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# Build a Forward Planning Agent

REVIEW

CODE REVIEW 4

HISTORY

## Meets Specifications

this is one of the best projects I have seen so far, great job (y)

### Planning Graph Implementation



(AUTOGRADED) Student code passes all Project Assistant test cases for:

- `ActionLayer` mutual exclusion rules:
  - `_inconsistent_effects()`
  - `_interference()`
  - `_competing_needs()`
- `Literallayer` mutual exclusion rules:
  - `_inconsistent_support()`
  - `_negation()`

Correct! (Note: this rubric item was graded automatically.)

### Heuristic Implementation



(AUTOGRADED) Student code passes all Project Assistant test cases for:  
Correctly implemented

- `PlanningGraph` class heuristics:
  - `h_levelsum()`
  - `h_maxlevel()`
  - `h_setlevel()`

Correct! (Note: this rubric item was graded automatically.)

### Experimental Results & Report



Report includes a table or chart to analyze the number of nodes expanded against number of actions in the domain.

- The chart or table includes data for all search & heuristic combinations for air cargo problems 1 and 2
- The chart or table includes data at least one uninformed search, two heuristics with greedy best first search, and two heuristics with A\* on air cargo problems 3 and 4
- Report includes at least a one paragraph discussion of these results that analyzes the growth trends as the problem size increases



Report includes a table or chart to analyze the search time against the number of actions in the domain.

- The chart or table includes data for all search & heuristic combinations for air cargo problems 1 and 2
- The chart or table includes data at least one uninformed search, two heuristics with greedy best first search, and two heuristics with A\* on air cargo problems 3 and 4
- Report includes at least a one paragraph discussion of these results that analyzes the growth trends as the problem size increases



Report includes a table or chart to analyze the length of the plans returned by each algorithm on all search problems.

- The chart or table includes data for all search & heuristic combinations for air cargo problems 1 and 2
- The chart or table includes data at least one uninformed search, two heuristics with greedy best first search, and two heuristics with A\* on air cargo problems 3 and 4



Submission includes a short answer to each of the following questions. (A short answer should be at least 1-2 sentences at most a small paragraph.)

- Which algorithm or algorithms would be most appropriate for planning in a very restricted domain (i.e., one that has only a few actions) and needs to operate in real time?
- Which algorithm or algorithms would be most appropriate for planning in very large domains (e.g., planning delivery routes for all UPS drivers in the U.S. on a given day)
- Which algorithm or algorithms would be most appropriate for planning problems where it is important to find only optimal plans?

well done, however your reasoning for the first question is not correct, in a "very restricted domain" speed is not an issue because the problem size is small so we can go with any algorithm that guarantee an optimal result (e.g. bfs, uniform search, ..etc) -as opposed to greedy which may give non-optimal results-

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CODE REVIEW COMMENTS



RETURN TO PATH

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