Michael Fieseher and Nathan Anuskiewicz

Deliverable 1 - The Deliverance

FUN-ITERATION: At each iteration, the player can enter any of 6 commands: N, S, L, I, H, D
     Tests: 1, 5, 8

FUN-UNKNOWN-COMMAND: If given any other command, respond with "What?"
     Tests: 2, 10, 19

FUN-INPUT-CAPS: Input values are case-insensitive
     Tests: 1, 3, 8, 17

FUN-MOVE: Player can move north only if door exists to north, and south only if door exists to south. If specified door doesn't exist, player is notified but does not move
     Tests: 1, 11, 12

FUN-WIN: Player wins game if and only if coffee, cream, and sugar are all collected and then drunk
     Tests: 4, 5, 13, 14

FUN-LOSE: Player loses game if and only if they drink without collecting all items
     Tests: 4, 5, 13, 14

FUN-INVENTORY: When player presses "I" their inventory is displayed. Inventory can only contain coffee, cream, and sugar
     Tests: 6, 15, 16

FUN-LOOK: When player presses "L" they collect whatever item is in that room and add it to their inventory. After which said item should no longer be able to be collected.
     Tests: 6, 7, 15, 16, 18

FUN-HELP: When player presses "H" a list of commands and their effects should be listed
     Tests: 8, 17

FUN-UNIQUE-ROOM: Each room in the house shall have a unique adjective describing it

     Tests: 9

Test Plan

IDENTIFIER: 1 - 'N' Command
TEST CASE: Move north through a room.
PRECONDITIONS: Start in the southernmost room.
EXECUTION STEPS: Input 'N'.
POSTCONDITIONS: Next room will be entered.
PASS/FAIL: PASS

IDENTIFIER: 2 - Invalid Command
TEST CASE: Enter a lower case 'z' while in any room.
PRECONDITIONS: Player is in any room.
EXECUTION STEPS: Input 'z'
POSTCONDITIONS: Output is 'What?'
PASS/FAIL: PASS

IDENTIFIER: 3 - Lower Case
TEST CASE: Test for acceptance of lower case input.
PRECONDITIONS: Player is in first room.
EXECUTION STEPS: Input letters in the following order: 'n', 's', 'i', 'l', 'd', 'h'.
POSTCONDITIONS: The output 'What?' is never displayed.
PASS/FAIL: FAIL. Lowercase 'n' outputs 'What?'.

IDENTIFIER: 4 - Win Conditions
TEST CASE: Player wins when all 3 items are obtained and drunk
PRECONDITIONS: All three items (coffee, cream, and sugar) are in the player's inventory and
player has not yet won.
EXECUTION STEPS: Input 'D'
POSTCONDITIONS: Player drinks beverage and is notified of victory
PASS/FAIL: PASS

IDENTIFIER: 5 - Creamy coffee
TEST CASE: Player loses when they try to drink with only coffee and cream in their inventory
PRECONDITIONS: Coffee and cream (and only those two) are in the player's inventory
EXECUTION STEPS: Input 'D'
POSTCONDITIONS: Player loses and game exits
PASS/FAIL: PASS

IDENTIFIER: 6 - Inventory Population, Cream
TEST CASE: Make sure new item is displayed in inventory
PRECONDITIONS: Player is in the room containing cream. The cream has not yet been picked up.
EXECUTION STEPS: Input "I" to check inventory. Input "L" to look for item. Input "I" again to check inventory.
POSTCONDITIONS: Upon first input cream is absent from inventory. Upon second input, cream is found and collected. Upon third input, inventory notes that cream has been obtained.
PASS/FAIL: PASS

IDENTIFIER: 7 - Double Find
TEST CASE: Check that item cannot be found twice.
PRECONDITIONS: Player is in 3rd room and has not yet collected coffee.
EXECUTION STEPS: Input 'L', then check inventory by inputting 'I'. Input 'L' agian.
POSTCONDITIONS: Upon first input the player should find coffee. When inputting 'I' coffee should be displayed in the inventory. When 'L' is input again nothing should be found in the room.
PASS/FAIL: FAIL. Coffee is found again.

IDENTIFIER: 8 - Help Command
TEST CASE: Verify help command is functional with uppercase H
PRECONDITIONS: Player is in first room.
EXECUTION STEPS: Input 'H'.
POSTCONDITIONS: A list containing commands 'N', 'S', 'L', 'I', 'D', and 'H' along with their respective effects is displayed.
PASS/FAIL: FAIL. The output is 'What?'.

