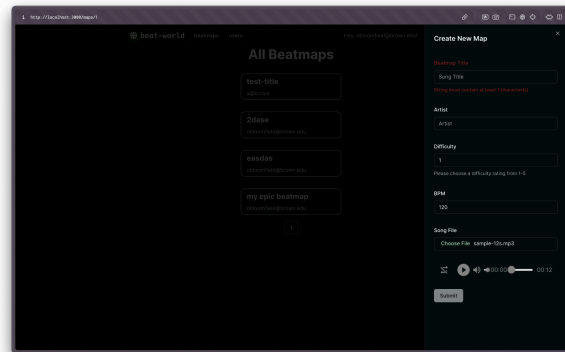
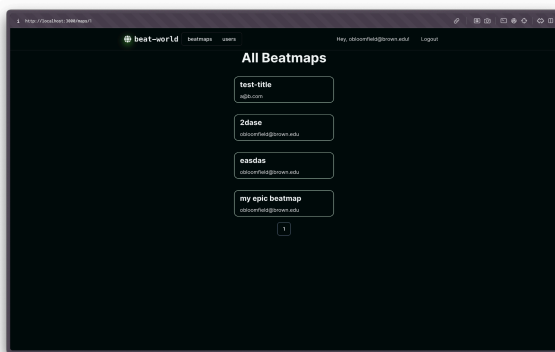


Sc.B Capstone
Orion Bloomfield

Beat World

Beat World is a web game implemented in Next.js and Rust for CS1950U (3D Game Engines). It is a rhythm game similar to Stepmania, Beat Saber, or Osu!, but runs completely on the web and requires no file download.



Running the 3D Game on the web is made possible using [WASM](#) + [WGPU](#). Although only fully compatible in chrome, Webassembly (WASM) allows any programming language code to run natively on all common hardware architectures, and web-gpu (WGPU) is a GPU-first graphics directive for the web.

Past the general course requirements, this project required a reimplementation of the baseline stencil code for CS1950U in Rust, as well as full-stack infrastructure around the game (creating beatmaps, login authentication, and web-rust integration).