



GeekTalks

Tema:
JavaScript
#geekspaceit



www.wbwa.com

Batalin Viktor

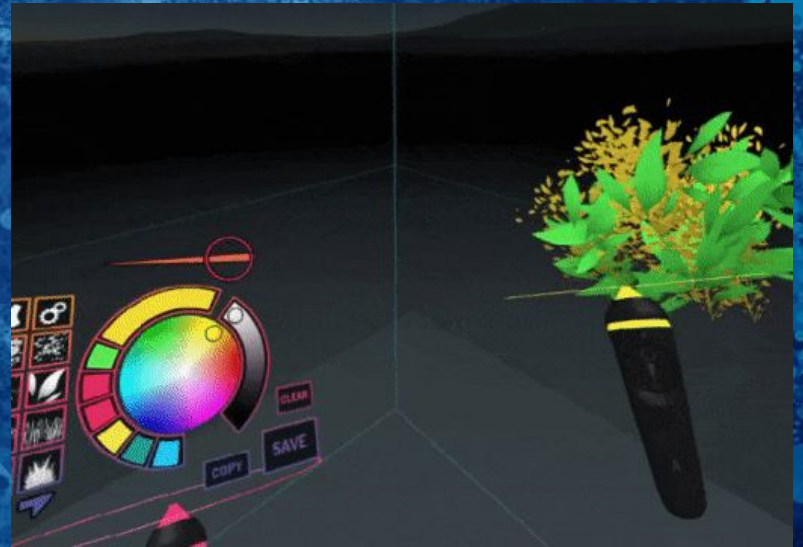
Frontend developer

Viseven Europe EU

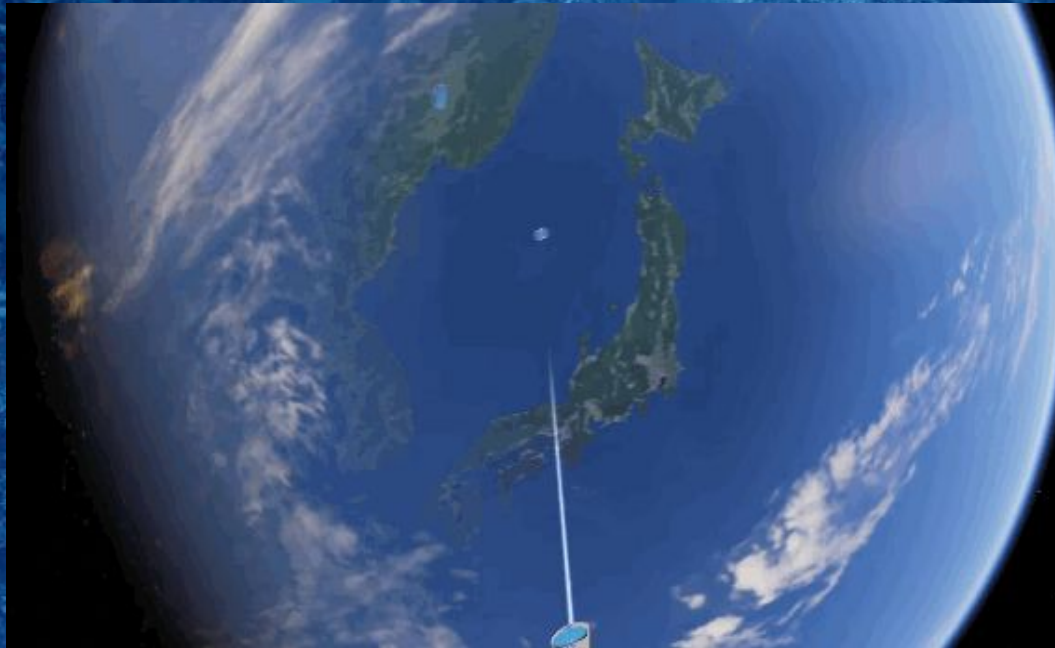
WHY

ARE?

