# CS 4480, Fall 2012 Term Project

Important Dates (details are discussed below):

Day	Date	Activity	Percent of Score
Friday	September 14	Proposal	10
Friday	October 12	Status Report 1	10
Friday	November 16	Status Report 2	10
Starting	November 30	Presentation and Demo	35
Wednesday	December 12	Final Write-Up	35

### Introduction

In order to give you the opportunity to explore a specific area of Artificial Intelligence (AI) in more depth, you will be required to complete a term project (involving programming and a write-up) in an appropriate topic in AI. This component of the course will constitute 40 percent of your overall course grade.

The project will involve programming beyond material covered in class. The majority of the code must be written by you, with appropriate citation of others code and sources of algorithms you are implementing. The final code must be commented appropriately and readably. In addition, you will turn in a "write-up" that summarizes the problem you are solving, the important data structures and algorithms, and the use and limitations of your program. The write-up style should follow the style of scientific academic writing (see separate handout) and would be expected to be in the range of three single-spaced pages.

## Choosing a Project

Your project must involve programming in an area of AI, in an appropriate language, and must go beyond the material covered in class. You may program in Lisp, Prolog, or Python (programming in another language requires prior approval).

You may want to start by looking at the topics covered in our book and at the code repository provided with the book, to find a topic that interests you enough to spend a semester working on. We will discuss possible projects in class and I will be happy to talk to you in office hours about your ideas.

Larger projects may require the work of a group of students to complete. With prior approval you may work in groups or two or more.

#### Schedule

#### Select a Project

No two students may work on exactly the same project, unless I approve groupwork at the time of the proposal. Initiate a "claim" to a project by emailing me briefly supplying a working title and describing your project, including which issues you intend to address and emphasize and what you intend to leave out and why, and including a tentative list of sources. Your claim will be finalized when I approve your proposal; I may ask you for one or more revisions along the way. Topics will be assigned on a first-come-first-served basis. Hand in your proposal no later than **Friday, September 14**<sup>th</sup>.

#### **Status Reports**

There are two status reports, due on **October 12 and November 16**. The status reports are designed to ensure that you work consistently and do not get bogged down or off track. The reports will include the title of your project, the work completed up to the date of the report, and a schedule to complete the work on time. Additional guidance on the format may be provided closer to the due date. It is crucial that these reports be honest and realistic, so that issues and problems, if any, can be addressed on a timely basis.

#### **Demos and Presentations**

We will reserve the last few class meetings and our final exam time to allow for student presentations and demos. You will be expected to prepare a demonstration of your project and describe it in an approximately 10 minute presentation. More details will be provided after the second round of status reports.

#### Final Write-up

No later than 11:15 am on Wednesday, December 12<sup>th</sup>, turn in all of the following:

- The final version of your write-up, in both printed and electronic form (use submission system).
- The final version of your code in electronic form (use submission system). This should include instructions on how to run your code and any limitations of machine architecture it will run on.