

4AIT – Quick project

Logic Programming

The solution is at the end of calculation

Programming State Space Heuristic Solver

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1 PREAMBLE: GENERAL INSTRUCTIONS

To give back the realizations: A .zip folder in the site sce.sad.supinfo.com

Realization: Groups of 2 to 4 students.

Programming language: FREE (It will justify your choice).

Project: **CHATBOT** (not obliged to do in graphic version - text version/console accepted).

Defense: time of defense is 20 minutes (local decision to planning).

Notation mark: (Realization + Defense)/2
PLAGIARISM VERSIONS OF EXISTING = "cheater"

2 PROJECT PRESENTATION

You must create a CHATBOT. The choice of programming language is free. You must create a quick and effective exchange with meaning.

Possible specific themes are:

- Mechanics (car, motorcycle, garage, breakdown, repair ...)
- Medical (illness, remedy, symptoms ...)
- Music (authors, composers, performers, distributors, trend ...)
- Travel (reservation, conveyance, number of participants ...)

You must to choose one of the 4 themes. Understanding theme and build the exchanges are also the project purpose.

Quick project purpose:

- 1. Create the good data structure
- 2. Create a large database (credibility is required in the responses)
- 3. Create comprehensive response rules and strategies
- 4. Create an AI able to talk to humans
- 5. Create two different Als talking to each other
- 6. Make a scripted version
- 7. Make a learner version

3 REALIZATION (20 POINTS)

You must give back these elements:

- 1 The source code with the executable. (3 points Readability, code structure and portability of the game)
 - 2 A manual introducing the CHATBOT, its implementation and its running. (1 point)
 - 3 A technical manual with:



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- a- Al Presentation: Explain the implantation of the different IA strategies. For all different IA, you explain which one is the best IA, according to your criteria applied. (3 points)
- b- Detailed description of algorithms (data structures, heuristics, constraints ...). (8 points)
- c- Simulations, tests and graphs to progress in CHATBOT. (4 points)
- d- You must justified the programming language choice. Be careful, this justification will according to the AI principles and not because the language is a simple language or it is known by the members of team (1 point)

The zip folder (.zip) containing the 2 manuals and code (source / executable) will placed in the website sce.sad.supinfo.com.

4 PROJECT DEFENSE (20 POINTS)

You defend your work during **20 minutes**. Indicate (at least one week before defending) your group (recorded in SCE) to your corrector and your Campus manager to establish the order of defense passage.

- 1 Presentation of strategic choices, with descriptions of the strengths and weaknesses points. (10 points)
- 2 Resolution performance's evaluation, with explanations of the results. (5 points).
- 3 Demonstration. (5 points)

Note: This defense is technical, you don't sell an object, but you present algorithms and their efficiency.

