

Seth Denney - std0003

COMP 2710 Lab 3

Compile Instructions and Testing Results/Sample Output

### Compile/Run Instructions:

```
>>g++ -o std0003_2 std0003_3.cpp Node.h Node.cpp Maze.h Maze.cpp
```

```
>>./std0003_2
```

#### A. Invalid Direction

- i. **Scenario** – User enters an option that is either a) incorrectly typed data (integer instead of letter) or b) correctly typed, but not within the domain of acceptable options (“A” where only “N”, “E”, “S”, “W” would be allowed, or “N” where only “E”, “W” would be allowed)
- ii. **Result** – The System should print an error message and prompt for a correct entry.

#### B. Input File Is Empty or Not Found

- i. **Scenario** – The file containing maze data cannot be read for some reason.
- ii. **Result** – The System should let the user know that no maze has been created due to a lack of data, and exit

#### C. User Visits a Room with a Chute/Ladder

- i. **Scenario** – User visits a room that has an attached chute or ladder.
- ii. **Result** – The System should automatically transport the user to the other end of the chute or ladder, and then proceed to allow normal gameplay from the new room.

#### D. User Visits Finish Node

- i. **Scenario** – User finds the Finish node, winning the game.
- ii. **Result** – The System should not allow the user to continue moving around rooms. Instead, the System should execute the victory instructions appropriately.

#### Test 1 - Invalid Direction

```
You are currently in room A1.  
You can travel North East. Which option would you like to take? a  
Invalid direction.  
  
You are currently in room A1.  
You can travel North East. Which option would you like to take? 1  
Invalid direction.  
  
You are currently in room A1.  
You can travel North East. Which option would you like to take? W  
Invalid direction.
```

#### Test 2 – Input File Is Empty or Not Found

```
Please enter the desired configuration file: bob  
Invalid Filename. Please Try again: Bob.txt  
Invalid Filename. Please Try again: Config.txt  
  
You are currently in room A1.  
You can travel North East. Which option would you like to take?
```

### Test 3 – User Visits a Room With a Chute/Ladder

```
Please enter the desired configuration file: wChute.txt
```

```
You are currently in room A1.
```

```
You can travel North East. Which option would you like to take? E
```

```
You have taken a secret passageway to room H5!
```

```
You are currently in room H5.
```

```
You can travel North South West. Which option would you like to take? N
```

```
Congratulations! You reached the end of the maze!
```

```
You visited the following rooms: A1 H5
```

```
It took you 1 moves to reach the end.
```

```
Thanks for playing!!!
```

Test 4 – User Visits Finish Node

```
C:\COMP\COMP2710\Lab3\Lab3\bin\Debug\Lab3.exe
Please enter the desired configuration file: Config.txt

You are currently in room A1.
You can travel North East. Which option would you like to take? N

You are currently in room A2.
You can travel North East South. Which option would you like to take? N

You are currently in room A3.
You can travel North East South. Which option would you like to take? N

You are currently in room A4.
You can travel North East South. Which option would you like to take? N

You are currently in room A5.
You can travel North East South. Which option would you like to take? N

You are currently in room A6.
You can travel East South. Which option would you like to take? E

You are currently in room B6.
You can travel East South West. Which option would you like to take? E

You are currently in room C6.
You can travel East South West. Which option would you like to take? E

You are currently in room D6.
You can travel East South West. Which option would you like to take? E

You are currently in room E6.
You can travel East South West. Which option would you like to take? E

You are currently in room F6.
You can travel East South West. Which option would you like to take? E

You are currently in room G6.
You can travel East South West. Which option would you like to take? E

Congratulations! You reached the end of the maze!
You visited the following rooms: A1 A2 A3 A4 A5 A6 B6 C6 D6 E6 F6 G6
It took you 11 moves to reach the end.
Thanks for playing!!!
Process returned 0 (0x0)   execution time : 30.396 s
Press any key to continue.
-
```