

2017/06/13 Notes

Review

Input/output - Chp 14 and notes

Arrays - Notes - we'll come back to Chp 7 later on.

Chp 3 - Object interaction

Each class must be in a file with the class name.java

Example:

Student.java

Lab_Classes.java

If using BlueJ, execute any of the methods in any class.

But at the command line, there must be a **main** function someplace, e.g. the Java Examples, HelloWorld and StringExample.

Ref: Chp 6 pg 244

One class (the driver) must have a main otherwise there's no way to start the program.

```
public class static void main(String [] args) {  
    // all the code  
}
```

Analyze the signature:

public - the public modifier means the class is visible/accessible anywhere

class - it's a class

static - only one copy exists at a time.

void - nothing is returned

main - the program that's run when the user invokes it. Holdover from C.

String [] args - IF any parameters are passed to the program, they are in an array of strings and the program must process them.

Finally, after completion of the initialization for class Test (during which other consequential loading, linking, and initializing may have occurred), the method main of Test is invoked.

The method main must be declared public, static, and void. It must accept a single argument that is an array of strings.

The Java virtual machine starts execution by invoking the method main of some specified class and passing it a single argument, which is an array of strings. This causes the specified class to be loaded and linked to other types that it uses, and initialized. The method main must be declared public, static, and void.

Example:

I created a class named HW3.java that contains a class named Checkbook and a class named **main**.

Separately, I created a class named **Check** which is in a file named **Check.java**

Because HW3.java and Check.java are in the same folder/directory, HW3 finds Check and uses it.

Works great at the command line, doesn't work in BlueJ because I have a main function.

Another option is to put all the classes into one file.