

WebAssembly (WASM)

- near native speed
- just computation, no DOM access nor I/O
- used for physics, game engines & non-webXR AR & SLAM engines
- support for strongly typed languages; around 40 programming languages reportedly compile to WASM
- developer survey: need for improvement in four areas: WASI (WebAssembly System Interface), debugging support, integration with JavaScript and browser APIs, and build tooling
- 2.0 in draft

Performance

- Decide your target device class: mobile (billions), standalone headsets (10s of millions), or PC VR (millions)
- To keep frames/sec up, watch these metrics
 - number of triangles per frame (raw power of GPU):
 - mobile: < 100,000–200,000
 - standalone headsets: < 750,000–1,000,000
 - draw calls per frame (CPU–GPU bandwidth):
 - mobile: < 100–150
 - standalone headsets: < 100–175