



CS 1632 Software Quality Assurance

Deliverable 1

Member 1 Name: Alex Chlpka

Member 2 Name: Evan Moran

1. Introduction

a. Division of Work

Alex - Traceability Matrix, Test Cases

Evan - Introduction, Test Cases, Defect Reports

b. One Edge Case

TEST-FUN-S-BOUND

This test is an edge case because the room is on the edge of the map and the player should not be allowed to walk further than this virtual map edge.

c. One Corner Case

TEST-INSTANT-LOSS

This test is a corner case because the player attempts to drink with the amount of items furthest away from what is needed to win the game.

2. Traceability Matrix

FUN-ITERATION: TEST-FUN-ITER

FUN-UNKNOWN-COMMAND: TEST-STRING-COMMAND, TEST-NUM-COMMAND

FUN-INPUT-CAPS: TEST-FUN-CAPS-LOWER-N-S, TEST-FUN-CAPS-UPPER-N-S, TEST-FUN-H, TEST-FUN-I,
TEST-FUN-L, TEST-INSTANT-LOSS, TEST-FUN-D-LOWER

FUN-MOVE: TEST-FUN-ITER, TEST-FUN-N-BOUND, TEST-FUN-S-BOUND

FUN-WIN: TEST-FUN-WIN, TEST-FUN-ITER

FUN-LOSE: TEST-INSTANT-LOSS

FUN-INVENTORY: TEST-FUN-I, TEST-FUN-ITER

FUN-LOOK: TEST-FUN-L, TEST-FUN-ITER

FUN-HELP: TEST-FUN-H, TEST-FUN-ITER

FUN-UNIQ-ROOM: TEST-UNIQ-ROOM-FURN

FUN-UNIQ-ROOM-FURNISHING: TEST-UNIQ-ROOM-FURN

3. Test Cases

IDENTIFIER: TEST-FUN-CAPS-LOWER-N-S

TEST CASE: Tests the requirement that go north and south command works and is case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "n" followed by Enter
- Type "s" followed by Enter

POSTCONDITIONS:

- Within the program output,
"You see a Funny room.
It has a Sad record player.
A Beige door leads North.
A Massive door leads South."
and
"You see a Small room.
It has a Quaint sofa.
A Magenta door leads North."
should have been printed

IDENTIFIER: TEST-FUN-CAPS-UPPER-N-S

TEST CASE: Tests the requirement that go north and south command works and is case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "n" followed by Enter
- Type "s" followed by Enter

POSTCONDITIONS:

- Within the program output,
"You see a Funny room.
It has a Sad record player.
A Beige door leads North.
A Massive door leads South."

and
"You see a Small room.
It has a Quaint sofa.
A Magenta door leads North."
should have been printed

IDENTIFIER: TEST-FUN-H

TEST CASE: Tests the requirement that the help command works and is case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "H" followed by Enter
- Type "h" followed by Enter

POSTCONDITIONS:

- Within the program output, there should be two listings of possible commands and what their effects are.
-

IDENTIFIER: TEST-FUN-I

TEST CASE: Tests the requirement that all instructions are case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "I" (Uppercase i) followed by Enter
- Type "i" followed by Enter

POSTCONDITIONS:

- Within the Program output,
"YOU HAVE NO COFFEE!
YOU HAVE NO CREAM!
YOU HAVE NO SUGAR!"
should have been printed twice
-

IDENTIFIER: TEST-FUN-L

TEST CASE: Tests the requirement that the look command works and is case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "L" followed by Enter
- Type "l" (lowercase L) followed by Enter

POSTCONDITIONS:

- Within the Program output,
"There might be something here..."
You found some creamy cream!"
should have been printed twice
-

IDENTIFIER: TEST-FUN-D-LOWER

TEST CASE: Tests the requirement that the drink command works and is case-insensitive

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Run the command "d" in CoffeeMaker

POSTCONDITIONS:

- The program should print
"You drink the air, as you have no coffee, sugar, or cream."
The air is invigorating, but not invigorating enough. You cannot study.
You lose!"
-

IDENTIFIER: TEST-FUN-ITER

TEST CASE: Tests the requirement that every command works correctly at every iteration of the game

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Run the commands "L", "I", and "H" followed by "N"
- Repeat the first step five times
- Run the command "S" five times
- Run the command "D"

POSTCONDITIONS:

- After each "L" command, the output should display if any items were collected.
 - After each "I" command, the output should inform the user of the items collected, if any.
 - After each "H" command, the output should be shown a listing of all commands and effects.
 - After each "N" command, the output should display what the player sees in each room.
 - After each "S" command, the output should display what the player sees in each room.
 - After running the final command "D", the output should display,
 "You drink the beverage and are ready to study!"
 You win!"
-

IDENTIFIER: TEST-STRING-COMMAND

TEST CASE: Tests string "string" as a command upon start of game

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "string" followed by Enter

POSTCONDITIONS:

- The program should output:

"What?"

