glancing

How do we show our intent to use something?

We look at it

Minimal Controls

There shouldn't be clutter.

When you are passively glancing at something, you should see just the necessary information. Subtle. Unobtrusive.

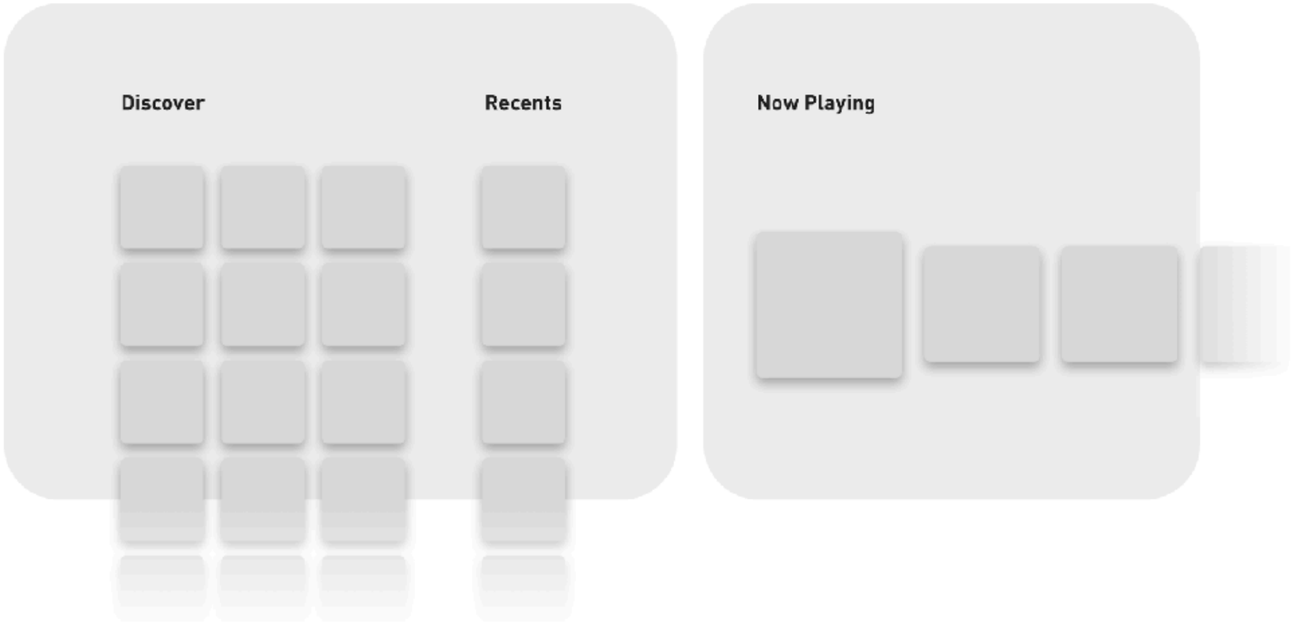
More Controls

The idea here is that most objects are designed for single actions, we can hide these ‘extraneous features’ in a way that is presented only when asked for

2 Parts of the ‘Full View’

Left view as a full, next level of information where the user has the option to explore other features of the object

Right view as an extension of the minimal controls



Interacting with the Queue

Treating each musical element as a physical object.

The queue acts as an extension of our initial minimal interactions (prev/next/play/pause)

Interacting with the Content Browser

Voice as the main navigation method

The problem with a lot of screen interaction is the abstraction between the actual action and what is portrayed.

Dismissing the Full View

This interaction should be as easy as it is to invoke, but different enough

Recap

How can we take advantage of the spacial capabilities of Mixed Reality and build an interface that fits seamlessly into our lives?

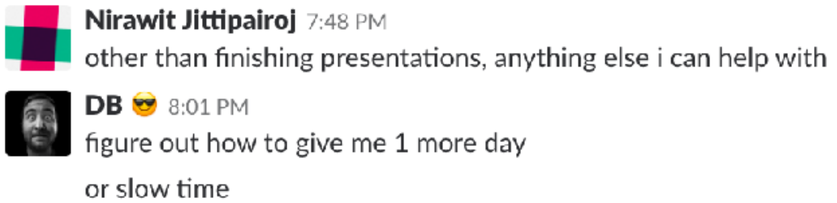
Rethinking the interaction model past flat 2D UIs and adding physicality to interface elements

If we had more time...

More time to visually represent our idea in video/Hololens form

Expand our system into other objects such as lighting, temperature, cooking, etc.

Explore more gestures



Thank You!