deno_webgpu

This op crate implements the WebGPU API as defined in https://gpuweb.github.io/gpuweb/ in Deno. The implementation targets the spec draft as of February 22, 2021. The spec is still very much in flux. This op crate tries to stay up to date with the spec, but is constrained by the features implemented in our GPU backend library wgpu.

The spec is still very bare bones, and is still missing many details. As the spec becomes more concrete, we will implement to follow the spec more closely.

In addition, setting the `DENO_WEBGPU_TRACE` environmental variable will output a wgpu trace to the specified directory.

For testing this op crate will make use of the WebGPU conformance tests suite, running through our WPT runner. This will be used to validate implementation conformance.

GitHub CI doesn't run with GPUs, so testing relies on software like DX WARP & Vulkan lavapipe. Currently only using DX WARP works, so tests are only run on Windows.

Links

Specification: https://gpuweb.github.io/gpuweb/

Design documents: https://github.com/gpuweb/gpuweb/tree/main/design

Conformance tests suite: https://github.com/gpuweb/cts

WebGPU examples for Deno: https://github.com/crowlKats/webgpu-examples

wgpu-users matrix channel: https://matrix.to/#/#wgpu-users:matrix.org