

## CP213 Lecture 8 sept 2016 CE

A constructor is a method in a class that allows a new object to be constructed

A constructor has the same name as the class

```
public class Rational {  
    :  
    Rational (int a, int b)  
    :  
}
```

There can be more than 1 constructor to initialize the class different ways.

There "can" be no constructor

```
public MyClass {  
    private String name;  
    private int age;  
    private int height  
    :  
}
```

```
MyClass oc = new MyClass();  
⇒ String name null  
   int age 0  
   int height 0
```

→ Java automatically generates a constructor with no arguments that does nothing

→ calling the "default" constructor initializes all the variables as 0 or null

If you initialize any constructor Java no longer will initialize the default no argument constructor

Should always make instance variables private!

↳ If you want user to be able to edit provide public methods called accessors that change instance variables