## 112: Using Pre-existing Classes

I'm sure you used a lot of classes from the Java library last term but let's review!

## Java API

The Java API (application programming interface) is all of the free classes that come to you when you install Java. Gold Mine!! You can take a quick review here using the older Java 7 documentation (which I like because it is easy to navigate)

https://docs.oracle.com/javase/7/docs/api/

Or Java 15 documentation site here

https://docs.oracle.com/en/java/javase/15/docs/api/index.html . Use the search button to find any class you are thinking of using. The documentation gives you the exact "recipe" to use in your code. Also checkout the Java API by Example site <a href="http://www.java2s.com/Code/JavaAPI/CatalogJavaAPI.htm">http://www.java2s.com/Code/JavaAPI/CatalogJavaAPI.htm</a> which gives you a running code example of that method in use!

REMEMBER: Taylor and Lynn are here to help you do this! Do not waste time getting frustrated – just ask for help!

## 112 YOUR MISSION, SHOULD YOU DECIDE TO ACCEPT IT:

**1 Dive Deeper into the classes you have already used!** Take a look at the documentation for the String class in the Java API. Now copy the skeleton below and write code to answer the four questions:

```
public class BootcampW2 {
    public static void main(String[] argv) {
        // let's go play with methods of the String class !

    String maryPoppins = "Supercalifragilisticexpialidoious";

        // So I may use the quote "be the change you want to see in the world."
        String wiseWords = "Put in your favorite quotation here.";

        // 1. How many letters are in the maryPoppins variable ?
        // 2. What is the integer location of the first 'x' letter in maryPoppins?
        // 3. Create a new String that is only the second half of the word
        // 4. BONUS! break up the quotation wiseWords into an array of Strings
    }
}
```

[This code will be available as a separate file in Discord]

**2 Review what you most need to refresh.** You may want to go over the methods in classes used in 111:

*Randon
*Math

\*File

\*Scanner

## **3 Explore and find new classes and try them out!** Some interesting suggestions:

- \* Robot lots of fun to be had here! <a href="https://toolsqa.com/selenium-webdriver/robot-class/">https://toolsqa.com/selenium-webdriver/robot-class/</a>
- \* Arrays confusing but Arrays is actually a class too with some really useful methods
- \* **HashSet, HashMap, TreeMap** These are new ideas, but grab the code from Java2API examples and run it using the Jgrasp Canvas Viewer. What can you learn about these useful data structures just by watching how they behave ???