Creating



Experiencing



Experiencing & creating

- Intuitive interfaces

Experiencing & creating

- Intuitive interfaces
- Natural interpretation of spatial data

Experiencing & creating

- Intuitive interfaces
- Natural interpretation of spatial data
- Shared experiences & collaboration

VR

Landscape

	Rift	Vive	GearVR	Daydream	Cardboard
Controls	2x	2x+	Touch	1x	Button

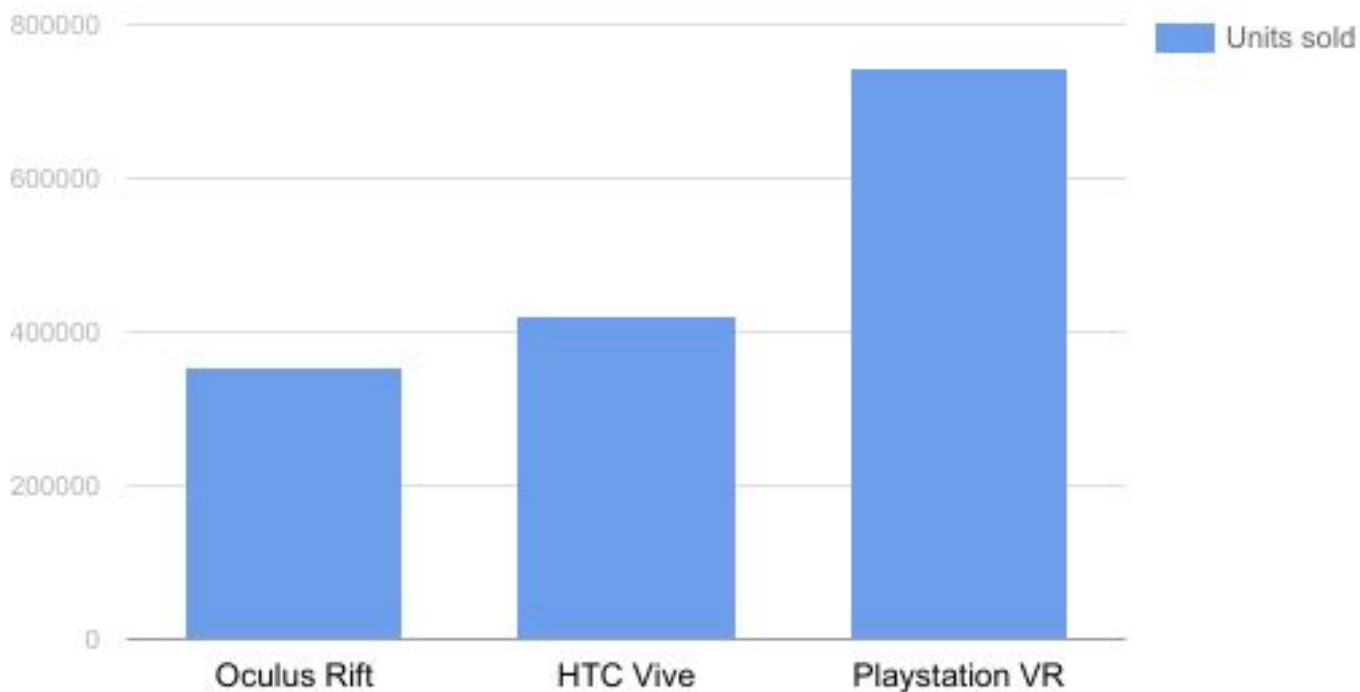
Room-
scale



Mobile?



