Coffee Maker Test Plan
By Kue Khang and Yeeleng Thao

Introduction

Some concerns we anticipated with the testing process was how to begin and what would be considered a bug. This being our first experience testing for bugs, we jumped right into it and forgot to plan things out first. A few steps in and we realized what we did and took a step back and started planning things out. Some bugs we found, such as picking up the same item multiple times, we thought were on the border of what would be called a bug and were unsure if we should record them.

Requirement

- FUN-ITERATION - At each iteration of the game, the user shall be able enter one of six commands - "N" to go North, "S" to go South, "L" to Look for items, "I" for Inventory, "H" for Help, or "D" to Drink.
- FUN-UNKNOWN-COMMAND - If a player enters a command not specified by FUN-ITERATION, the system shall respond with the phrase "What?".
- FUN-INPUT-CAPS - The system shall be case-insensitive in regard to input values; that is, it shall accept capital and lower-case letters and treat them as equivalent.
- FUN-MOVE - The system shall allow a player to move North only if a door exists going North, and South only if a door exists going South.
- FUN-WIN - The player shall win the game if and only if Coffee, Sugar, and Cream have been collected by the player and then drunk.
- FUN-LOSE - The player shall lose the game if and only if the player Drinks but has not collected all of the items (Coffee, Sugar, and Cream).
- FUN-INVENTORY - Upon entering "I" for inventory, the player shall be informed of the items that he/she has collected (consisting of Coffee, Sugar, and Cream).
- FUN-LOOK - Upon entering "L" for Look, the player shall collect any items in the room and those items will be added to the player's inventory.
- FUN-HELP - Upon entering "H" for Help, the player shall be shown a listing of possible commands and what their effects are.
- FUN-UNIQ-ROOM - Each room in the house shall have a unique adjective describing it.
- FUN-UNIQ-ROOM-FURNISHING - Each room in the house shall have one and only one unique furnishing
- visible to the user upon entering the room.

Test Cases

<u>Room 1</u>

 Test 1 – User input "N" or "n" to go north into next room
  Pre-condition: You see a small room
  Execution: Input "N" or "n"
  Post-condition: You see a funny room
  Output: "N" passed, "n" failed

 Test 2 – User input "S" or "s" to go south into previous room
  Pre-condition: You see a small room
  Execution: Input "S" or "s"
  Post-condition: You are in magical land!
  Output: "S" passed, "s" passed

 Test 3 – Input "L" or "l" to look for item
  Pre-condition: User is in room
  Execution: Input "L" or "l"
  Post-condition: User found creamy cream
  Output: "L" passed, "l" passed

 Test 4 – Input "I" or "I" to check inventory
  Pre-condition: User is in room
  Execution: Input "I" or "I"
  Post-condition: You have NO coffee, You have cream, You have NO sugar.
  Output: "I" passed, "I" passed

 Test 5 – Input "D" or d" to drink coffee
  Pre-condition: User is in room
  Execution: Input "D" or "d"
  Post-condition: You drink the cream with no coffee and no sugar. You lose!
  Output: "D" passed, "d" passed

 Test 6 – Input "H" or "h" to show help
  Pre-condition: User is in room
  Execution: Input "H" or "h"
  Post-condition: What?
  Output: "H" failed, "h" failed

<u>Room 2</u>

 Test 1 – User input "N" or "n" to go north into next room
  Pre-condition: You see a Funny room
  Execution: Input "N" or "n"
  Post-condition: You see a Refinanced room
  Output: "N" passed, "n" failed

 Test 2 – User input "S" or "s" to go south into previous room
  Pre-condition: You see a funny room
  Execution: Input "S" or "s"
  Post-condition: You see a small room
  Output: "S" passed, "s" passed

 Test 3 – Input "L" or "l" to look for item
  Pre-condition: User is in room
  Execution: Input "L" or "l"
  Post-condition: Nothing out of the ordinary
  Output: "L" passed, "l" passed

Test 4 – Input "I" or "I" to check inventory

    Pre-condition: User is in room

    Execution: Input "I" or "I"

    Post-condition: You have NO coffee, You have cream, You have NO sugar.

    Output: "I" passed, "I" passed

Test 5 – Input "D" or d" to drink coffee

    Pre-condition: User is in room

    Execution: Input "D" or "d"

    Post-condition: You drink the cream with no coffee and no sugar. You lose!

    Output: "D" passed, "d" passed

Test 6 – Input "H" or "h" to show help

    Pre-condition: User is in room

    Execution: Input "H" or "h"

    Post-condition: What?

    Output: "H" failed, "h" failed

Room 3

Test 1 – User input "N" or "n" to go north into next room

    Pre-condition: You see a Refinanced room

    Execution: Input "N" or "n"

    Post-condition: You see a Dumb room

    Output: "N" passed, "n" failed

Test 2 – User input "S" or "s" to go south into previous room

    Pre-condition: You see a Refinanced Room

    Execution: Input "S" or "s"

    Post-condition: You see a funny room

    Output: "S" passed, "s" passed

Test 3 – Input "L" or "l" to look for item

    Pre-condition: User is in room

    Execution: Input "L" or "l"

    Post-condition: User found caffeinated Coffee

    Output: "L" passed, "l" passed

Test 4 – Input "I" or "I" to check inventory

    Pre-condition: User is in room

    Execution: Input "I" or "I"

    Post-condition: You have coffee, You have cream, You have NO sugar.

    Output: "I" passed, "I" passed

Test 5 – Input "D" or d" to drink coffee

    Pre-condition: User is in room

    Execution: Input "D" or "d"

    Post-condition: Without sugar, the coffee is too bitter. You cannot study. You lose!

