

CIS 4930: Introduction to Artificial Intelligence

Project 2: Expert Systems

Due: Thursday 11/30/2017 by 11:59pm

- Choose an area of expertise and build an expert system using CLIPS. You can work with one partner.

1. Minimum Requirements:

To ensure some uniformity on the work done by all groups, your expert system must meet the following minimum requirements:

1. Include **at least** two objects defined as instances of two different classes.
2. Include **at least** 20 rules. Approximately half of these rules should be referring to attributes of two different objects.
3. **Get input from user** – these rules are not included in the count for requirement 2.

2. Grading Criteria

READ THE GRADING CRITERIA CAREFULLY

- 50% Technical Quality:
 - 30% - System performs correctly: asks the user the correct questions, knows when to stop searching, and reaches the correct conclusion.
 - 10% - Completeness and accuracy of the knowledge base in the system.
 - 10% - Originality and usefulness of your expert system.
- 20% Documentation:
 - include as comments at the beginning of program -- yours and your partner's name followed by title and brief description of what the expert system does for the user (5%) and clear instructions on how to run your program (5%)
 - 10% - Clean, well-organized and neat code with well- written, meaningful comments before each of the rules/objects stating what the rule/object does.
- 20% Usability: User interface that is easy to use and intuitive.
 - 10% - Easy to understand questions and messages to the user.
 - 5% - Status information showing pertinent conclusions made by the expert system as it runs.
 - 5% - Error checking on user input.
- You can earn at most 20% of total points (documentation) if the program does not run.
- **10% Bonus: The 3 best projects will be awarded a bonus of 10%.**

Note on Plagiarism: Your program must be your original work. Any portion of code that is not your own work must be referenced, giving the appropriate credit to the author.

3. Submission:

Please submit your project online through canvas as **ONE** “clips” file