Complex Systems

1/23/2009

Opening Discussion

- What did we talk about last class?

Linked Storage

- These are basically linked lists.

- One variation that you might not be familiar with is "static linking" where you use ints instead of pointers.

- If you use static linking you can use a pool of element and keep a free list. This can be more efficient because memory allocation is often a fairly slow operation.

Linked Lists for Events?

- The author states that linked lists will often have advantages over arrays in simulations.

- He uses a sorted linked list for doing the event queue.

- What might be a better data structure?

Simlib

- The author has developed a small bit of C code in order to help with building simulations. This code really just focuses on playing with lists.

- While it is interesting to see what type of functionality he puts in, I think that we might benefit more from creating our own similar type of framework that is more object-oriented.

Single Server Queue w/ Simlib

- To help introduce Simlib, the book does an implementation of the singe-server queue using it as a foundation.

- I'd like for us instead of spend some time figuring out how we might code this in a good OO manner.

Minute Essay

- Do you have any questions about what we did today?

- How well do you think that the code we put together today will extend to other models?