Spike: *13*
Title: Testing

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Goals / deliverables:
The goal is to create three unit tests on three different spikes using a Test
Framework (Standard Visual Studio is fine)

To create this spike, you require:
- 3 random Spikes
- Basic understanding of Unit Testing

Technologies, Tools, and Resources used:
List of information needed by someone trying to reproduce this work
- Visual Studio 2015
- Unit Testing
    - https://en.wikipedia.org/wiki/Unit_testing
- Visual Studio Native Unit Testing
    - https://www.visualstudio.com/en-us/docs/test/developer-testing/getting-started/getting-started-with-developer-testing

Tasks undertaken:
- Choose 3 Spikes to test. I tested:
    - Grid world player movement
    - Player inventory addition and removal of items
    - Setting up locations with edges for a graph
- Create a new project that is empty
- Import all files across
- Create a New "Unit Native Test" project
- Link the project together
    - Unit Test Project -> Properties
    - Linker -> Input -> Additional Dependencies
    - At the Front, input "$(SolutionDir)/(Project Name of the one you're testing)/Debug/*.obj;"
- Create unit tests to confirm your classes work like they are supposed to.
- If not? Then update the class in this project and repeat above step
- Once complete repeat process for the next spikes.

What we found out:
- When you import the files, you need to create the classes and then copy and paste the code across. Also, put all includes into the main file where most of the functionality links to

- You need a main function to build the program

Open issues/ risks:
- When you are creating a new project. If you don't make it empty it will make the unit testing difficult because you will have lots of linking errors