

# MOBILE APPLICATION DEVELOPMENT – Android with Kotlin

## CURRICULUM

DAY	TOPICS
1	Introduction Kotlin vs Java Why Kotlin
	Installation Setting up environment
	Var and Val Operators
2	Using Java in Kotlin String Template If else condition
	String Comparison Null Handling When Expression
3	Loop & Range List & Map Functions Types of Parameters
	Exception Handling with Try Extension Function
	Infix and Operator Overloading Recursion
4	Recursion Tail Recursion
	Class Object Constructor
	Secondary Constructor Inheritance
5	Inheritance
	Abstract Class Interface Data Class
	Anonymous Inner Class Companion Object
6	List

	List of objects
	Array
7	Array
	Higher Order Function Filter & Map
	Project

### Advance Kotlin (Android Development)

Day	Topics
8	Building First App
	Layouts
	App Navigation
9	Activity and Fragment Lifecycle
	App Architecture (UI Layer)
	Recycler view
10	Connect to Internet
	Behind the Scenes
	Designing for Everyone
11	Using Notifications
	Custom Views
	Drawing on Canvas Objects
12	Clipping Canvas Objects
	Android Property Animations
	Using Motion Layout in Animate Android Apps
15	Google Maps api with kotlin
	Location Services and tracking
	Testing: Basics
16	Test Doubles and Dependency Injection
	Survey of Advanced Testing Topics
	Implementing Login using firebase