readme.md - Grip

Readme

Gitlab repository url:

https://gitlab.com/comp1921_2021/sc20jjz.git

Commit history

Please refer githistory.txt text file

or type the command

```
cat githistory.txt
```

Instructions on executing the program:

Prerequisites:

Below are the required libraries to be installed before executing the instructions

1)CMake(should be higher that 2.8)

2)SDL 2.XX

For inrstructions to install CMake please click here.

For instructions to install SDL please refer the link below:

https://wiki.libsdl.org/Installation

Instructions:

After cloning the repository ensure that the directory structure of the cloned repository has the following files:

`animation.h animation-test.c graphics.h graphics.c CMakelists.txt unity.c unity.h unity_internals.h`

Then type the following command in the the given sequence:

1. `mkdir build`
2. `cd build`
3. `cmake..`
4. `make`
5. `./gol`

On executing the the above mentioned command you will be propmpted to enter the number of rows, the number of columns and population of the world in sequence. Inorder to create the next entry hit the ENTER key.

Sample inputs:

```
To terminate the program please CTRL+C
Enter no.of rows(0-9):3

Enter no. of columns(0-9)3

Enter population:4

Enter steps:1
```

On hitting the enter key a grid with blank spaces will appear.

```
 012
0
1
2
Enter coordinate:
```

Enter the coordintes in the form x,y as follows:

```
 012
0
1
2
Enter coordinate:0,1
```

You will see a '*' appear in the given coordinate in the grid.

```
 012
0 *
1
2
Enter coordinate:
```

Please ensure that there is ',' between the row number and column number.

You will be prompted till the count of the '*' symbol in the grid is equal to the population.

On entering the co -ordriantes succesfully the images showing the evolution of will be rendered graphically.

To the test suites execute the command ./test-report in the build directory. The tests can be found in animation-tests.c file in the top level of the repository.

To see the final state of the world type the following command:

```
cat output.txt
```

A sample walkthough :

Entering the inputs:

```
Enter no.of rows(0-9):3

Enter no. of columns(0-9)3
```

```
Enter population:3

Enter steps:2

Please enter  coordintes in  the form x,y
 012
0
1
2
Enter coordinates:0,1
```

Entering the co-ordinates:

```
 012
0 *
1
2
Enter coordinate:1,1
```

Screen gets cleared and updated grid is rendered.

```
 012
0 *
1 *
2
Enter coordinate:2,1
```

After entering the coordinates

```
Initial state of world:
 012
0 *
1 *
2 *
 Press y to continue. If you do not want to continue press any key other than y to reinitialise.
```

Graphical visualisation:

STEP 1:

STEP 2 :