IDENTIFIER: 9 - Unique Adjectives
TEST CASE: Verify that each room is describe with a unique adjective.
PRECONDITIONS: Player is in northernmost room.
EXECUTION STEPS: Note the adjective for the current room. Then input 'S' until southernmost room (Small) is reached, noting the descriptor for each room.
POSTCONDITIONS: Player is in the first room. There are no duplicates in the list of noted adjectives.
PASS/FAIL: PASS

IDENTIFIER: 10 - Multi Character Commands
TEST CASE: Test a command that is more than one character but starts with a specified command.
PRECONDITIONS: Player is in any room.
EXECUTION STEPS: Input the command "Look".
POSTCONDITIONS: The program will output "What?".

PASS/FAIL: PASS

IDENTIFIER: 11 - Northern Room "N"
TEST CASE: Verify that player cannot move north when a door to the north is not specified.
PRECONDITIONS: Player is in northernmost room.
EXECUTION STEPS: Input 'N'.
POSTCONDITIONS: Player remains in the same room.
PASS/FAIL: FAIL. Player is teleported back to first room.

IDENTIFIER: 12 - Southern Room "S"
TEST CASE: Verify that player cannot move south when a door to the south is not specified.
PRECONDITIONS: Player is in the southernmost room.
EXECUTION STEPS: Input "S".
POSTCONDITIONS: Player remains in the southernmost room.
PASS/FAIL: PASS

IDENTIFIER: 13 - Creamy Sugar
TEST CASE: Player loses when trying to drink only cream and sugar
PRECONDITIONS: Player has cream and sugar in their inventory. Player does not have coffee in their inventory.
EXECUTION STEPS: Player inputs 'd'
POSTCONDITIONS: Player is notified of loss and game exits
PASS/FAIL: PASS

IDENTIFIER: 14 - Du café avec du sucre.
TEST CASE: Player loses when trying to drink only coffee and sugar
PRECONDITIONS: Player has coffee and sugar in their inventory. Player does not have cream in their inventory.
EXECUTION STEPS: Player inputs "D"
POSTCONDITIONS: Player is notified of loss and game exits
PASS/FAIL: PASS

IDENTIFIER: 15 - Inventory Population, Coffee
TEST CASE: Make sure new item is displayed in inventory
PRECONDITIONS: Player is in the room containing coffee. The coffee has not yet been picked up.
EXECUTION STEPS: Input "I" to check inventory. Input "L" to look for item. Input "I" again to check inventory.
POSTCONDITIONS: Upon first input coffee is absent from inventory. Upon second input, coffee is found and collected. Upon third input, inventory notes that coffee has been obtained.
PASS/FAIL: PASS

IDENTIFIER: 16 - Inventory Population, Sugar
TEST CASE: Make sure new item is displayed in inventory
PRECONDITIONS: Player is in the room containing sugar. The sugar has not yet been picked up.
EXECUTION STEPS: Input "I" to check inventory. Input "L" to look for item. Input "I" again to check inventory.
POSTCONDITIONS: Upon first input sugar is absent from inventory. Upon second input, sugar is found and collected. Upon third input, inventory notes that sugar has been obtained.
PASS/FAIL: PASS

IDENTIFIER: 17 - Help Command, lowercase
TEST CASE: Verify help command is functional with lowercase h
PRECONDITIONS: Player is in first room.
EXECUTION STEPS: Input 'h'.
POSTCONDITIONS: A list containing commands 'N', 'S', 'L', 'I', 'D', and 'H' along with their respective effects is displayed.
PASS/FAIL: FAIL. The output is 'What?'.

IDENTIFIER: 18 - Not even grasping at straws
TEST CASE: When no item is in the room, nothing is picked up/found by the player
PRECONDITIONS: Player is in room containing none of coffee, cream, sugar
EXECUTION STEPS: Input 'I', then check inventory by inputting 'L'. Input 'I' agian.
POSTCONDITIONS: Upon first input of 'I', note what is in the inventory. Upon second input, nothing should be found. Upon final input, inventory should remain unchanged.
PASS/FAIL: PASS

IDENTIFIER: 19 - Invalid Command, Uppercase Letter
TEST CASE: Enter an uppercase 'M' while in any room..
PRECONDITIONS: Player is in any room.
EXECUTION STEPS: Input 'M'
POSTCONDITIONS: Output is 'What?'
PASS/FAIL: PASS

Defect Log

SUMMARY: Lowercase 'n' command is not recognized--found via test 1..
DESCRIPTION: When the player enters a lowercase 'n' to move through a door to the north, the command is not recognized and the player remains in the same room.
REPRODUCTION STEPS:
1) Begin in a room with a door to the north
2) Input a lowercase 'n'
EXPECTED BEHAVIOR: Player will enter the next room to the north.
OBSERVED BEHAVIOR: The game outputs the phrase 'What?' and displays the information for the current room again.

