# **Spike:** Task 11
# **Title:** Game Graphs from Data

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## Goals / deliverables:

Create a program that demonstrates the following:

1. **Design**: Specify a design as a sketch or diagram (REQUIRED) for the text-file format that represents a Zorkish game “Adventure” details. Include this in your spike report details.
    - This can be vector based, or a design on paper, and included as images, in your design document.
    - Specifically, your design will need to include (at this stage) world locations, location details (name, description etc.) and connections to other locations.
    - You can include other details in your design, but we only need locations and connections.
2. **Args**: Take the game world “adventure” filename at run time using a command line argument.
3. **Graph**: Process the locations and connections as a graph data structure in your program.
4. “**Go**”: Implement ONLY the basic “go” and “quit” commands. Print location and direction options (N, UP, NE etc) to the user so they know where they are and what directions they can go in.

## Technologies, Tools, and Resources used:

- draw.io **- UML Plan**
- Xcode

## Tasks undertaken:

- Created a Locations.txt file with the following format:
  Location: Home
  Description: This is your cozy home.
  Connections: Forest, Cave
- Created a Node class, containing a name, description, and connections
- Created a Graph class, that reads in the Locations.txt file in the constructor, and builds a vector of nodes.
- Added print, input, and update functions to the Graph class

## What we found out:

Mostly logistics relating to how to read in the Locations.txt file, and how to use substrings. There may have been some merit to using json format for the Locations file, but I found it much more interesting figuring out how to iterate through the file and build each node

## Open issues/risks:

- Currently, there are no directions displayed or involved in the commands for this. Commands simply follow a “go to [location]” format and don’t need location specified. The spec for this was somewhat vague anyway, especially since the task sheet wanted us to go beyond just the 8 compass coordinate system; this does go beyond…just by removing it all together.