

Austin Laimos

### Architecture for Assignment 3

First of all let me start out by saying there were a few bugs in the original dean code. The class found a few but I feel like there are some stragglers in there. I did change a bit of the naming conventions/spacing/formatting as it was it kind of hard to read for a bit. But other than that is was a pretty straight up assignment, except A\* was a bit of a weird. What was the real trick for this project was finding the weird ways pathfinding can break, like having a path size of 0 or having the start node be the same as the end node. But the A\* heuristic bit is just the crow flies method. Also, it will sometimes generate a wavy path but it will always be the same path size as a normal line so I don't see the issue there. The input manager is pretty simple with just the keybinds as described in the assignment documentation. A lot of stuff was just pulled from the DFS thing with the exception a priority queue was used. A stackoverflow thread on how to improve the STL priority queue so that will probably appear in the projects using priority queue. It is quoted in my h file. I felt like the minimal weirdness of the files were best in order to get maximum performance, which is what the seems to be about. Also, the descriptors of the functions are in the cpp file above the function name. Descriptors were not added to files that were already in the project that Dean created. #pragma ones were added to all the h files. If there were any minute details about my previous assignments they were not fixed as I do not know what they are.