

### Adventure Game Specification

The assignment was to design and implement a text-based adventure game that runs as a web-based application, using JavaScript for the frontend and Python with Flask for the backend. It can be found at [http://rahulraj.scripts.mit.edu/workrepo\\_6170/assignment6/index.fcgi/](http://rahulraj.scripts.mit.edu/workrepo_6170/assignment6/index.fcgi/)

Initially, the application asks the user to log in, or register if they haven't logged in. This is used to keep players' games separate from each other. In addition, it allows for a future extension to keep track of the games a user has played and possibly a save feature. Passwords are protected by hashing with a salt.

The game is presented as a simple terminal-based interface, where descriptions of the scenario are shown in text and the user inputs data in text. The following commands are available:

inventory - display the player character's inventory  
use <item> - use an item if the player has it and it would have an effect in the current room  
examine <item|exit> - read the description of an item or an exit  
take <item> - take an item in the room if it is available  
exit <exit> - go through an exit if it's there and not locked  
help - display a list of valid possible commands

The terminal will respond to each command by sending the message to the server, which will process it, update the game state, and return the next message to the user. This cycle continues until the user reaches the end of the game, defined by them entering a room marked by the game designer as the final room. Game scenarios whose objective is to retrieve an item can be expressed through this structure by having the item in question unlock the last room.