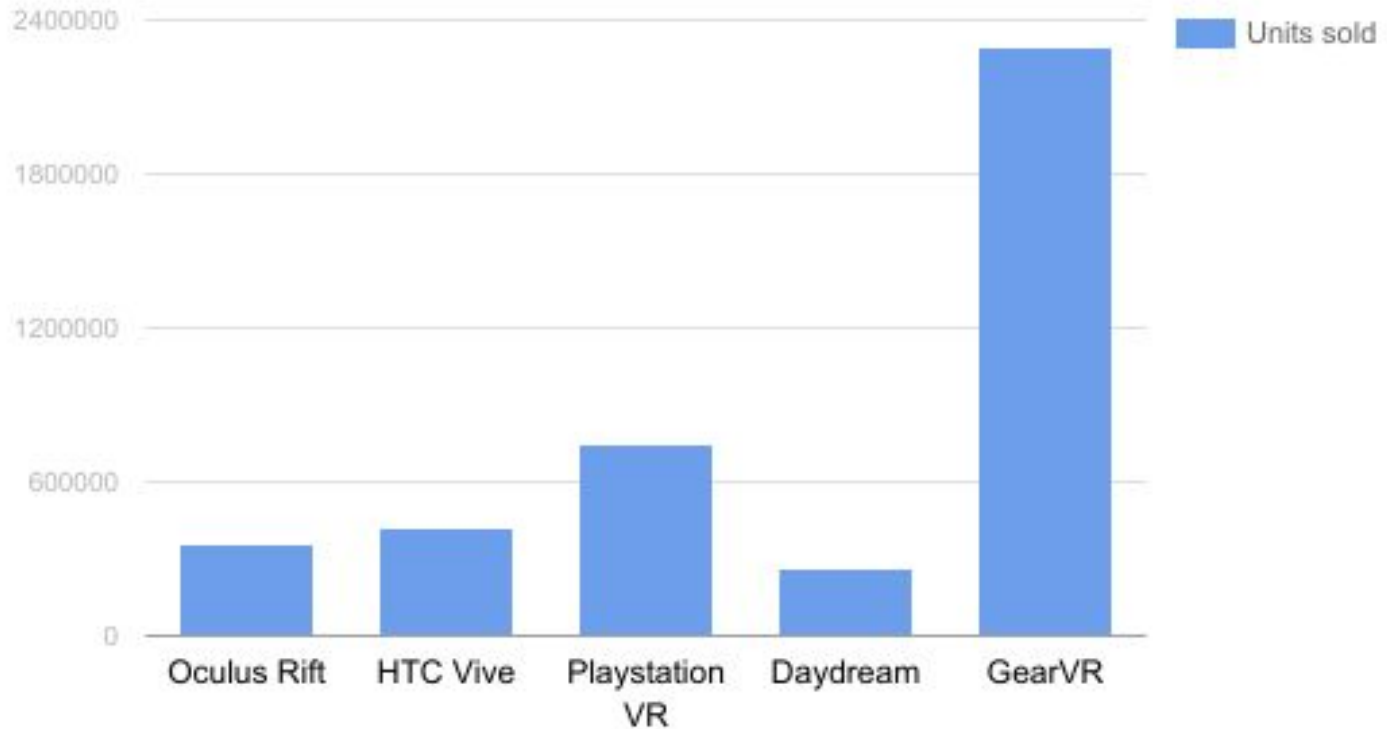
VR device sales 2016



Source:

<https://www.viarbox.com/single-post/2017/01/20/Virtual-Reality-HMDs-2016-Sales-Numbers>

