

Samsung Internet for GearVR

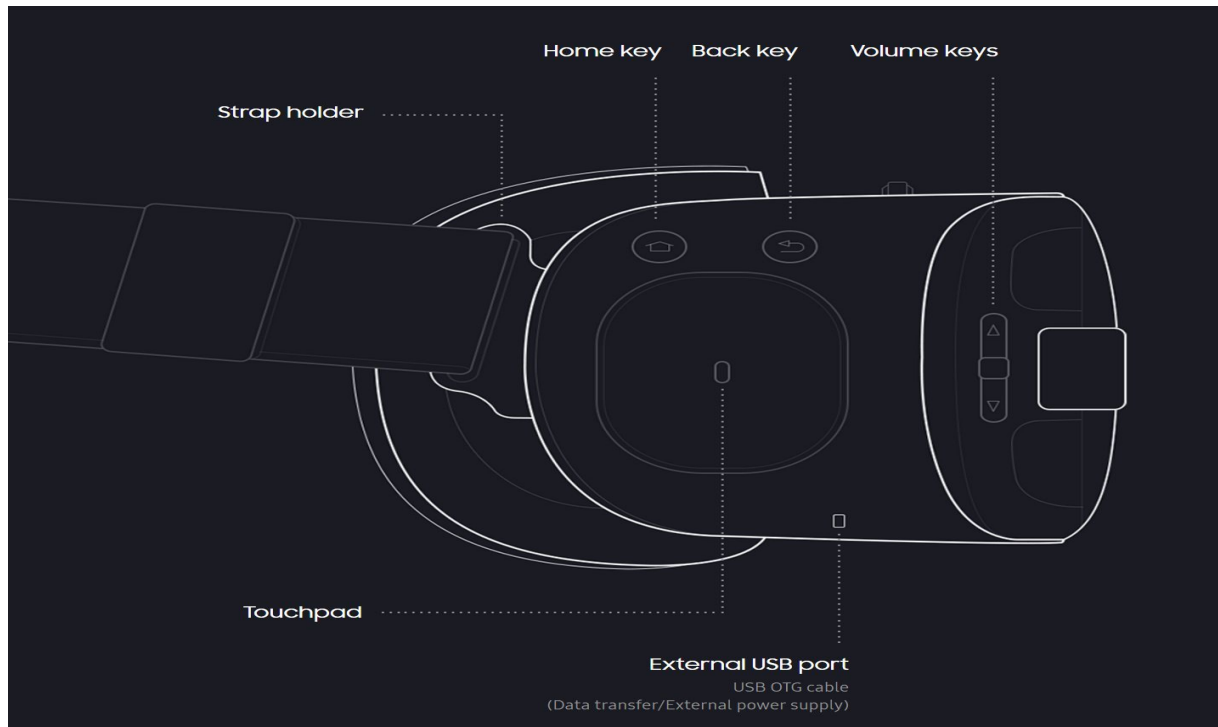
*Laszlo Gombos, Web Platform, Samsung
@laszlogombos*



