DUE Monday, December 5 at 5pm in my CIS mailbox. This is worth 50% of your grade. Late assignments not accepted, although you may turn it in early!

Choosing the Topic
The final project or research paper can be chosen from numerous topics. The topic must be related to the course and approved by the instructor. At the November 7 class I will ask you to give me a brief 1-2 paragraph description of the topic that you have chosen including several potential references. I will notify you by November 9 as to whether this is acceptable and include some guidance if necessary. If you need help defining a topic, please come to my office hours or make a special appointment before November 7.

All Written Products
Format. The project report or research paper should be well-written and researched. Correct grammar and spelling are expected. Citations are to be given at the end of the paper. These citations should fully document the reference sources including website URL’s. Paper versions only will be accepted saving me the time of printing it out.

Contents. I am particularly looking for evidence that you grasp some of the larger abstract ideas. Remember that the final project or research paper is the best means by which you can demonstrate what you have learned in class.

Project
A project involves working with a software program: either the code with the Bigus book or the AgentBuilder. A project explores various ideas that we have discussed in this class. Remember, you will need to state the questions, gather the data if needed, build the model, program it, run experiments, and write a report.

Possible Topics:
- Exploring KQML with AgentBuilder
- Create new agents with AgentBuilder to better understand the IDE and its overall functionality
- Create a better User Interface for the AirFare agent
- Build poker playing IA’s with the CIAgent or Marketplace platform
- Integrate learning into an agent using either AgentBuilder or CIAgent
- Integrate fuzzy logic into the MarketPlace and Airfare agents

Turn-in for the Project:
(1) A paper printout of the source programs. I would expect that your program will follow the highest standards of programming practice including explicit naming, modularity, comments, etc. If you have modified existing software, show through hi-liter or comments what you have modified and what is the original code. Provide me with a path to an ix account for the location of the source and
executable versions OR give me a CD-ROM with all the code. Please tell me how to run the program. Note: if you create and run this on your personal PC and I can’t duplicate it in my lab, please contact me so that we can arrange a demo the week before it is due.

(2) A sample output run demonstrating basic functionality.

(3) Write a short (no more than 10 pages) report summarizing and analyzing the results from your exploration of the topic chosen. Note that this paper should include a thorough discussion of the questions you asked, the experiments you conducted, graphic representations of the input and output data, and the results you obtain. You also will want to generalize your findings.

Research Paper

Alternatively, you may choose to write a technical research paper. Topics should explore in some depth issues of HCI and Intelligent Agents.

Possible Topics:
• Speech Act Theory and KQML
• Social interaction and intelligent agents
• Game playing intelligent agents
• Intelligent agents for teaching humans
• User modeling in intelligent agents
• Modeling affective (emotional) behavior in intelligent agents

Turn-in for the Research Paper:
Write a paper (15 to 20 pages) focusing on the research topic. Clearly state the topic. Define the important terms. Why is this topic important? What are the critical issues? Summarize the literature and past research. What are the results? What hasn’t been solved and why not? Provide complete list of references read and cited. Note, the style of this paper is scholarly. Please conform to standard practice in the field, e.g. an ACM journal or proceedings paper.