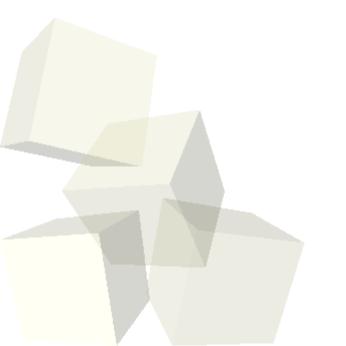


#### **List Based Stacks and Queues**

#### 3-9-2006

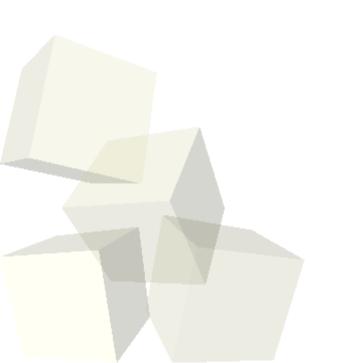






# **Opening Discussion**

- What did we talk about last class?
- Do you have any questions about the assignment?
- Changes to the format of the class.

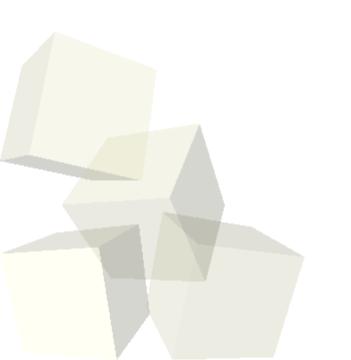


### **List Based Stacks and Queues**

- Previously we made stacks and queues that were based on arrays. You can also implement these ADTs with linked lists.
- Let's go through on the board and draw how we would do this.
- Notice how this demonstrates the separation of interface and implementation. We really don't care how we do push, pop, enqueue, or dequeue, we only care that they function as they are supposed to.

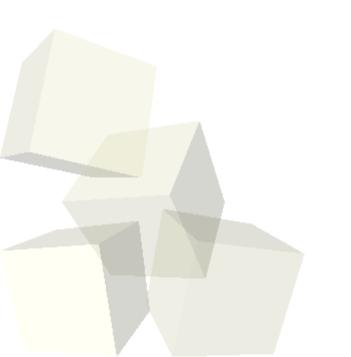
# **Coding It Up**

- Now we will code a linked list based stack together.
- I want you all to code a linked list based queue on your own.



## **The Semester Project**

With the time that is left I want us to talk about design and do coding on the semester in-class project.



## **Minute Essay**

- Assume in a future class you are asked to write a stack but the implementation mechanism isn't specified. Would you write it using an array or a linked list? Why? What about a queue?
  Enjoy your spring break Don't forget too much
- Enjoy your spring break. Don't forget too much. You might even want to write a bit of code over the break.