

# **Building Your First Android App with Kotlin**

## **Introduction**

Kotlin is a modern programming language for Android development. This guide will walk through building a basic Android app with Kotlin.

## **Setting up the Environment**

- Install Android Studio and SDK.
- Create an emulator or connect physical device.
- Set up Kotlin plugin and dependencies.

## **Creating an Android Project**

- Start a new Android Studio project.
- Select "Empty Activity" and language as Kotlin.
- Defines app name, domain, package name

## **Designing the App UI**

- Use layout XML files for defining views.
- Add UI elements like TextView, Button, ImageView.
- Use Constraint Layout for responsive design.

## **Writing Kotlin Code**

- Reference UI elements and attach click listeners.
- Update views dynamically through view binding.
- Leverage Kotlin features like extension functions.

## **Running the App**

- See changes in real-time with Apply Changes.
- Run on emulator or connected devices.
- Build APK package for distribution.

## **Adding Functionality**

- Enable user input through EditText.
- Store data locally with SharedPreferences.
- Improve UX through animations and notifications.

## **Conclusion**

With Kotlin's concise syntax and Android Studio's tools, building basic Android apps is straightforward.