Class Constructor

Java
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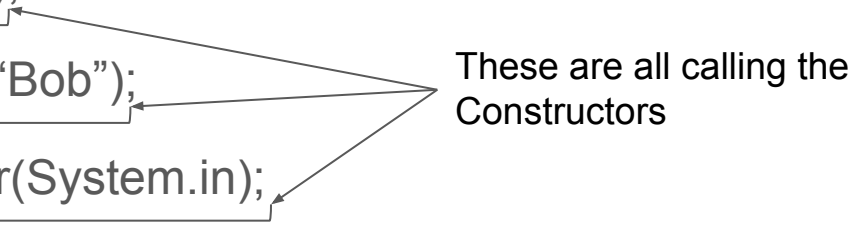
What is a Constructor?

A Constructor is similar to a **Method** but instead it **creates** the object itself.

Example of Constructors that we've used.

```
String name = new String();
String name = new String("Bob");
Scanner sc = new Scanner(System.in);
```

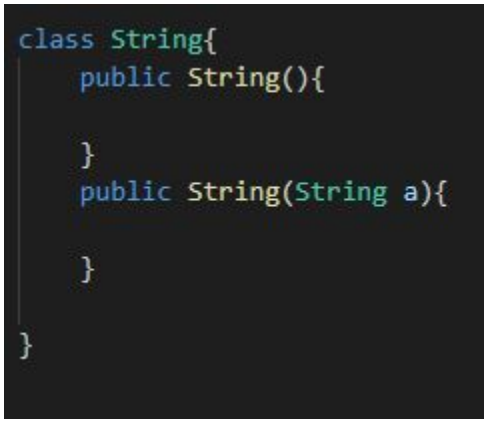


Constructors

Constructors can be empty **or** they can be filled of parameters.

String name = new String(); Empty Constructor

String name = new String(“Bob”); String Constructor



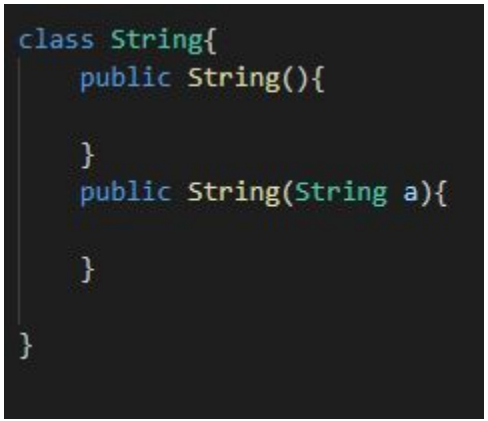
Empty Constructor

String Constructor

Example: Constructors

Constructor's purpose is to **create** the object.

In this case, it is CREATING the String with or without a String parameter.



Empty Constructor

String Constructor

Constructors Good Practice

Constructors are great for initializing/declaring values for our global variables!

Value is constructed below, but declared inside the constructor.

```
public class BaseClass {
    int value;

    public BaseClass() {
        value = 0;

    }

}
```

Lab - Constructors

1. For our myCharacter class
    a. Create an Empty Constructor
    b. Create a constructor that takes in the “role” of the class
        i. Ex: Wizard, Warrior, Rogue
2. Using lab 14, check the input in your constructor and output the correct exclamation.
    a. Ex: “You chose Rogue! How cunning!”
    b. If no correct role, tell the user and reset role to “No Role”
3. In starter.java
    a. Create two myCharacter class objects
        i. One should be empty, output role and all stats
        ii. One should be defined as the user input of Wizard, Warrior, Rogue. Then output role and all stats.