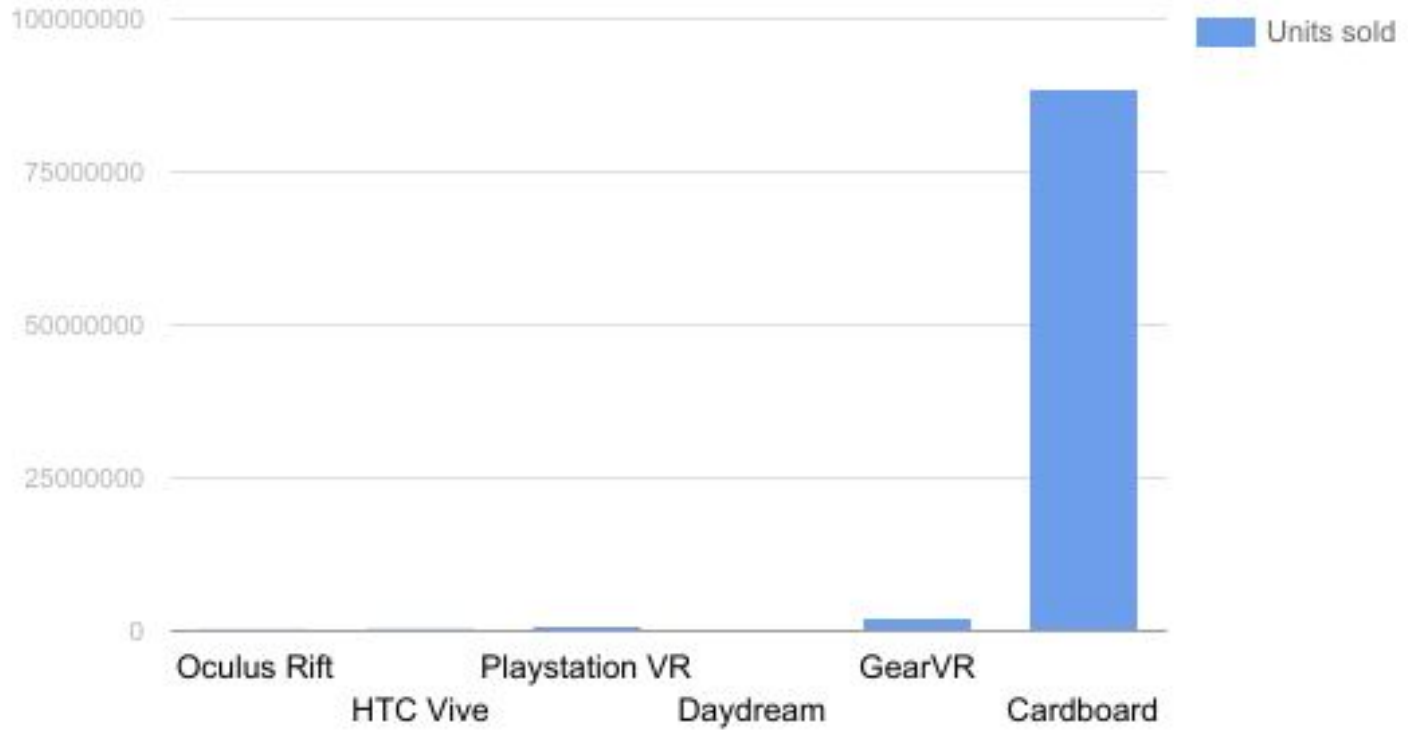
VR device sales 2016



Source:

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Conclusion

- Variety of capabilities

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- Mobile VR > Desktop VR

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- Variety of capabilities
- Mobile VR > Desktop VR
- Cardboard most widely deployed