SUMMARY: Help command is not recognized--found via tests 8 and 17.
DESCRIPTION: No help menu is displayed when either 'h' or 'H' is input as a command while in any room. This was originally tested in the first room. Other rooms were later tested to verify that the room itself was not the issue.
REPRODUCTION STEPS:
1) Player is in first room
2) Enter either 'h' or 'H'
EXPECTED BEHAVIOR: A help menu will appear displaying a list containing commands 'N', 'S', 'L', 'I', 'D', and 'H' along with their respective effects is displayed.
OBSERVED BEHAVIOR: The phrase 'What?' is output and the information for the first room is displayed again.

SUMMARY: Moving north in room without northern door teleports player back to first room--found via test 11.
DESCRIPTION: When the player is in the sixth room, there is no door to the north. It is thought to be the last room. If the player inputs 'N', they get transported to a magical land, then end up at the first room. They somehow got to this magical land despite there not being a door.
REPRODUCTION STEPS:
1) Input 'N' until the sixth room is reached.
2) Be sure that current room does not have a door to the north.
3) Input 'N' again.
EXPECTED BEHAVIOR: Player remains in the same room and is informed that they cannot move north.
OBSERVED BEHAVIOR: Player is told that they have traveled to a magical land and are transported back to first room.

SUMMARY: Coffee can be found multiple times--found via test 7.
DESCRIPTION: As specified by the requirements, once an item is found and collected, it should not be able to be found in that room (or otherwise) a second time. When in the third room, coffee was picked up and added to inventory. Even after this event, it was able to be found again.
REPRODUCTION STEPS:
1) Input 'N' until third room is reached
2) Input 'L'
3) Input 'L' a second time
EXPECTED BEHAVIOR: Upon first 'L' input, player would find coffee in room and add it to inventory. Upon second 'L' input, player would be told there were no items to find in the room
OBSERVED BEHAVIOR: Upon first 'L' input, player finds coffee. Upon second 'L' input, player finds coffee again.

SUMMARY: Error number displayed when upon win--found via test 4.
DESCRIPTION: While not explicitly specified in the listed requirements, messages about error codes should not be displayed to the end user. These outputs should be reserved for debugging purposes. In test 4, the player won and a victory message was displayed along with "Exiting with error code 0."
REPRODUCTION STEPS:
1) Input 'L' while in first room
2) Input 'N' twice
3) Input 'L'
4) Input 'N' three times
5) Input 'L'
6) Input 'D'
EXPECTED BEHAVIOR: Player goes through house and collects all 3 items. Upon inputting 'D', player consumes all 3 items and wins the game. A standard victory message of is displayed.
OBSERVED BEHAVIOR: Player goes through house and collects all 3 items. Upon inputting 'D', player consumes all 3 items and wins the game. A message of

     "You drink the beverage and are ready to study!

     You win!

     Exiting with error code 0"

is displayed. The third line with the error code is not expected.

SUMMARY: Error number displayed when upon loss--found via test 5.

DESCRIPTION: While not explicitly specified in the listed requirements, messages about error codes should not be displayed to the end user. These outputs should be reserved for debugging purposes. In test 5, the player lost and a losing message was displayed along with "Exiting with error code 1."

REPRODUCTION STEPS:
1) Input 'L' while in first room
2) Input 'N' twice
3) Input 'L'
4) Input 'D'

EXPECTED BEHAVIOR: Player will collect the cream in the first room. They will then move north through the second and into the third room. Here they will pick up the coffee. Finally the player will drink the coffee and cream and be notified that they have lost the game because they had not yet collected the sugar.

OBSERVED BEHAVIOR: Player collects the cream in the first room. They then move north through the second and into the third room. Here they pick up the coffee. Finally the player drinks the coffee and cream and is notified that they have lost the game because they have not yet collected the sugar. However, an additional line indicating an error code is also displayed. The full message to the player is shown below:

"Without sugar, the coffee is too bitter. You cannot study.

You lose!

Exiting with error code 1"