

Questions and Feedback from Asgn 1, Cognitive Modeling (2009-2010)

How much/what level of detail should I include when describing the model I implemented?

Basically, I am looking for you to convince me that

1. you understand the phenomena you are supposed to be modeling.
2. you have considered other ways of modeling these phenomena.
3. your code correctly implements the model you believe it to be implementing.
4. you have considered the results of your model, its strengths and weaknesses.

In general, to satisfy item 3, you

- SHOULD include critical code snippets (rules or conditions, typically those that you added or modified) and give the box-and-arrow diagram (if modified), and you should explain these in words – how does the model as a whole function, how do the rules and conditions you added work, and how do they fit into the rest of the model?
- SHOULD NOT just dump code or outputs and expect me to read and interpret them for you. I will not.
- SHOULD NOT just describe your model in words and expect me to believe that you actually implemented it. I will not.

As for items 1, 2, and 4: Suppose the solution I have in mind is solution A. Consider the following possible types of answer. Which ones do you think are best?

1. “My model works like this: A.”
2. “I implemented this using A. What I found is [...]”.
3. “I implemented this using A. What I found is [...] which seems [unrealistic/realistic] because [...]”.
4. “I implemented this using B. What I found is [...] which seems [unrealistic/realistic] because [...]. One way to improve upon this would be [...], because [...]”.
5. “A, B, and C are some ways to do this. A seems best because [...]. B has the problem that [...], and C seems [...]. However, I’m not sure how to implement A [or, A is very difficult/time consuming to implement] so I chose to do B instead. I found that, as expected, [...]. Also, I noticed that [...], which seems [unrealistic/realistic] because [...]”.

Note that, as in many things, it is possible to go overboard here. I’m not looking for you to justify every tiny decision that you made, or consider every possible option. But some indication of thought is warranted.

Examples from Assignment 1

- `evaluate_operator`
- Switching strategies
- Brain damage

How do I store/change a value/counter?

How does parallelism work in Cogent?