### Implement a Planning Search

# **Project Submission**

In this project, you will define a group of problems in classical PDDL (Planning Domain Definition Language) for the air cargo domain discussed in the lectures. You will then set up the problems for search, experiment with various automatically generated heuristics, including planning graph heuristics, to solve the problems, and then provide an analysis of the results. Additionally, you will write a short research review paper on the historical development of planning techniques and their use in artificial intelligence.

## **Coding and Analysis**

Download the template code from:

https://github.com/udacity/AIND-Planning (https://github.com/udacity/AIND-Planning)

Open the README.md file and follow the instructions there to complete the project.

Submit these code files when you're done:

- my\_air\_cargo\_problems.py
- my\_planning\_graph.py

And submit your written responses and analysis as: heuristic\_analysis.pdf

#### **Research Review**

After completing the coding and analysis portion of the project, read up on important historical developments in the field of Al planning and search. Write a one-page report on three of these developments, highlighting the relationships between the developments and their impact on the field of AI as a whole.

Appropriate sources (such as books or magazine or journal articles) should be cited, and you should use citations in-line for sourced facts, quotations, and inferences.

Submit this as: research\_review.pdf

[**Tip**: The book Artificial Intelligence: A Modern Approach by Norvig and Russell is chock full of references in the Bibliographical and Historical notes at the end of Chapter 10.]

#### **Submission and Rubric**

Submit your work by uploading a .zip file containing all your work, which must include the following files:

- my\_air\_cargo\_problems.py
- my\_planning\_graph.pyImplement a Planning Search
- heuristic\_analysis.pdf
- research\_review.pdf

## **Evaluation**

You can see the project rubric here (https://review.udacity.com/#!/rubrics/681/view).

You have not submitted the project yet SUBMIT PROJECT