






Artificial Intelligence and Intelligent Agents

Coursework 1 – PDDL Report

The following is my report for my PDDL program. I used the online PDDL editor and planner available at <http://editor.planning.domains/>.

Map Setup

I decided to set my map up as follows:

	1	2	3	4	Key:  - Pirate Occupied  - Base  - Flat  - Hilly  - Mountainous
1	M	M	F	H	
2	F	F	H	H	
3	M	F	F	H	
4	H	H	F	M	

Explanation of Problems

Problem 1

Problem 1 was a simple problem designed to display a member of personnel moving around the map, the goal is to move from grid location 3, 3 (I33) to location 4, 1 (I41). This problem displays traversal of both flat and hilly terrains.

Problem 2

Problem 2 is designed to display an engineer shielding a location. The goal is to shield the location 2, 1 (I21).

Problem 3

Problem 3 is designed to show the terraform action of science officers. The goal is to terraform location 4, 1 (I41).

Problem 4

Problem 4 is designed to show the terraformer's more complex properties such as becoming damaged, getting fixed and recharging. The goal is to terraform both location 4, 1 (I41) and location 2, 1 (I21).

Problem 5

Problem 5 is designed to show the planetary shield being established and activated. The goal is to activate the planetary shield. This also displays the engineers only having 2 shields per person.

Problem 6

Problem 6 is designed to display the guarding engineer that security personnel have. The goal is for the engineer to enter the pirate occupied location without being captured, this is achieved by the security personnel entering first and 'guarding' the location

Problem 7

Problem 7 is designed to show the commander's negotiation mechanic. The goal is to free the engineer from the pirate occupied location.