

## GridWorld: Quantised Excitement!

### Overview

The GridWorld game (we hesitate to call it that but never mind...) is a simple console or “Command Line Interface” (CLI) text based game. In this world the player will guide their hero character through a grid-world of block positions. The player can move in four directions only. The game objective is to move from the Start grid location to the chest of Gold somewhere in the world.

A player can enter the following commands (only) in the game:

- “N” to move north
- “E” to move east
- “S” to move south
- “W” to move west
- “Q” or “q” to quit

Your game should be insensitive to UPPER or lower case letters. (Convert all input up or down!)

### The Map

The GridWorld Map is presented below (Figure 1), with “S” indicating the “Start” location and “G” to represent the wonderful chest full of “Gold” that awaits the hero. “D” indicates “Death” for the player... you can decide the specific manner of the players demise. Walls are marked with “#” characters. The world is 8 by 8 blocks in size.

```
#####
#G D#D #
#  # #
### # D#
#  # #
# ##### #
#      #
##S#####
```

*Tip: Keep It Simple! Store the map as a “hard coded” data. Don’t load it from a file – it’s really not needed for this simple first game.*

*Tip: You might decide to add an additional lower row of blocks to your data so that the player is contained. If you don’t, you’ll have to deal with a player heading south from the start location in some way!*

Figure 1. The Simple World of “GridWorld” with Start, Gold and Death locations indicated.

### Game-play Samples

Below are two sample game experiences. In Sample 1 the player chooses poorly and meets an ugly demise, while in Sample 2 the play gets lucky. The exact wording for your implementation can differ, but the map must be the same.

Sample 1. Player discovers the dangers of GridWorld.

```
Welcome to GridWorld: Quantised Excitement. Fate is waiting for You!
Valid commands: N, S, E and W for direction. Q to quit the game.
You can move N:> N
You can move E,S,W:> E
You can move E,W:> E
... (lines removed to avoid boredom)
You can move N,S,W:> N
Arrrrgh... you’ve fallen down a pit.
YOU HAVE DIED!
Thanks for playing. Maybe next time.
```

*Tip: You don’t need to display a “map” or the current location of the player in a graphical way, but you might find it useful ... it’s your choice but it’s outside the spec.*

Sample 2. Player discovers the wonderful riches of GridWorld.

```
Welcome to GridWorld: Quantised Excitement. Fate is waiting for You!
Valid commands: N, S, E and W for direction. Q to quit the game.
You can move N:> N
You can move E,S,W:> W
You can move E,W:> N
... (lines removed to avoid boredom)
You can move N,E:> N
Wow - you’ve discovered a large chest filled with GOLD coins!
YOU WIN!
Thanks for playing. There probably won’t be a next time.
```