

Kotlin – Override Method of Super Class

Kotlin – Override Method

To override method of a Super class, define a function in the Child class with same definition as that of in Super class. Overriding a method of Super class is useful, when you need to change the default behaviour. Also note that only those functions that are open in Super class could be overridden.

Syntax – Kotlin Inheritance

The syntax to override method of a Parent class in Child class is

```
open class SuperClass(primary_constructor){
    open fun behaviour_1(){
        // common behaviour
    }
}

class ChildClass(primary_constructor): SuperClass(primary_constructor_initialization){
    fun behaviour_1(){
        // custom behaviour overriding common behaviour
    }
}
```

Note: The method to be overridden has to be **open**.

Example 1 – Override Method of Super Class in Kotlin

In the following example we shall define a super/parent class named `Person` , and child class named `Student` .

example.kt

```
fun main(args: Array<String>) {
    var student_1 = Student("Arjun")

    println("\n\nAbout "+student_1.name+"\n-----")
    student_1.doAll()
}

/**
 * Person is a Super Class
```

```

*/
open class Person(var role: String = "Person", var name: String = "X") {
    fun eat(){
        println(name + " is eating.")
    }
    open fun sleep(){
        println(name + " is sleeping.")
    }
}

/**
 * Student class inherits Person class
 */
class Student(name: String): Person("Student", name) {
    // activity function belongs to Student only
    fun activity(){
        println("$name is a $role. $name is studying in school.")
    }

    // overrides sleep function of Person class
    override fun sleep(){
        println("$name is a $role. $name goes to bed early.")
    }

    fun doAll(){
        eat()
        sleep()
        activity()
    }
}

```

When the above program is run, you will get the following output.

Output

```

About Arjun
-----
Arjun is eating.
Arjun is a Student. Arjun goes to bed early.
Arjun is a Student. Arjun is studying in school.

```

Conclusion

In this [Kotlin Tutorial – Override Method](#) of Super Class, we have learnt that the function that could be overridden has to be open, and the overriding function definition in Sub class has to be same as that of in Super class. We also saw a Kotlin Example to override method of super class.

Kotlin Java

◆ [Kotlin Tutorial](#)

Getting Started

- ◆ Setup Kotlin(Java) Project
- ◆ Kotlin Example Program
- ◆ Convert Java to Kotlin
- ◆ Kotlin Main Function
- ◆ Kotlin Loops
- ◆ Kotlin For Loop
- ◆ Kotlin While, Do While Loops
- ◆ Kotlin Repeat
- ◆ Kotlin Ranges
- ◆ Kotlin When

Object Oriented Concepts

Classes

- ◆ Kotlin - Class, Primary and Secondary Constructors
- ◆ Kotlin Sealed Class
- ◆ Kotlin Data Class
- ◆ Kotlin Enum
- ◆ Kotlin - Extension Functions

Inheritance

- ◆ Kotlin Inheritance

⇒ **Kotlin Override Method of Super Class**

Abstraction

- ◆ Kotlin Abstraction
- ◆ Kotlin Abstract Class
- ◆ Kotlin - Interfaces
- ◆ Kotlin Null Safety

Exception Handling

- ◆ Kotlin Try Catch
- ◆ Kotlin Throw Exception
- ◆ Kotlin Custom Exception

Fix Compilation Errors

- ◆ Kotlin - Variable must be initialized
- ◆ Kotlin - Primary Constructor call expected
- ◆ Kotlin - Null can not be a value of a non-null type String
- ◆ Kotlin - Cannot create an instance of an abstract class

Kotlin - String Operations

- ◆ Kotlin - Compare Strings
- ◆ Kotlin - Replace String
- ◆ Kotlin - Split String
- ◆ Kotlin - Split String to Lines
- ◆ Kotlin - String Capitalize

Kotlin - Functions

- ◆ Kotlin Function - Default Arguments
- ◆ Kotlin - Use Function

Kotlin Collections

Kotlin List

- ◆ Kotlin List
- ◆ Kotlin List forEach

Kotlin File Operations

- ◆ Kotlin - Create File
- ◆ Kotlin - Read File
- ◆ Kotlin - Read File as List of Lines
- ◆ Kotlin - Write to File
- ◆ Kotlin - Append Text to File
- ◆ Kotlin - Check if File Exists
- ◆ Kotlin - Copy a File to Other
- ◆ Kotlin - Iterate through all files in a directory
- ◆ Kotlin - Delete Recursively

◆ [Kotlin - Get File Extension](#)

Kotlin Interview Q/A

◆ [Kotlin Interview Questions](#)

Kotlin Android

◆ [Kotlin Android Tutorial](#)

Useful Resources

◆ [How to Learn Programming](#)