Chapter 1: Java Building Blocks.

Object: a runtime instance of a class in memory. All the various objects of all the different classes represent the state of your program.

Elements of a java class: methods and fields. They are the members of a class. Variables hold the state of the program and methods operate on that state.

Keyword: reserved words of the Java language.

Method signature: the full declaration of a method. E.g.: *public int numberVisitors (int month)*

There are two types of comments:

// Single-line comment

/\*

Multiple-line comment

\*/

/\* And

\* // they can be

\* combined

\*/

Classes and files.

Classes are .java extension. Public classes are not required. You can put multiple classes in one file, at most one of those classes is allowed to be public. The name of the file needs to match the public class.

The main() method is the entry point of the Java program. This is managed by the JVM. The JVM calls the OS to allocate memory and CPU time, access files and so on.

*public class Zoo {*

*public static void main(String[] args) { }*

*}*

Public is the access modifier (it can be protected or private)

Static binds the method to its class.

Void is the return type (can be any other type, primitive or user defined). It’s a good practice to use the a void method to change an object’s state.

Main is the name of the method.

Inside the parenthesis is the argument. Args is the name. String is an array of java.lang.String type. These are acceptable as well for main: String args[] or String… args.

To compile a java file: *javac Zoo.java.* The result will be a file of bytecode by the same name, but with a .class extension.

To run the file: *java Zoo*

To run passing parameters: java Zoo Bronx “San Diego” Zoo