Samsung GearVR



Controls



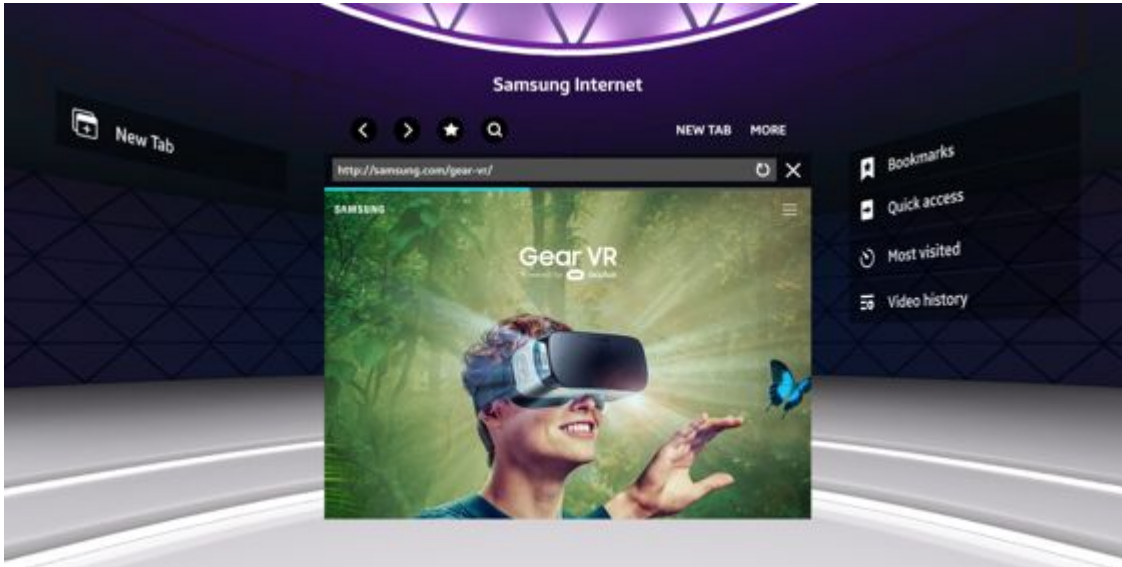
SAMSUNG

GearVR

- Large field of view
- Improved tracking due to additional IMU (inertial measurement unit)
 - When docked, system does not use the mobile's sensor for tracking
- Additional input capabilities
 - Touchpad on the side
- USB to go
 - Data transfer/external power supply



VR Browser for GearVR – VR-first browser



First Public Beta - Dec 2015

- Published in the Oculus store as an independent application

*..might ultimately end up being one of the **platform's most useful tricks***
(TheNextWeb)

*...one big reason for the Gear VR to have a web browser, and it's all about **access to YouTube*** (Android Central)

*...really important step for the **consumerization of virtual reality*** (Techcrunch)



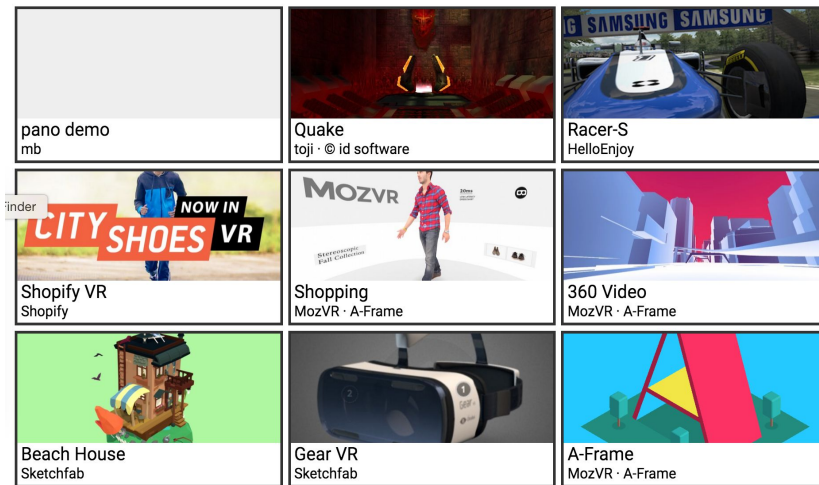
First Public Release - March 2016

- Chromium M44 for web rendering
- Introduce WebVR support (need to turn it on)
 - `internet://webvr-enable`
- Improved input with bluetooth devices (Gamepad, Keyboard, Mouse)
- Continuous experience between mobile and VR
- Sync video history, bookmarks
- Quick access sites
- 3D/360° Image support
- Improved video support
- Reorientation support (use it lying down)



Second Public Release - April 2016

- Launched at [Samsung Developer Conference](#)
- Updated to v1.0 API [WebVR API](#)
- WebVR demo page at <http://webvr.io/>



