



An immersive browser playground

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The metaverse



Source: Fortnite's Travis Scott concert

The web does not understand 3D

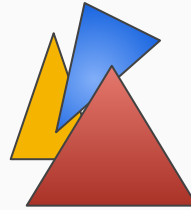


- `<canvas>` - draw your own pixels!
- We'll help, GPU APIs to draw triangles:
 - [WebGL](#)
 - [WebGPU](#) / [WebGPU Shading Language](#)

Some areas that are not covered:

- 3D asset/texture/scene formats
- User interaction
- Text 😬

How to draw a 3D owl on the web

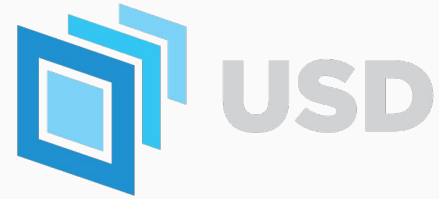


1. Draw a few triangles



2. Draw the rest of the owl

3D formats



3D formats - Text support



Basic text support
No wrapping 😬
No CSS 😬

Basic needs for a “webaverse”



- Need some way to render “usual” web content
- Need some way to copy-and-paste text

Geek week explorations

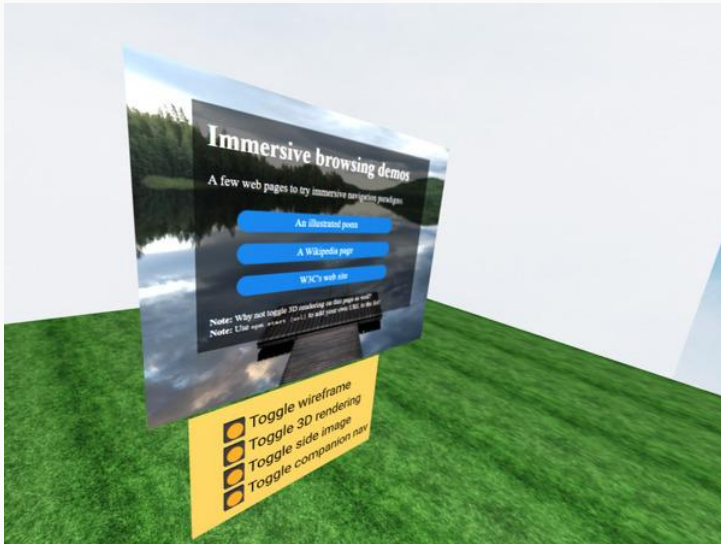


- Can simple 3D effects enhance browsing experiences of web pages in an immersive setting?
- Can browsers leverage the extended viewport to enhance navigation?

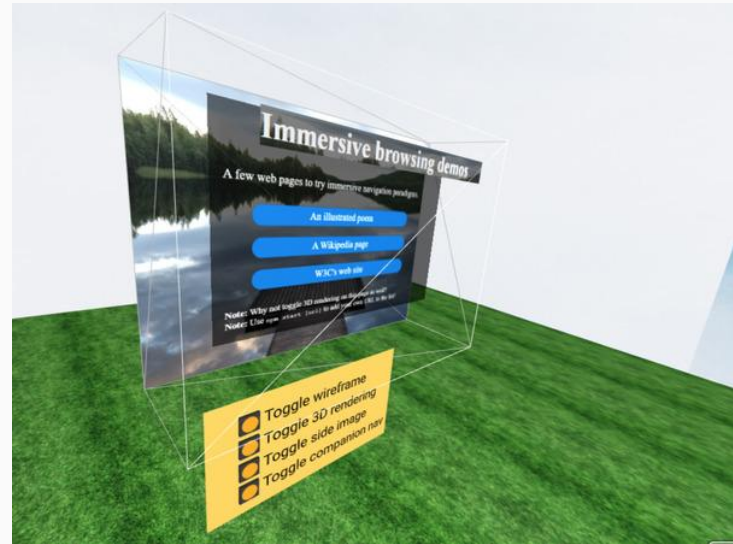
Immersive browser playground demo



Flat



3D



Code at: <https://github.com/dontcallmedom/immersive-browser-playground>

Some takeaways

- Good reminder that the web is **super powerful at laying out 2D content!**
- In parallel to pondering semantics for immersive contexts, we should also focus on **text support in 3D**.
- Conceptually, scoping a page to a 3D box seems sound.
- Not clear it adds a lot of value though.
- Extending beyond the box (with a permission model) might be interesting.
- CSS has 3D properties already... for 2D content. Different ways to signal intent to use for real 3D.

Thank you!



Dom



François



Attributions



Icons from www.flaticon.com:

- [Virtual reality icons](#) created by Nikita Golubev
- [Secret agent](#), [Brickwall](#), [Question mark](#), [Must have](#), [Medal](#), [Website](#), [BFF](#), [Cube](#), [VR](#), [Hard work](#), [Timeline](#), [2D](#) icons created by Freepik
- [Promise icons](#) created by Eucalyp
- [Computer icons](#) created by vectorsmarket15
- [Wish list icons](#) created by monkik