



Custom Class: Constructors

Constructor

- A special **method** that every class **must** have.
- It's used when we create objects of a class.
- We can use constructors to **initialize** the object's instance variables.
- Execution of a constructor always depends on the object.

Creating Constructors

- Constructor is a special method that matches the **name of the class** and has **no return type** nor a **specifier**.

```
public class Car{  
    public Car(){  
    }  
}
```

```
public class Employee{  
    public Employee(int age){  
    }  
}
```

Types of Constructors: No-Argument

- A constructor that has no parameter.
- Also known as default constructor.
- If we do not define constructor in a class, then compiler creates default constructor

```
public class Car{  
    public Car(){  
    }  
}
```

Types of Constructors: Parameterized

- A constructor that has parameters.
- If we want to initialize the **fields** (instance variables) of the class with our own values, then we pass parameters to the constructor

```
public class Employee{  
    public Employee(int age){  
    }  
}
```

Constructor Overloading

- We can have multiple constructors in a class by implementing method overloading

```
public class Dog{  
    public Dog(){  
        // no-arg constructor  
    }  
  
    public Dog(int age){  
        // constructor with int argument  
    }  
  
    public Dog(String breed){  
        // constructor with String argument  
    }  
}
```