

COSC1125/1127 Artificial Intelligence RMIT University



Computer Science, Software Engineering, and IT

Project 1, 2017 Pacman Search

Deadline: Monday March 27 @ 11:59pm

This project counts towards 10% of the marks for this subject.

This is an **individual** project-assignment.

The purpose of this project is to get you acquainted with search and how to derive heuristics using Berkely Pacman.



http://inst.eecs.berkeley.edu/~cs188/pacman/project_overview.html

Your task is to complete UC Pacman Project 1 at http://inst.eecs.berkeley.edu/~cs188/pacman/search.html. You can download the zip with all the necessary files to complete the project, the description of the task is contained within that. Please make sure you follow the instructions in the project specification and in the source code. In particular, you should add your code where it says: "*** YOUR CODE HERE ***"

Corrections: From time to time, students or staff find errors (e.g., typos, unclear instructions, etc.) in the assignment specification. In that case, corrected version will be uploaded to the course web page as quickly as possible and an announcement will posted in the course web page and also to the forum. The date of the latest specification can be found in the bottom right of this document.

Marking criteria: We will follow the marking criteria specified in the project instructions. Observe that while the automarker is a useful indication of your performance, it is not the ultimate mark. We reserve the right to run more tests and even inspect your code manually.

Submission

You must submit solution electronically via the following Google Form under your RMIT student account:

http://tinyurl.com/ai17-sub-proj1

Please make sure you adhere to the following instructions:

1. Your code **must run** on Linux. It should at least run on RMIT coretachingXX.cs.rmit.edu.au machines. You can test your code by running the autograder in the server. Staff will not debug or fix any code.

- 2. Your code should adhere to **Python 2.7**. The whole Pacman infrastructure works under that version (not 3), so please program your solutions for 2.7. Using a different version will risk your program not running with the autograder and may risk losing marks.
- 3. You are to **submit just one zip file** named XXXXXXX.zip, where XXXXXXX is your student number.
- 4. In the zip file, **include only the py files you have modified** plus **an optional pdf or text file report**. Do not modify the filenames, otherwise our scripts will fail to execute your code and it will attract zero marks. So in this project you are to submit files search.py and searchAgents.py, and an optional report file.
- 5. If you submit a **report**, it must be either a text file or pdf file (not Word) and should be named report.pdf or report.txt. The report can be used to acknowledgment any code you may have re-used from elsewhere and any reflection about your code/solution that you think could be interesting.
- 6. Put all your py files in the **root** of the zip files. Do not create any directory in the zip file submitted.
- 7. You can edit your submission (using the email confirmations) details but not actual file attached. If you want to submit a new solution, then you need to do a fresh **new submission** from the above link. Only the last submission will be used for marking.
- 8. Submit your project **substantially before** the deadline, preferably one day before. Submitting close to the deadline could be risky and you may fail to submit on time, for example due to lose of Internet or server delays. There will be no extensions based on these unforeseen problems.

Submissions not compatible with the instructions above will attract zero marks and do not warrant a resubmission. Staff will not debug or fix your submission.

Extensions will only be permitted in exceptional circumstances. Note that workload and/or heavy load of assignments will not be accepted as exceptional circumstances for an extension. Please refer to this page for more information.

<u>Silent Policy:</u> A silent policy will take effect **48 hours** before this assignment is due. This means that no question about this assignment will be answered, whether it is asked on the newsgroup, by email, or in person.

Academic Misconduct

This is an *individual* assignment. It is worth 10% of the overall course grade. You may not collude with any other individual, or plagiarise their work. Students are encouraged to discuss the assignment topic, but *all submitted work must represent the individual's understanding of the topic*. Students are expected to present the results of their own thinking, problem solving, and coding. Never copy another students work (even if the other student "explains it to you first") and never give your written work to others. Keep the collaboration verbal and high-level, without sharing or showing code to each other. Never copy your solution, or part of it, from the web or any other resource. Adapting someone else solution does make it your own work: *you are meant to generate the solution to the questions by yourself*. You may however reuse code or techniques that are auxiliary to the problem being solved, as long as you understand well the code being reused and document where it comes from. See here for a guide on what is (and what is not) acceptable.

Plagiarism is a serious issue. We trust you; *please don't let us down*. The staff take academic misconduct very seriously. Suspected collusion or plagiarism will be dealt with according to RMIT University policy.

Forum postings on assignment: Do not ever post any information on the forum that may disclose how to solve a question or what the solution may be. You can only post assignment related questions for clarification on what is being asked, for example, whether a formal proof is required in a given exercise or to clarify certain notation. Any post discussing possible solutions or strategies may directly be considered plagiarism, see above. If in doubt, do not post and ask your question to the tutor instead.

¹Please note that the extension of a file does not determine its type. So make sure it is a proper text file or pdf file.