You see a Small room.

It has a Quaint sofa.

A Magenta door leads North.

INSTRUCTIONS (N,S,L,I,D) >"

IDENTIFIER: TEST-FUN-INSTANT-LOSS

TEST CASE: Player attempts to drink nothing

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "D" followed by Enter

POSTCONDITIONS:

- The program should print
 "You drink the air, as you have no coffee, sugar, or cream.
 The air is invigorating, but not invigorating enough. You cannot study.
 You lose!"

IDENTIFIER: TEST-FUN-S-BOUND

TEST CASE: Tests the requirement that attempting to go south when there is no door works as specified

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Type "S" followed by Enter

POSTCONDITIONS:

- The program should print "A door in that direction does not exist." and disallow the movement

IDENTIFIER: TEST-FUN-N-BOUND

TEST CASE: Tests the requirement that attempting to go north when there is no door works as specified

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"
- Be in the topmost room by following these steps
 - a. Type "N" followed by Enter
 - b. Type "N" followed by Enter
 - c. Type "N" followed by Enter
 - d. Type "N" followed by Enter
 - e. Type "N" followed by Enter

EXECUTION STEPS:

- Type "N" followed by Enter

POSTCONDITIONS:

- The program should print "A door in that direction does not exist." and disallow the movement
-

IDENTIFIER: TEST-FUN-WIN

TEST CASE: Player attempts to win by drinking when all the items that can be collected are in their inventory

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"
- Be in the topmost room with all ingredients by following these steps:
 - a. Type "L" followed by Enter
 - b. Type "N" followed by Enter
 - c. Type "N" followed by Enter
 - d. Type "L" followed by Enter
 - e. Type "N" followed by Enter
 - f. Type "N" followed by Enter
 - g. Type "N" followed by Enter
 - h. Type "L" followed by Enter

EXECUTION STEPS:

- Type "D" followed by Enter

POSTCONDITIONS:

- The program should print
 "You drink the beverage and are ready to study!
 You win!"
-

IDENTIFIER: TEST-UNIQ-ROOM-FURN

TEST CASE: User tests whether each room has a unique adjective describing it

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

EXECUTION STEPS:

- Run the command "N" in CoffeeMaker until there is no door leading north

POSTCONDITIONS:

- The program should print the details of each room every time the command is run, use a different adjective for each different room, and use a different adjective for each piece of furniture

IDENTIFIER: TEST-NUM-COMMAND

TEST CASE: Player attempts to run a command that is not known by entering a number which is not a command

PRECONDITIONS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"
- No previous commands have been run

EXECUTION STEPS:

- Type "1234" followed by Enter

POSTCONDITIONS:

- The program should print
"What?"

You see a Small room.
It has a Quaint sofa.
A Magenta door leads North.

INSTRUCTIONS (N,S,L,I,D) >"

4. Defects

IDENTIFIER: DEFECT-NO-HELP

SUMMARY: "H" or "h" is not a recognized command for the program.

DESCRIPTION: Typing in "H" as a command for the program, outputs "What?", which is the expected result of a string/character that is not one of the commands.

REPRODUCTION STEPS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"
- Type "H" followed by Enter

EXPECTED BEHAVIOR: The player shall be shown a listing of possible commands and what their effects are.

OBSERVED BEHAVIOR: The program outputs "What?"

IDENTIFIER: DEFECT-OUT-OF-BOUNDS

SUMMARY: Going south upon start of game outputs string not outlined in requirements.

DESCRIPTION: Typing in "S" as a command for the program, outputs "You are in a magical land! But you are returned to the beginning!" and moves the player to the starting room, instead of "A door in that direction does not exist." and disallowing the attempted move.

REPRODUCTION STEPS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"
- Type "S" followed by Enter

EXPECTED BEHAVIOR: The program should output "A door in that direction does not exist."

OBSERVED BEHAVIOR: The program outputs "You are in a magical land! But you are returned to the beginning!"

IDENTIFIER: DEFECT-LOWER-N

SUMMARY: Game does not recognize "n" as a command.

DESCRIPTION: Typing in "n" as a command outputs "What?" instead of moving the player to the second room. As by FUN-INPUT-CAPS, the program should be case-insensitive

REPRODUCTION STEPS:

- "java -version" shows java version "1.8.0_231"
- The game is launched by: "java -jar coffeemaker.jar"

- Type "n" followed by Enter

EXPECTED BEHAVIOR: The program should output

"You see a Funny room.
It has a Sad record player.
A Beige door leads North.
A Massive door leads South.

INSTRUCTIONS (N,S,L,I,D) > "

OBSERVED BEHAVIOR: The program outputs

"What?

You see a Small room.
It has a Quaint sofa.
A Magenta door leads North.

INSTRUCTIONS (N,S,L,I,D) > "