Arrays and Stuff 9-24-2002 **Opening Discussion** ■ What did we talk about last class? Do you have any questions about the assignment? **Reminder About Arrays** When you allocate an array of object type you get an array of null references to that type of object. The objects themselves will still need to be allocated. ■ This is significant in the assignment because your getBlock(x,y) method should never return null for a valid x,y pair.

Revisiting the Project

- Let's look really quick at the structure of the project and the parts you should be writing code for at this point.
- What are the interfaces? What do they mean? How do they allow the game to work? How are they being used by my code?

Separation of Interface from Implementation

- One of the cornerstones of object orientation is the idea that you want to be able to have the interface of piece of code separate from how it really does what it is doing, the implementation.
- My code assumes certain interfaces. Your code can implement that however you want as long as it follows the guidelines.
- Allows the polymorphism and greater code power.

instanceof Operator

- I mentioned this before with a bunch of other data, but now that you have a bit more knowledge you might be able to better understand it.
- Imagine you write a method that gets a Block from your screen. You need to find out if you can go through it. One way is to "ask" it what type it is with the instanceof operator.

Now let's go through and finish up the code that we had started a while back, then spend the rest of the class writing Java code to illustrate things we have discussed. Minute Essay What questions remain for your assignment? Did seeing the coding today and the discussion from today help you at all? Next class will begin with quiz #2. Next

Tuesday the design for assignment #3 is

due.