Command, Iterator Proxy, Composite

10-26-2011

Opening Discussion

- Projects?

  - You should be closing out the first project.

- Cool news?

- Robots taking over?

- Have you written software to put anyone out of a job recently?

Command

- Encapsulate things that happen in a program so that they can be done when needed.

- Add undo and you have the capability for easy do-undo functionality.

- Instead of actually doing anything, you package commands and send them to a main processor.

Iterator

- This one you should be familiar with. For any collection, you want to have the ability to run through the elements.

- An iterator provides that functionality in an abstract way.

- The "how" part no longer matters and can be determined in other parts of the code or easily changed.

Proxy

- Don't pass a real object because it would take up too much of some resource. Instead, pass a proxy that shares the interface.

- Matlab arrays.

- In Scala iterators sometimes serve as Proxies. Views are truly proxies.

Composite

- Compose a complex object out of multiple subtypes.

- This provides a tree-like structure.

- Highly flexible and easy to work with. Can easily add new subtypes. Hard to add new functionality.

Closing Discussion

- Questions?