Last Public Release – Aug 2016

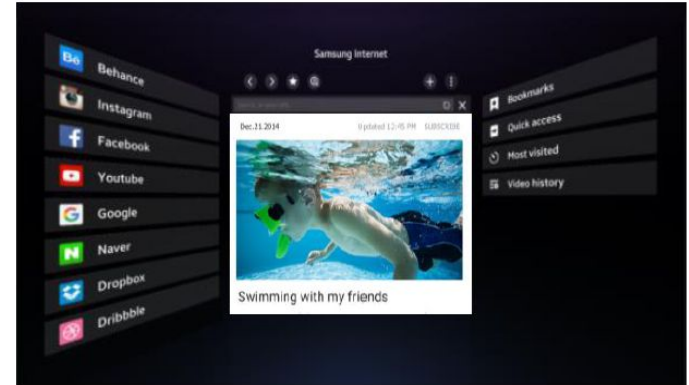
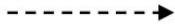
- Skybox API
- WebVR 1.0
- USB on-the-go support (offline media content browser)
- More languages
- Enhanced privacy options
- Over a million downloads
- Still WebVR 1.0



Integration with mobile browser

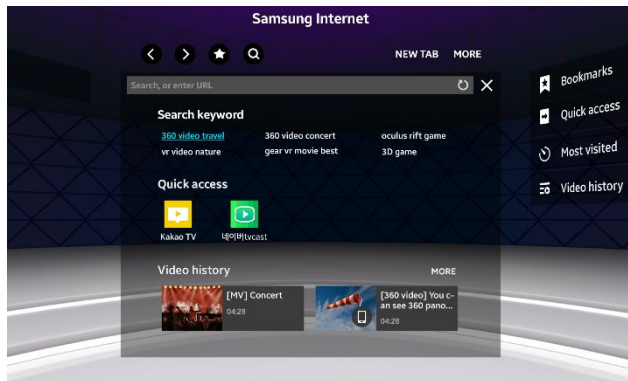


Continuous experience when switching to and from Samsung Internet for Android, and synchronized Video History.



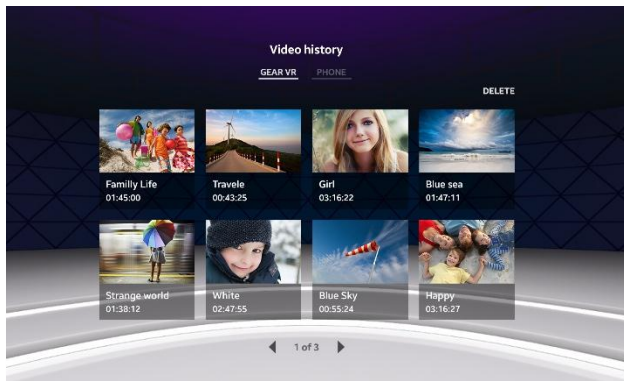
VR experiences

Easy Content Access



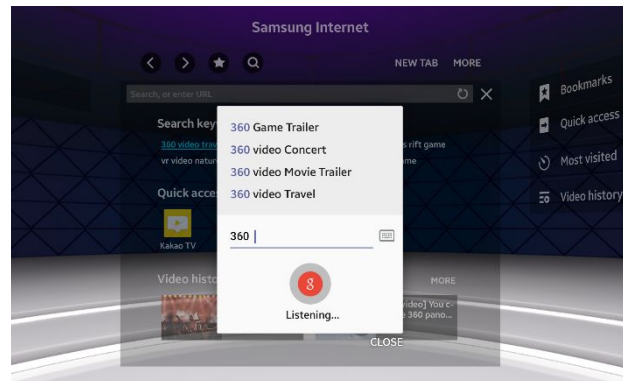
- Quick Access*
- Bookmarks (synced)
- Tab Manager

