

# KOTLIN



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## **Kotlin - Overview**

Features  
Environment Setup  
Editing  
Compiling  
and Running  
Execute for Android

## **Kotlin Basics**

Basic Types  
Defining local variables  
Comments  
Functions  
Packages and Imports  
If Expression  
When Expression  
For Loops  
While Loops  
Break and continue Loop

## **OOP's in Kotlin**

Object Oriented Programming  
Association  
Composition  
Aggregation Inheritance  
Lists Sets and Maps  
Interfaces and Implementation  
Design by Contract  
Classes and Objects  
Constructors  
static methods  
public private internal protected class  
methods Objects  
Delegation



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## Functional Programming in Kotlin

- Functions as objects
- Creating and returning functions
- Nested functions
- Dynamic functions
- Anonymous(lambda) functions
- Unit returning functions
- Inline Functions
- Extension Functions
- Couroutines
- Dictionary and Set Comprehensions
- Collection interconversion patterns

## Kotlin JavaScript Interaction

- Calling JavaScript from Kotlin
- Calling Java from Kotlin
- Calling Kotlin from Java
- Tools in Kotlin

## Other

- Destructuring Declarations
- Collections
- Ranges
- Type Checks and Casts
- This expressions
- Equality
- Operator overloading
- Null Safety
- Exceptions
- Annotations
- Reflection
- Type-Safe Builders
- Dynamic Type



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