

Interface

What is an interface?

A collection of abstract method.

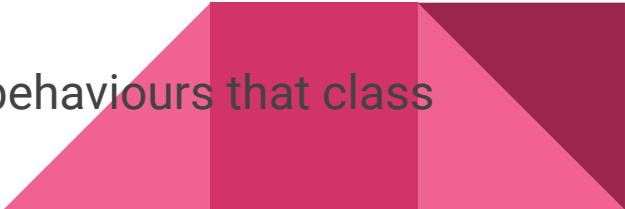
Abstract method: A method without body, they just have method signature.

A class implements interface and inherits all the abstract methods of the interface.

Interface may also contain constant, default methods, static methods and nested types.

Creating an interface is same as creating a class.

Class describes attributes & methods, interface contains behaviours that class implements.



Class v/s Interface.

Class	Interface
Can be instantiated	Cannot be instantiated
All methods are not abstract	All methods are abstract
Class is extended by other class	Interface is implemented by class
Cannot extend multiple interfaces	Can extend multiple other interfaces
Contains multiple constructors	Does not have constructors



Class & Interface similarities.

Both can contain any number of methods.

Both classes and interfaces have a .java extension.

Byte code of a class and interface both are present in the .class file.

Both classes and interface are contained in packages.



How to create an interface.

```
public interface InterfaceName{  
    //fields  
  
    //abstract method declarations  
  
}
```



Interface declaration example

```
interface Car{  
    public void drive();  
    public void stop();  
}
```





Once the interface is created, it needs to be implemented by a class.

Implementing interfaces

```
public class Vehicle implements Car{  
  
    public void drive(){  
  
        System.out.println("The car has started");  
  
    }  
  
    public void stop(){  
  
        System.out.println("The car has stopped");  
  
    }  
  
}
```



In main.java

```
public static void main(String args[]){  
  
    Vehicle v = new Vehicle();  
  
    v.drive();  
  
    v.stop();  
  
}
```



Let's write some code...