Video History



- Synced
- Viewing mode is saved
- Watch video directly without going to webpage

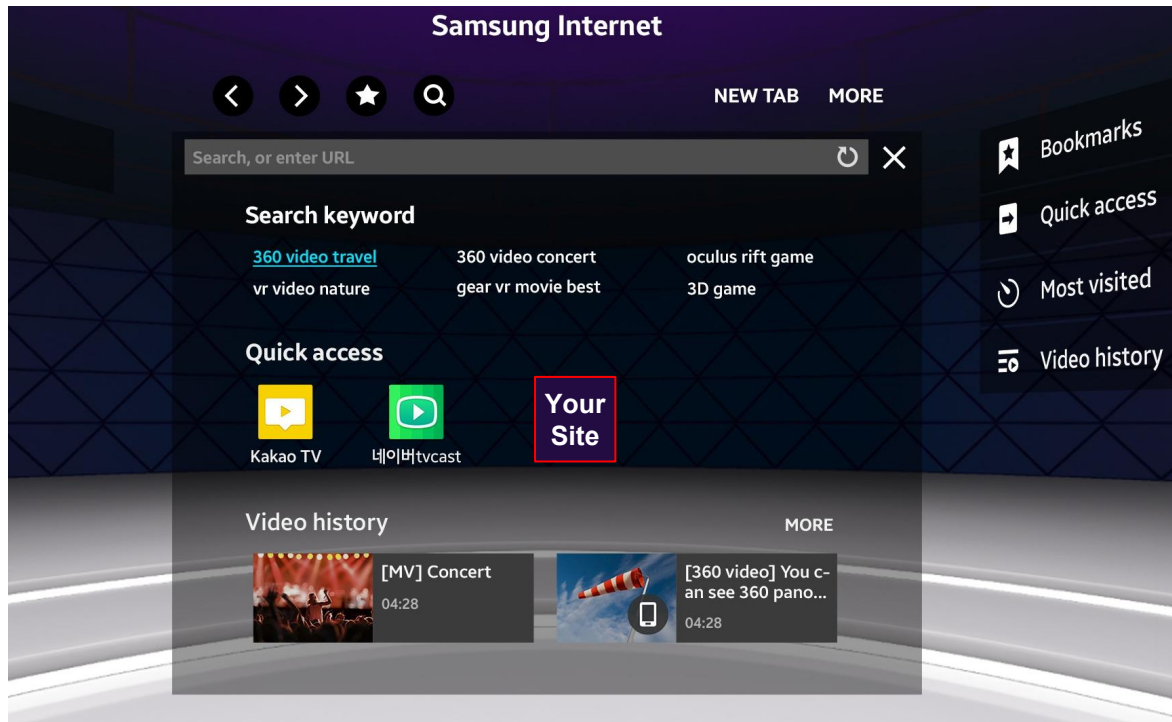
Text Input



- Voice input
- On-screen keyboard



Quick access service (curated)



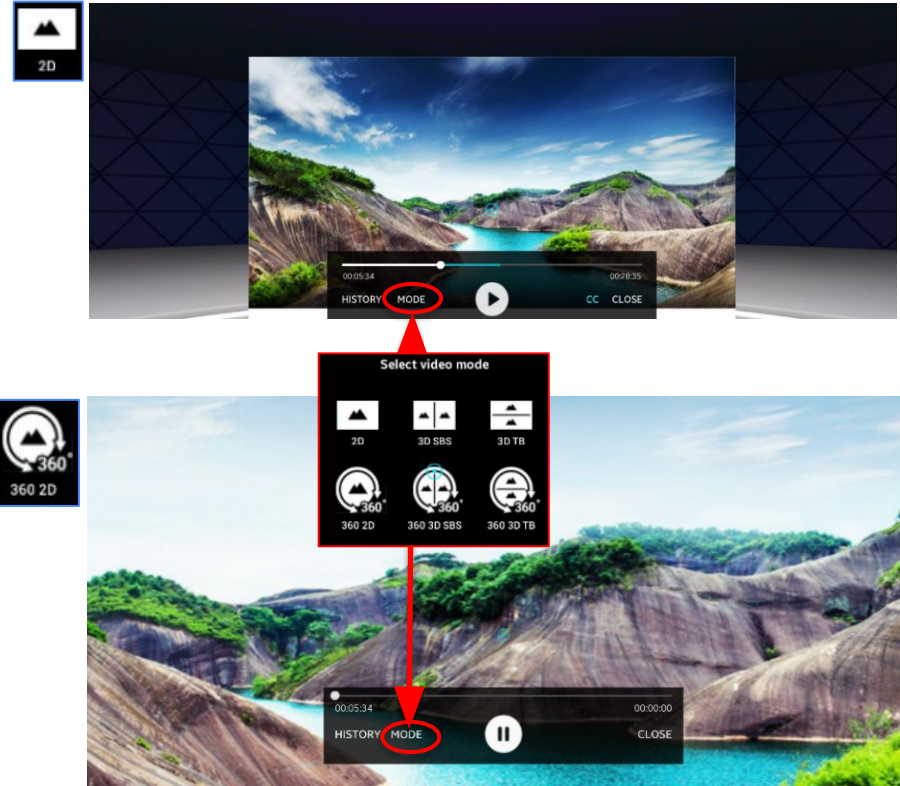
Video experience

Press the 'Mode' button to select the type of video.

