

#### 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 teaches players how to write small programs and attach them to objects in the game, allowing for a customizable, challenging, and completely original gaming experience.

#### **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 is injecting compiled HackScript into the running game within a canvas element on a web page

## **Innovations**

- Offers more freedom and variety than traditional RPGs
- Allows for unlimited replayability
- Teaches elements of programming with a simplified, custom language
- Player created scripts are compiled and attached to game elements as running code

### Goals

- By the end of February we plan to have all of the game elements (compiler, script injection, game shell, procedural terrain generation) working together as well as a five minute playable level.
- The demo will have music, sound effects, and a unique design style
- By the end of the semester, we hope to have a refined, polished game with level advancement, saved states, various enemies and items, and the ability to use more complex HackScript constructs.