    Output: "D" passed, "d" passed

Test 6 – Input "H" or "h" to show help

    Pre-condition: User is in room

    Execution: Input "H" or "h"

    Post-condition: What?

    Output: "H" failed, "h" failed

Room 4

Test 1 – User input "N" or "n" to go north into next room
Pre-condition: You see a Dumb room
Execution: Input "N" or "n"
Post-condition: You see a Bloodthirsty room
Output: "N" passed, "n" failed

Test 2 – User input "S" or "s" to go south into previous room
Pre-condition: You see a Dumb room
Execution: Input "S" or "s"
Post-condition: You see a refinanced room
Output: "S" passed, "s" passed

Test 3 – Input "L" or "l" to look for item
Pre-condition: User is in room
Execution: Input "L" or "l"
Post-condition: Nothing out of the ordinary
Output: "L" passed, "l" passed

Test 4 – Input "I" or "I" to check inventory
Pre-condition: User is in room
Execution: Input "I" or "I"
Post-condition: You have coffee, You have cream, You have NO sugar.
Output: "I" passed, "I" passed

Test 5 – Input "D" or d" to drink coffee
Pre-condition: User is in room
Execution: Input "D" or "d"
Post-condition: Without sugar, the coffee is too bitter. You cannot study. You lose!
Output: "D" passed, "d" passed

Test 6 – Input "H" or "h" to show help
Pre-condition: User is in room
Execution: Input "H" or "h"
Post-condition: What?
Output: "H" failed, "h" failed

Room 5

Test 1 – User input "N" or "n" to go north into next room
Pre-condition: You see a Bloodthirsty room
Execution: Input "N" or "n"
Post-condition: You see a rough room
Output: "N" passed, "n" failed

Test 2 – User input "S" or "s" to go south into previous room
Pre-condition: You see a Bloodthirsty room
Execution: Input "S" or "s"
Post-condition: You see a Dumb room
Output: "S" passed, "s" passed

Test 3 – Input "L" or "l" to look for item
Pre-condition: User is in room
Execution: Input "L" or "l"
Post-condition: Nothing out of the ordinary
Output: "L" passed, "l" passed

Test 4 – Input "I" or "I" to check inventory

Pre-condition: User is in room

Execution: Input "I" or "I"

Post-condition: You have coffee, You have cream, You have NO sugar.

Output: "I" passed, "I" passed

Test 5 – Input "D" or d" to drink coffee

Pre-condition: User is in room

Execution: Input "D" or "d"

Post-condition: Without sugar, the coffee is too bitter. You cannot study. You lose!

Output: "D" passed, "d" passed

Test 6 – Input "H" or "h" to show help

Pre-condition: User is in room

Execution: Input "H" or "h"

Post-condition: What?

Output: "H" failed, "h" failed

Room 6

Test 1 – User input "N" or "n" to go north into next room

Pre-condition: You see a rough room

Execution: Input "N" or "n"

Post-condition: You are in magical land!

Output: "N" passed, "n" failed

Test 2 – User input "S" or "s" to go south into previous room

Pre-condition: You see a Rough room

Execution: Input "S" or "s"

Post-condition: You see a Bloodthirsty Room

Output: "S" passed, "s" passed

Test 3 – Input "L" or "l" to look for item

Pre-condition: User is in room

Execution: Input "L" or "l"

Post-condition: You found some sugar

Output: "L" passed, "l" passed

Test 4 – Input "I" or "I" to check inventory

Pre-condition: User is in room

Execution: Input "I" or "I"

Post-condition: You have Coffee, you have Cream, You have Sugar

Output: "I" passed, "I" passed

Test 5 – Input "D" or d" to drink coffee

Pre-condition: User is in room

Execution: Input "D" or "d"

Post-condition: You drink the beverage and are ready to study. You win!

Output: "D" passed, "d" passed

Test 6 – Input "H" or "h" to show help

Pre-condition: User is in room

Execution: Input "H" or "h"

Post-condition: What?

Output: "H" failed, "h" failed

Traceability Matrix

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
Iteration	x	x	x	x	x	x
Unknown	x	x	x	x	x	x
Caps	x	x	x	x	x	x
Move	x	x				
Win					x	
Lose					x	
Inventory				x		
Look			x			
Help						x
Uniq Room	x	x				
Uniq Furnishing	x	x				

Defects Found

No case sensitivity for "n"

- Description: The "N" command to move north is not case sensitive and "n" is not recognized.
- Reproduce: Type "n" into the command line and press Enter
- Expected: Should move you into the room to the north
- Observed: Is not recognized by the program

Can pick up multiples of the same item

- Description: All three items are able to be picked up multiple times
- Reproduce: Type "L" in any of the rooms with an item multiple time
- Expected: Item should be picked up the first-time inputting "L" and the next time display "You don't see anything out of the ordinary"
- Observed: Item is found multiple times

No door leading into magical land at either end

- Description: There is no door that leads to the magical land, yet we can still move in that direction
- Reproduce: Type "s" in the Small room of the game and "n" in the Rough Room
- Expected: You should not be able to move to another room unless there is a door in that direction
- Observed: You can move in said direction even when there's no door

No help menu when inputting "h" or "H"

- Description: Inputting "h" into the command line doesn't bring up the help menu
- Reproduce: Input "h" or "H" into the command line and press Enter
- Expected: The help menu should appear on the command line
- Observed: The input "h" or "H" is not recognized

Who Did What?

Kue – Tested the program and found defects.
Yeeleng – Recorded the findings and found defects.