L.A.M.D.A. Quest

Description

L.A.M.D.A Quest is a 2D, browser-based, adventure game featuring a custom-built programming language that allows players to write small programs and attach them to objects in the game, allowing for a customizable, challenging, and completely original gaming experience.

Innovations

- Offers more freedom and variety than traditional RPGs
- Allows for unlimited replayability
- Player created scripts are compiled and attached to game elements as running code

Technical

- The core framework uses the Phaser game engine, written in JavaScript
- Application backend utilizes Node.js
- The HackScript lexer and parser were created with Jison
- The main technological challenge was allowing the player the freedom to script anything while still keeping the game challenging.

Limitations

- The Phaser engine is made for small, one-screen games. We were trying to build a large, multi-map RPG. This made it difficult to change maps.
- Since HackScript didn't support functions, its capabilities were limited. Most functionality required hard-coded support in the engine.
- We got a working engine built, but we didn't spend as much time on level design.