

Ada Rose Cannon

Samsung Internet



@samsunginternet





The WebXR Device API

VR and AR on the Web



WebXRs Goals

- Build a single experience which works across a range of devices
- Smooth onboarding with 'inline' sessions.
- A single website can target both VR and AR.
- A very fast way to get into XR for first time VR or AR developers.

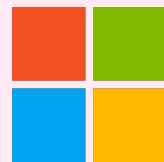


<https://github.com/immersive-web/webxr>

- immersive-web/webxr-ar-module
- immersive-web/webxr-gamepads-module

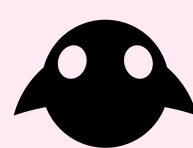


Who is Involved?



Microsoft

Google



magic
leap

amazon

facebook

SAMSUNG

moz://a



When can I use it?

- Implementations are being worked on and will hopefully be landing over the next 6 months.
 - Behind a flag or origin trial in Chrome.
 - There is a polyfill you can use today!
-
- Coming in Samsung Internet, q2 2020.

<https://github.com/immersive-web/webxr-polyfill>



But what about WebVR?



Lets discuss what the modules bring to WebXR

- Controllers
- AR



Web Browser

Profiles

XRInputSource

Gamepad
(Not included in navigator.getGamepads)

WebXR Input Profiles OpenSource JavaScript Library

3D Models in GLTF
Format

Input Profiles in
JSON Format

Output

The correct 3D model.
(or appropriate fallback)

With the user's
interactions
represented.



WebXR Input Profile Viewer

Select profiles source

Repository Local Profile

Select profile right ▾

Component trigger

buttonValue touched pressed

Component thumbstick

buttonValue touched pressed

xAxis yAxis

Component grip

buttonValue touched pressed

Component touchpad

buttonValue touched pressed

xAxis yAxis

Component menu

buttonValue touched pressed

▶ Data



<https://tinyurl.com/webxr-input-profiles>



Augmented Reality Plans



Session Modes:

- `'inline'` (VR only)
- `'immersive-vr'`

- `'immersive-ar'` **(new)**



We need your help,

- Check out the tests, the polyfill and the samples
- PRs for bug fixes are encouraged
- Check out the profile viewer

