F29AI – Artificial Intelligence and Intelligent Agents Coursework – Answers to Frequently Asked Questions

NOTE: This document will be updated on a regular basis. Please check back regularly for new content. Document last updated: 10/10/2017

Part I

1. Can I use a version of A* search I found on the web?

Yes, provided the owner of the code has permitted you to use it and you clearly state somewhere in your solution where the code comes from.

2. Can I write my own A* search if I want?

Yes. The emphasis in this question is on figuring out how to represent the states, transitions, heuristics, and goal in the problem. However, if you want to write your own version of A* search, that's fine.

3. Do I need to somehow combine the two heuristics into one?

No. Your solution should allow you to test each heuristic individually.

Part II

1. Are there good tutorials or other documentation on PDDL?

Yes. Take a look at the slides and the examples I posted in the first instance. I'm not asking you to learn any new features of PDDL that we haven't covered in class (and all the features we covered may not be necessary to do the coursework). If you're still confused, take a look at this tutorial:

http://www.cs.toronto.edu/~sheila/2542/w09/A1/introtopddl2.pdf

or this document:

http://users.cecs.anu.edu.au/~patrik/pddlman/writing.html

Remember: not every planner will necessarily support every feature of the language.

2. The online planner doesn't appear to be working. What's wrong?

I don't have any control over the online planner and, like any web resource, you could experience problems using it. If this happens, try using a command line version of the planner from your linux account, such as Fast Downward or Fast Forward. I've uploaded an executable version of Fast Forward (FF) to Vision. Copy it into your Linux account and make sure it's executable by typing:

chmod +x ff-linux

from a terminal prompt. You can then use ff-linux to test your domain and problem files using the syntax:

ff-linux -o domain.pddl -f problem.pddl

where domain.pddl and problem.pddl are replaced by the names of your domain and problem files, respectively.