For developers - add 'dimension' in the video tag for auto mode change

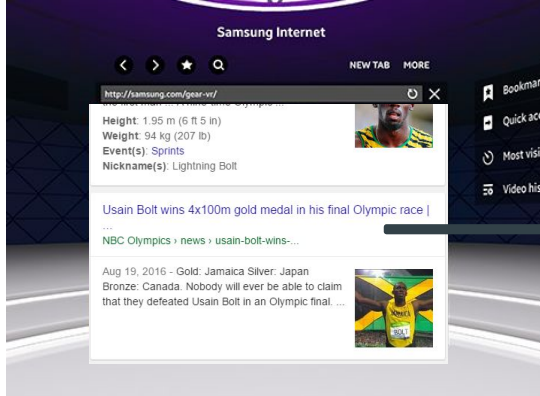
※ HTML5 Video Dimension Type Support (auto mode change)

- **dimension=3d-lr**: Side-by-Side 3D Video
 - **dimension=3d-tb**: Top-to-bottom 3D Video
 - **dimension=360**: 360° Video
 - **dimension=360-lr**: Side-by-side 3D 360° Video
 - **dimension=360-tb**: Top-to-bottom 360° Video
- (ex) `<video controls src="360video.mp4" type="video/mp4; dimension=360-lr;">`



Skybox (JavaScript API)

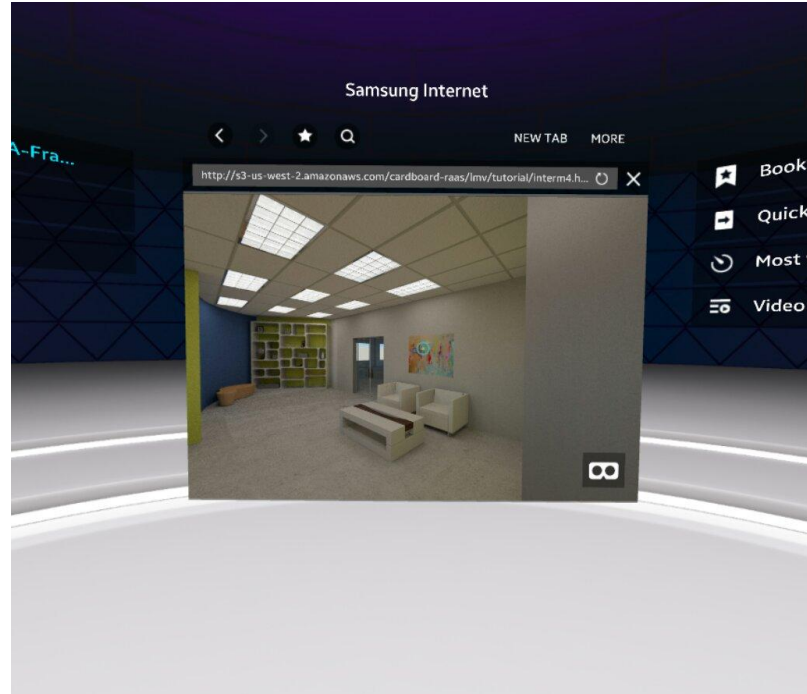
- Progressive enhancement
- Set the mood/theme for your page using JavaScript API that changes the theme you assign.
<https://medium.com/samsung-internet-dev/control-the-world-with-the-skybox-api-6e8ca213f171>



Demo - CAD from Autodesk

Virtual walk through in a office

From Michael Beale, Autodesk
(using A-Frame)



