ECE 4524 - PROJECT 2 - SPRING 2020

Multi-Agent Search

Due February 28

Instructions:
The goal of this assignment is for you to gain experience with several common *adversarial search* techniques. As you did for Project 1, you must develop and test Python code that operates in the Pacman world. The graphical display provides an entertaining way to observe and assess the different techniques.

Follow the instructions that are posted here: https://computing.ece.vt.edu/~abbott/teaching/ece4524/p2/ Please use Python version 3.8.1. The assignment consists of 5 parts:

Q1: Reflex Agent
Q2: Minimax
Q3: Alpha-Beta Pruning
Q4: Expectimax
Q5: Evaluation Function

Solve these problems by editing and testing 1 file, as explained at the web site:

- `multiAgents.py`: where all of your multi-agent search agents will reside.

Submitting your work:
Submit your completed file `multiAgents.py` to Canvas directly. A zip file is not required for this assignment. After uploading, please verify correct submission by downloading your zip file from Canvas and checking the contents. (The file(s) that you submit to Canvas are the files that will be graded.)

If you did not complete some part of the assignment, you may provide a brief description to the grader to explain the situation, and to describe how the grader could evaluate your code for partial credit. Preferred formats for this file are *.txt or *.pdf. You may also submit this file to Canvas directly.

Grading:
The maximum score for this assignment is 25 points, as noted in the web site. A human grader will test your code by using his copy of the `autograder.py` script. He will use Python version 3.8.1.

Programming style:
In general, please follow the coding style that is in the starter code. Provide useful comments to explain interesting parts of code that you develop. A lengthier discussion of Python style is provided at python.org/dev/peps/pep-0008.

Honor Code:
As a reminder from the course syllabus, project assignments must be completed independently. You are allowed to refer to code provided by the instructor, a Teaching Assistant, or the textbook's web site. You should not share your code with anyone except the instructor or TA.