Spike: 7
Title: Graphs

Author: Steven Efthimiadis, 1627406

## Goals / deliverables:

The goal is to create a basic graph system in Zorkish Adventure game to be able to traverse from node(Location) to node through edges(Path).

To create this spike, you require:

- Spike 5
- Simple graph in txt file
- Read the text file and create each node and edge.
- Able to navigate the graph

# Technologies, Tools, and Resources used:

List of information needed by someone trying to reproduce this work

- Visual Studio 2015
- Read from Text File
  - o <a href="http://www.cplusplus.com/doc/tutorial/files/">http://www.cplusplus.com/doc/tutorial/files/</a>
- Nodes
  - o <a href="https://en.wikipedia.org/wiki/Node">https://en.wikipedia.org/wiki/Node</a> (computer\_science)

## Tasks undertaken:

- Create the classes for Nodes and Edges
- Create Dummy Data to input Manually
- Once working recreate in a text file
- Read the text file and dynamically create Nodes and Edges
- Negotiate the Graph

#### What we found out:

- Create Dummy Data manually to make sure you set up the Nodes and Edges properly
- Take your time when reading from a text file. You should test reading what the line is and then adding them to which data type they are when you can successfully do that, dynamically add to each node and edge.

### Open issues/ risks:

• C++ doesn't have a split function that works well with strings.

#### **Recommendations:**

• If you're not an experienced programmer in c++ I suggest splitting a string will not be a good idea. If you really want to split a string you can research.