

Assignments for Lecture 10

Deliverables

1. Construct a domain model from your phase two use cases.
2. Re do the interaction sequence diagrams for user-system interaction, and subsystem interactions to incorporate increment functionality.
3. Construct state diagrams that model your GUI interface logic.
4. For each of the patterns (Strategy, State, and Decorator) consider how they might be used in your project. Give examples where you argue the pros and cons. Use the pattern if the pro is stronger.

Study questions

1. What is the difference between a transition in a flow diagram and one in a state chart, in terms of its purpose?
2. In the concurrent state sample diagram, how many possible system states are there?
3. Consider, for each pattern: when is the choice of alternatives determined, and when can it be set or changed. (Times: class design time, object creation time, post object creation run time.)

Questionnaire

1. How complex (in terms of numbers of states and transitions) do you think a situation can be, and you can still carry out a mental simulation in your head?
2. An iconic example of a pattern is one that helps you remember it. For example, the sorting algorithm choice example is an iconic example of strategy. Can you think of an iconic example for the State Pattern?