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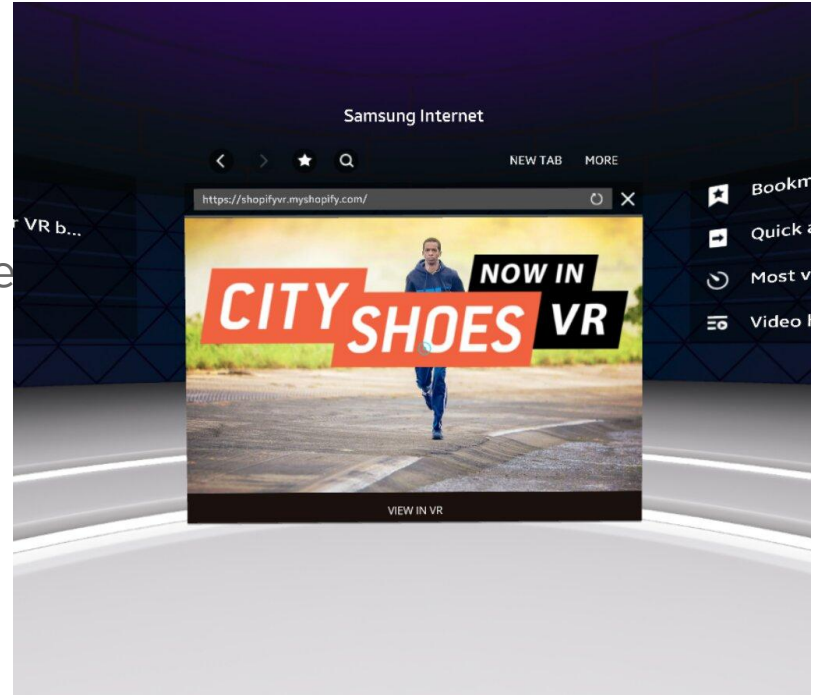
Demo - Shopify

E-commerce VR

Discover VR enabled sites from mobile and switch to a VR experience for online product discovery and shopping

<https://shopifyvr.myshopify.com/>

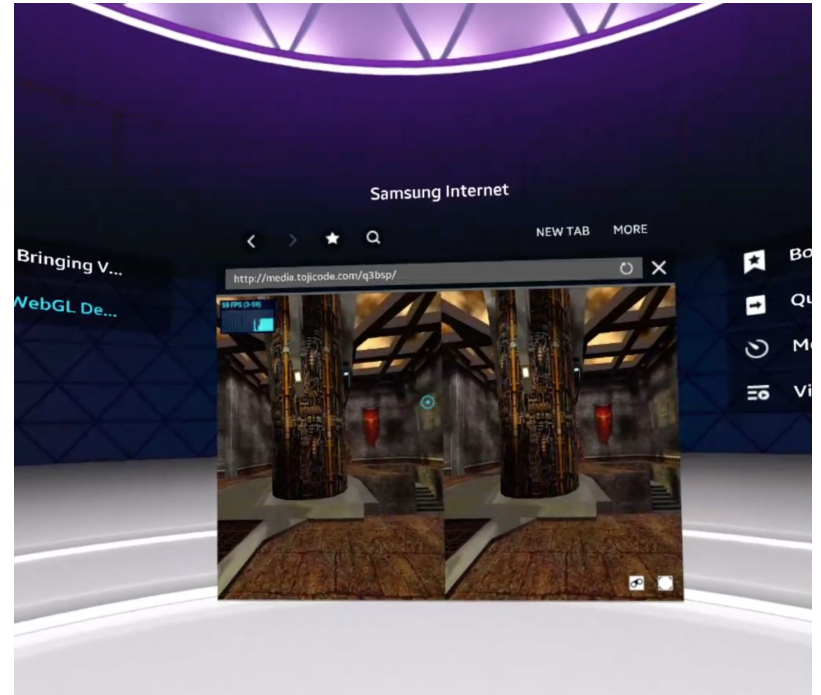
from Daniel Beauchamp



Demo - Quake

Load Quake and enter VR mode
demonstrates locomotion with
physical keyboard input

<http://media.tojicode.com/q3bsp/>
from Brandon Jones, Google



What's next

Ship WebVR enabled by default (at least make it easier to enable it)

- auto suggesting to turn it on
- Improve performance

More APIs to control the VR environment

- "Theming" of what is outside of the webview

Bring the "full" web to VR

- Full parity with mobile browser feature set (progressive web apps for VR)

Who we're/send us feedback

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<http://developer.samsung.com/internet#gearvr-overview>

<https://medium.com/samsung-internet-dev/>