

Slide 1

### Administrivia

- Reminder: Quiz 1 Thursday. You can bring, and use, your textbook and any notes. No Web-browsing, though.
- Reminder: Homework 1 design phase due today (11:59pm). Code phase due Thursday.

Slide 2

### About the Project

- For most assignments, you'll need multiple sources of information:
  - Assignment writeup, and overall project description.
  - APIs for game framework and Java library.
  - Class discussion.
  - Textbook and/or notes.
- Sometimes you may have trouble tracking down a key bit of knowledge. If this happens — *ask*. Assignments are deliberately a bit underspecified, but overall plan for the course includes me spending time in open lab, office hours, and e-mail answering specific questions.

### Review of Key Ideas

Slide 3

- Basic syntax similar to C (declarations, expressions, if/then/else, loops).
- Variables — primitive types, reference types.
- Declaring classes — variables and methods; `static`.
- Inheritance and interfaces.
- Java library classes — `String` and `System.out`.

### Generics

Slide 4

- Java library includes classes for collections of things (`Vector`, e.g. — like an expandable array). Originally, could put any kind of `Object` in one of these. Nice, except that then there's no way to know anything about types of objects inside except by using reflection (*much* later, if at all) or `instanceof` operator. Must also use explicit casts to do much with objects retrieved from collection.
- So in Java 1.5 (a.k.a 5.0), there are “generics” — similar to C++ template classes. Idea is to allow you to specialize a collection — so, a `Vector` of `Integer` objects only, or a `Vector` of `Shape` objects only, etc., etc.
- Let's do some examples ...
- Let's also look at API for `MainFrame` in the game framework ...

### Minute Essay

- Write Java code to create a `Vector` to hold `Strings`, and put into it a `String` "hello".

Slide 5

### Minute Essay Answer

- These lines would work:  

```
Vector<String> v1 = new Vector<String>();  
v1.add("hello");
```

Slide 6