

CS 111: Final Project

“Dungeon”

Objective

The goal of the game is to explore the dungeon in order to **find your long lost treasure** (the gold). You'll go through a series of rooms, and in each one you need to **find a key** you'll use to **unlock the door** to the next room.

Commands to Know

General

- **(unlock door key)**
 - In order to go through a door, it must be unlocked first. So, once you find the key, use the unlock command to unlock the door and then you'll be able to go through it.
- **(container-contents container)**
 - Allows you to see all of the objects inside of a container. Will be especially useful in certain rooms.
- **(go door)**
 - Takes you to another room. In general, you can select the next door by using **(the next door)** and the previous by using **(the previous door)**.

Room 1

- **(swing hammer box)**
 - Use the hammer to break any boxes and see the contents within.
Note: The hammer does not work on the special boxes (blue-box, red-box, purple-box).

Room 2

- **(read paper)**
 - Displays the information that is written on the paper.

- **(unlock locker combo)**
 - If the correct combination is provided, the locker will be unlocked and its contents will become accessible.

Room 3

- **(open special-box)**
 - In order to view the contents of a special box, you have to open it first.
- **(use antidote)**
 - If you are bitten by a snake, you must use the antidote before continuing to the next room.

Room 4

- **(pass-through chamber)**
 - To view the contents of a chamber, you must first use the pass-through command to enter it.

Room 5

- **(play fortune-teller guess)**
 - In order to defeat the fortune-teller, you have to beat them in a game of Rock, Paper, Scissors. Your guess should be a string.
 - **Example:** (play (the fortune-teller) "Rock")
- **(drink strength-potion)**
 - If you find a strength potion, use the drink command to consume it.

Room 6

- **(take object)**
 - Adds the selected object to your inventory.

Room 7

- **(slash sword thief)**
 - Used to kill the thief and win the game.
- **(within me object)**
 - Used to select objects that are in your inventory. **Note:** 'object' is the name of the object as a string (e.g. "sword" instead of sword).

About the Redundant Types

Within our project, we have types that are redundant at some level (such as red-box, blue-box, orange-chamber, white-chamber, etc.) but it's for a reason. In order to find the key in rooms that have these redundant types, you have to guess which container the key is in and guessing wrong leads to certain consequences. In order to implement some of those consequences, a new type had to be created (such as adding a snake field for the red-box). Because of this, those new types would be obviously different when printed to the output. To illustrate, look at the following example:

- Scenario 1: Without the Duplicate Types
 - You see:
a blue box
a red-box
a purple box
- Scenario 2: With The Duplicate Types
 - You see:
a blue-box
a red-box
a purple-box

As you can see in Scenario 1, you can tell just from the output that the red box is obviously different from the others. But, in Scenario 2, you can't tell that any of the boxes are different from each other. Hopefully, this makes sense.