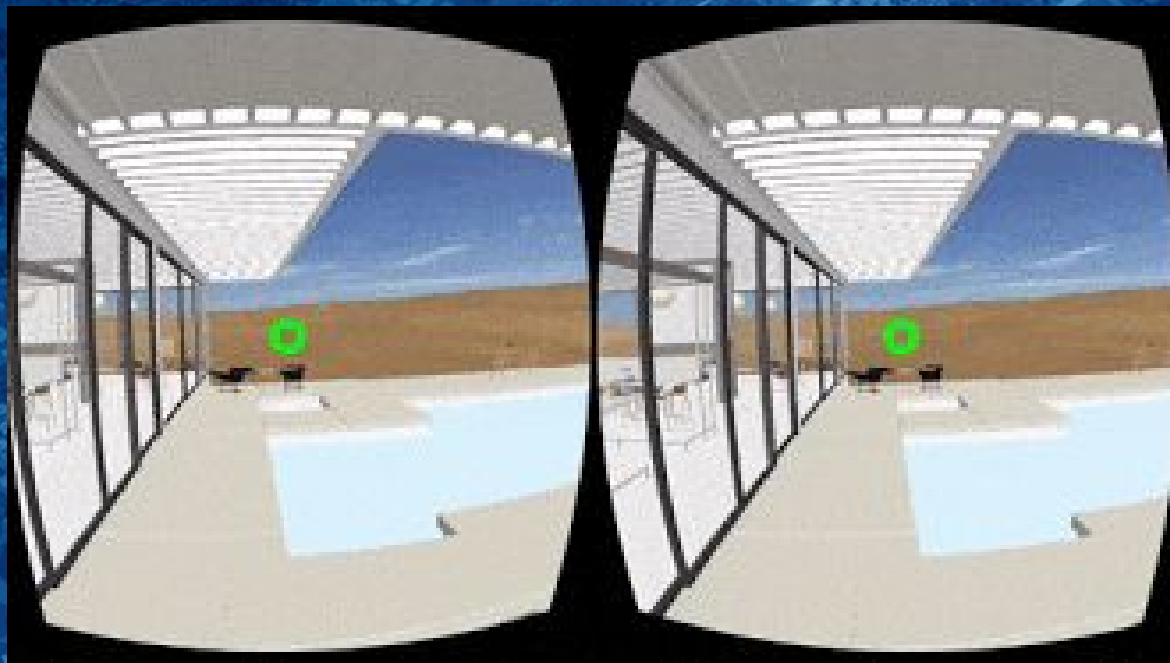
The Web

The biggest platform to share & collaborate

Lets try
WEBVR



How's it lookin'?



WebVR

- Available on many devices & platforms

WebVR

- Available on many devices & platforms



WebVR & WebGL

WebVR:

- Access to **VR device info & sensor data**
- Redirecting output to HMD

WebGL:

- The actual **3D rendering**

WebVR

- Available on many devices & platforms
- Open Standard (W3C)

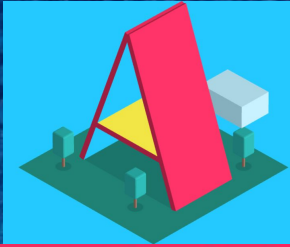
WebVR

- Available on many devices & platforms
- Open Standard (W3C)
- Lots of tooling & strong community

WebVR

- Available on many devices & platforms
- Open Standard (W3C)
- Lots of tooling & strong community
- Easier to create & share

