Announcements

- Check class announcements daily
- You must implement programming projects by yourself
Anonymous Functions

- Dynamically declared at run time without having to provide a name
- **Example:** AnonymousFunc.html
- You can pass the anonymous function as a parameter
- Can be used as a callback function
- What is callback function?
JQuery User Interfaces

- JavaScript library based on Jquery
- **Example:** DatePicker.html
- **Example:** JQueryFadeToOneFile.html
- **Example:** JQueryFadeTo.html
Debuggers

- Firebug demo
Java

- Let’s review some features of the Java programming language and how they compare with JavaScript

Java

- Compiled language
- Programs can be written using a text editor or advanced IDE (Integrated Development Environments)
- Programs are run on the command line via the java interpreter
- Some Java programs can be run on a web browser (Java Applets)
Java

- Java Provides a lot of libraries for
  - Reading/writing files
  - Networking
  - GUI design
  - Others

- Several Java constructs similar to JavaScript constructs
Java Fundamentals

- Comments
- Two types
  - Inline - // this is a comment until the end of the line
  - Block comment –
    /* The following is a comment that spans several lines */
Java Fundamentals

- The basic unit of work is a class
- A program must have a special function called main
- Unlike JavaScript Java is a strongly-type language.
- Variables must be associated with a type
- Primitive Data Types
  - int → integer
  - float/double → floating-point
  - char
- Output
  - System.out.println
  - JOptionPane.showMessageDialog
- Example: Basics.java
Java Fundamentals

- Input
  - JOptionPane.showMessageDialog
- Transforming string into number:
  - Integer.parseInt
  - Double.parseDouble
- Example: Input.java
- Operators
  - <, >, <=, >=, !=, &&, ||
  - =, +=, -=, /=, *=

Java Fundamentals

- Conditionals
  - If, if else, cascaded if statements

- Iterations
  - while
  - do while
  - for loops

- Example: CondIteration.java

- break and switch statements as in JavaScript
Java Fundamentals

- Functions (methods)
- General format
  
  ```java
  returnType functionName(parameter list) { body }
  ```
- Example: Functions.java
- Arrays: Example: Arrays.java