Week 3 (Bk 1: pp 29-54)

Reading: 3.6-3.16

Handouts: Project 1 Desc

You should have done the reading and know about each class and some of its methods.

You don’t have to memorize the methods in the library, but you will be more used to working with some and will naturally memorize it

Packages and import

* When you import a package to use, make sure that you do not do a wild card import
* It is good style to import each one by one
  + Eg. Import a Scanner: java.util.\* is NOT correct. Need java.util.Scanner

String Class Example: StringStuff.java

1. 1 public class StringStuff  
    2 {  
    3 public static void main(String [] args)  
    4 {  
    5 String s = "abc"; // One way to create a new String obj  
    6 String t = new String(s); // Another way to create a new String obj  
    7 System.out.println(t);  
    8   
    9 String r = new String();  
   10 System.out.println(r);  
   11   
   12 // What does this do?  
   13 System.out.println(s.length()); // + " is the length of the string s");  
   14   
   15 String i = null; // i references nothing  
   16 // System.out.println(i.length()); would be an error: no address, no value, no object to own a method  
   17   
   18 System.out.println(s.toUpperCase());  
   19 System.out.println("Bye, SUCKERS".toLowerCase());  
   20   
   21 char a = s.charAt(0);  
   22 char b = s.charAt(1);  
   23 char c = s.charAt(2);  
   24   
   25 s = "Java is FUN!";  
   26 String o = "Java is fuNdameNtal";  
   27 int place = o.indexOf('N'); // should be 10. Also be careful! Case sensitive!  
   28 int place2 = o.indexOf('N',place + 1);  
   29 int location = o.indexOf("Ndame"); // Should return 10 since it is the index of the 'N'  
   30 String cute = "hamburger".substring(4,8); //returns "urge"  
   31   
   32 String u = "damental";  
   33 System.out.println(s + u);  
   34 System.out.println("The letter 'N' is in either " + place + " or " + place2);  
   35 System.out.println("Meanwhile, the \"Ndame\" is in " + location);  
   36   
   37 }  
   38 }

DecimalFormat, Random, Scanner example class

1 import java.text.DecimalFormat;  
 2 import java.util.Scanner;  
 3 import java.util.Random;  
 4   
 5 public class APIExamples  
 6 {  
 7 public static void main(String [] args)  
 8 {  
 9 //Demo of DecimalFormat  
10 DecimalFormat formatter = new DecimalFormat("$000,000.00");  
11 double d = 123.456420;   
12 String m = formatter.format(d); //format d  
13 System.out.println(m);  
14   
15 DecimalFormat formatD = new DecimalFormat("$#,##0.00"); // hashtags for optional places which may or may not be there  
16 double v = 67813420.68969;  
17 String n = formatD.format(v); //format v  
18 System.out.println(n);  
19   
20 //Demo of Random  
21 Random r = new Random();  
22 int rUREADY = r.nextInt(6) + 1; // Random number btwn 0-5  
23 System.out.println("Your random dice roll is..... " + rUREADY + "!!");  
24   
25 //Demo of Scanner  
26 Scanner in = new Scanner(System.in);  
27 System.out.print("Enter a double! > ");  
28 double vv = in.nextDouble();  
29 System.out.print("Enter a word, whatever you want > ");  
30 String tikToken = in.next();  
33 System.out.print("Finally, enter a number > ");  
34 int i = in.nextInt();  
35 System.out.print(vv + tikToken + line + i);  
36 }  
37 }

* 1. java Class Library
  2. packages and import
  3. String
  4. Random
  5. Scanner
  6. System/PrintStream
  7. DecimalFormat
  8. Math
  9. Object wrapper
  10. JOptionPane
  11. CSD in jGRASP