

WHAT ARE ABSTRACT CLASSES IN JAVA?

Abstract Classes in Java act as a boundary between the implementation method and its functionality. It is used to exchange the functionality between the Concrete class members and the Abstract Class method.



SYNTAX FOR ABSTRACTION IN JAVA



Abstract Class:

```
abstract class edureka{}
```

Abstract Method:

```
abstract class method();
```



RULES FOR ABSTRACT CLASSES IN JAVA

It cannot be Instantiated

It can have Final Methods

An Abstract Class must be declared using Abstract Keyword

It can have Abstract and Non-Abstract Methods

It can have Constructors and Static Methods also



WHAT IS AN INTERFACE?

- An interface is a shared boundary across which two or more separate components of a computer system to exchange information.
- The exchange can be between software, computer hardware, peripheral devices, humans, and combinations of these.



SYNTAX TO DECLARE AN INTERFACE?

```
interface <interface_name> {  
    // declare constant fields  
    // declare methods that abstract  
    // by default.  
}
```

ACCESS MODIFIERS IN AN INTERFACE

- Interface cannot be declared as private, protected or transient.
- All the interface methods are by default **abstract and public**.
- Variables declared in interface are **public, static and final** by default.
- Interface variables must be initialized at the time of declaration otherwise compiler will throw an error.
- Inside any implementation class, you cannot change the variables declared in interface.