WEB VR Frameworks



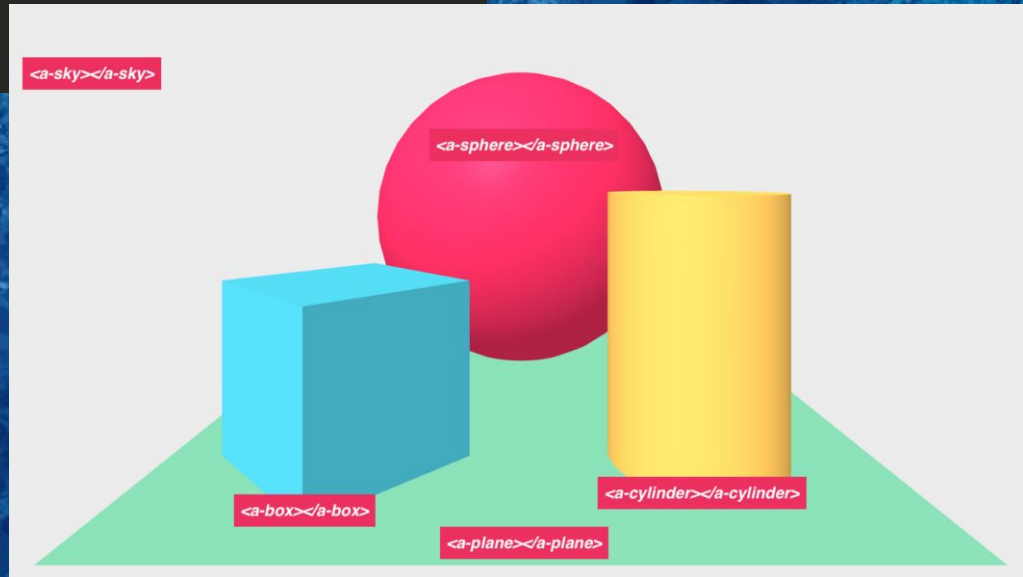
A-FRAME



React VR

A-frame by Mozilla

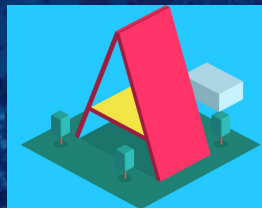
```
1 <html>
2   <head>
3     <script src="https://aframe.io/releases/0.6.1/aframe.min.js"></script>
4   </head>
5   <body>
6     <a-scene>
7       <a-box position="-1 0.5 -3" rotation="0 45 0" color="#4CC3D9"></a-box>
8       <a-sphere position="0 1.25 -5" radius="1.25" color="#EF2D5E"></a-sphere>
9       <a-cylinder position="1 0.75 -3" radius="0.5" height="1.5" color="#FFC65D"></a-cylinder>
10      <a-plane position="0 0 -4" rotation="-90 0 0" width="4" height="4" color="#7BC8A4"></a-plane>
11      <a-sky color="#ECECEC"></a-sky>
12    </a-scene>
13  </body>
14 </html>
```



Visual editor



AFrame with Vue



A-FRAME



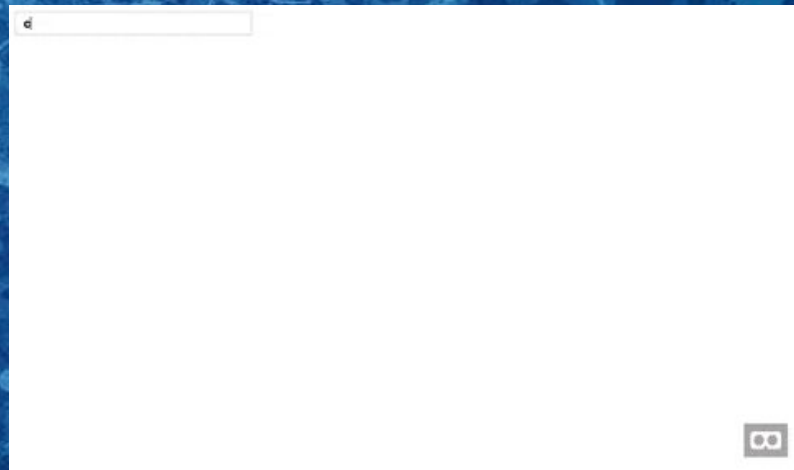
Basic usage

Custom component with reactive property within the aframe scene:

```
1 <a-scene>
2   <my-component :furniture-id="id"></my-component>
3 </a-scene>
```

Vue.js component:

```
1 Vue.component('my-component', {
2   props: ['furnitureId'],
3   template: `<a-entity :io3d-furniture="'id:' + furnitureId"></a-entity>`
4 })
```



