Meaning Making Through Collaborative Agent Design in AI Course

This group activity was designed for an advanced, undergraduate Artificial Intelligence course for CS majors and minors. Students review concepts from Chapter 2 of Russell and Norvig's "Artificial Intelligence: A Modern Approach" 4th Edition, and the activity is designed to do the following:

- Build classroom community through small-group discussions and collaboration, including extra motivation by making the subsequent presentation a "pitch" to a "venture capitalist."
- Engage in *meaning making* by collaboratively "imagining" a technology of the future, while directly connecting their idea to the basic components in agent design.
- Providing a point of personal reference for students by revisiting the suggested agents in appropriate future lessons.

Activity

In groups of 3-4 students:

- Think of an artificial agent you would like to design (it can be an extension of something that already exists).

- Audience: venture capitalists funding early phase AI development projects

- Develop a Google Slide (1 or 2 slides) to report:

    1. Your agent's name and purpose

    2. What type of "intelligence" does it have? (see slides from last 2 classes and screenshot below - does it "act humanly", "think humanly", etc.)

    3. What is its Performance Measure?

    4. What is its Environment, and what are the characteristics of that environment (see slide from today)?

    5. What are its Actuators? (if any)

    6. What are its Sensors? (if any)

    7. Tell us more about the agent's type (eg. reflex, model-based, goal-based, utility-based, can it learn?).

    8. What is the most important thing about your agent - in an ideal sense (meaning it works as the designers intended).

9. Why should they fund your project?

Consider what a professional audience of venture capitalists would like to see. Focus on the story, providing less text, images as appropriate, interesting design that helps your idea stand out from others.

Work on this with your group before we meet next time. When you are finished, share your slide with xxx.

We will begin short presentations near the end of our next class.

Full score based on attendance in class on the day assigned and participation in the activity.