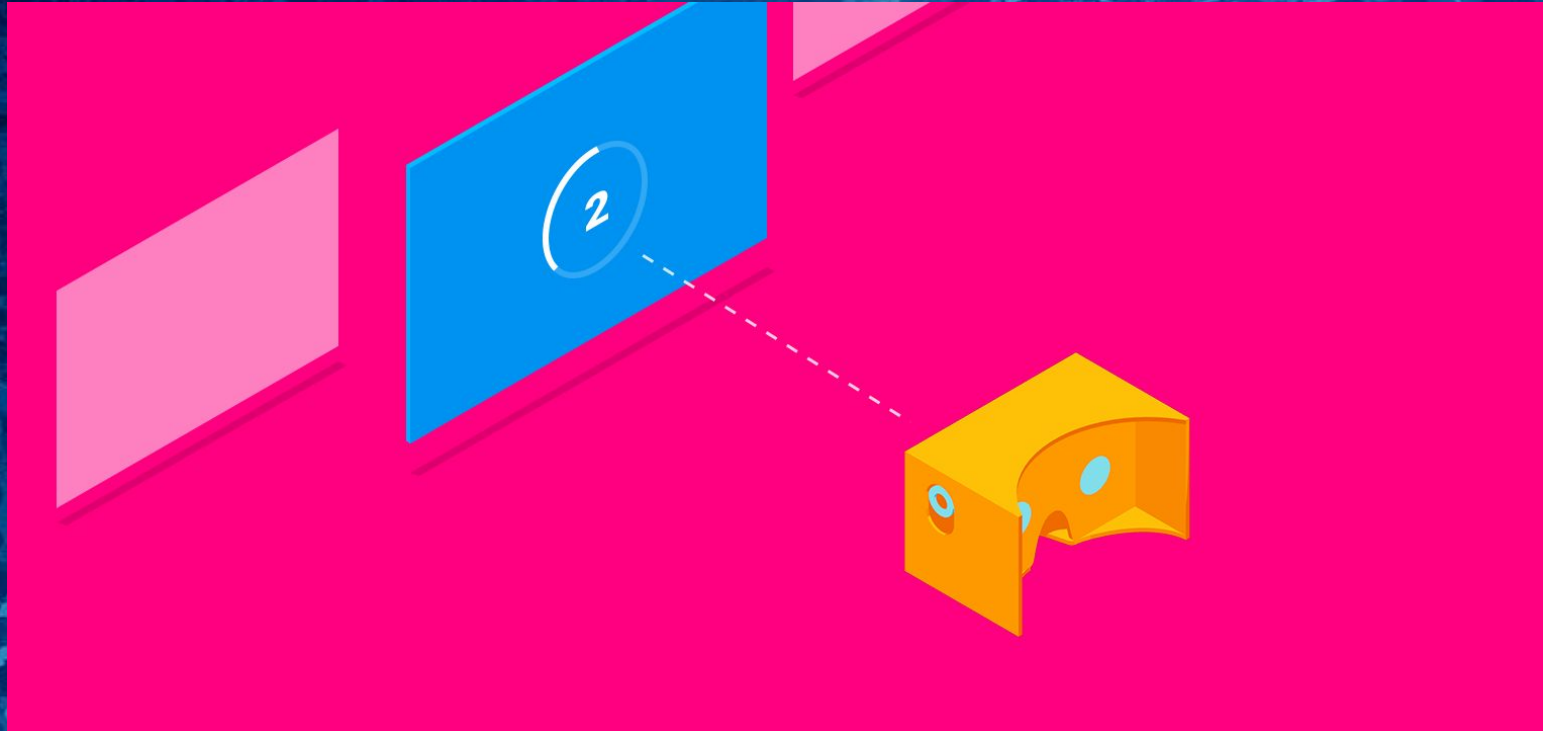


Challenges

Challenge 1: Input



Pointer / Gaze control



Challenge 2: Motion



Source: [@walaber](#) [[this tweet](#)]

Challenge 3: Presence



Source: [Google VR @ I/O '16](#)

So...

What perspectives of these technologies do you see? Do they really need you?

Links

<https://github.com/frederic-schwarz/aframe-vuejs-3dio>

<https://aframe.io/>

<https://facebook.github.io/react-vr>

<https://spaces.archilogic.com/blog/3d-models-of-architecture-for-your-3d-and-vr-a-frame-apps>

<https://github.com/archilogic-com/3dio-js/tree/master/examples-browser/staging/stage-room-ar>

<https://furniture.3d.io>