



Android Development





1 Programming Fundamentals

- Basic Programming Knowledge
- Understanding of Object-Oriented Programming (OOP)

2 Kotlin Language Overview

- History and evolution of Kotlin
- Kotlin vs Java
- Introduction to Kotlin
- Basic Kotlin Syntax
- Functions and Lambdas
- Object-Oriented Programming in Kotlin
- Functional Programming Concepts
- Concurrency and Asynchronous Programming
- Coroutines
- Variables (val vs var)
- Data types and type inference
- Operators and expressions
- Null Safety (?!, ?:, let, safe calls)
- If, else, when expressions
- Ranges and steps
- Break and continue
- Lambdas and higher-order functions
- Inline functions
- Sealed Classes
- Data classes
- Object keyword (singletons, companion objects)

3 Android Development with Kotlin

- Kotlin for Android Development
- Tooling and IDE Support
- Android Architecture Overview
- Setting Up Android Studio
- Project Structure and Gradle Basics

4 Android UI Development

- Activity & Lifecycle
- XML Layouts and Views
- Handling Clicks & Events
- ConstraintLayout, LinearLayout, FrameLayout
- RecyclerView & Adapters
- Toast, Snackbar, Dialogs
- Themes, Styles, and Custom Views
- Material Design Components



5 Android Components & Navigation

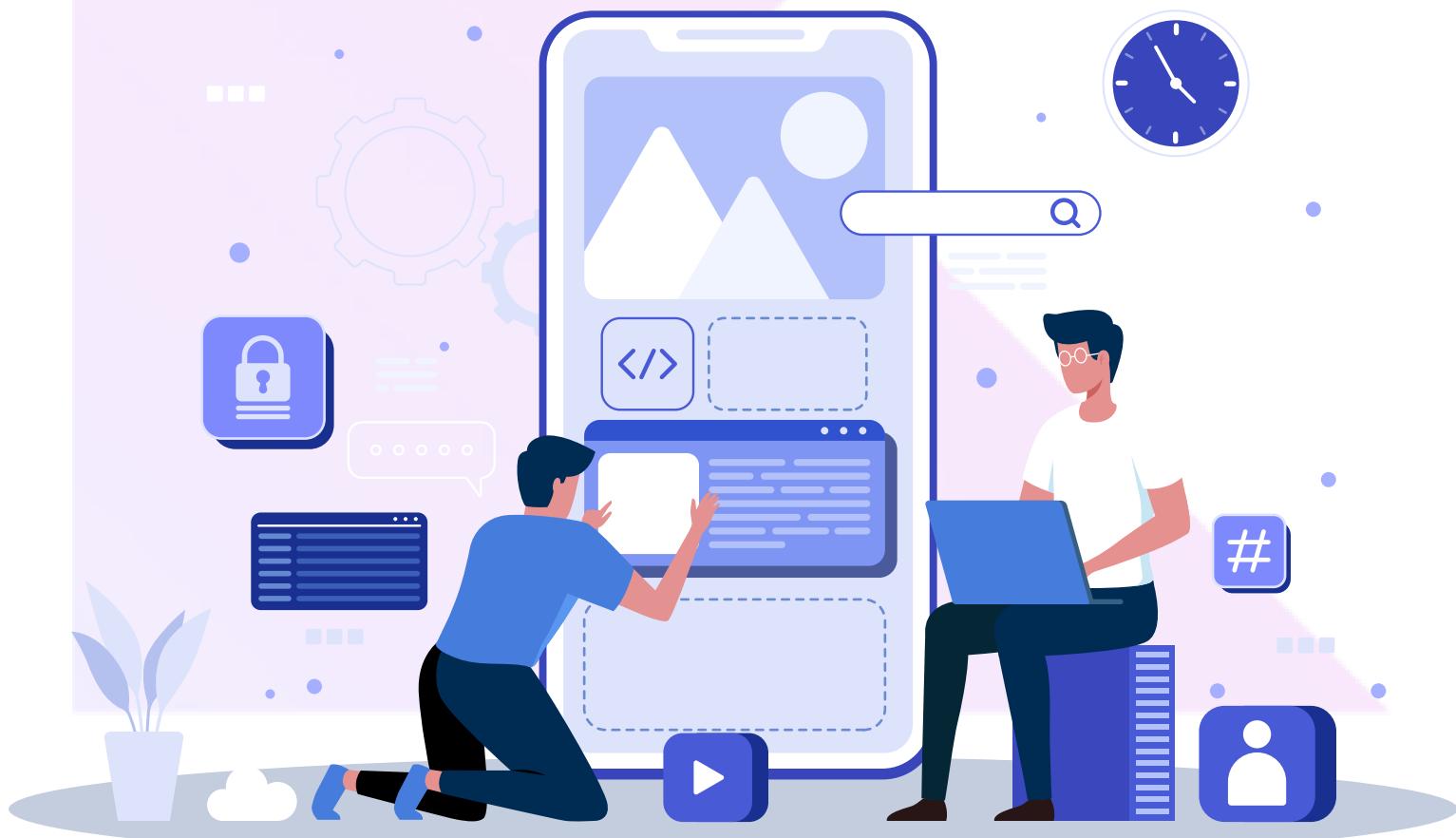
- ▶ Intents (Explicit and Implicit)
- ▶ Fragments and Fragment Lifecycle
- ▶ ViewPager and TabLayout
- ▶ Navigation Component & Safe Args

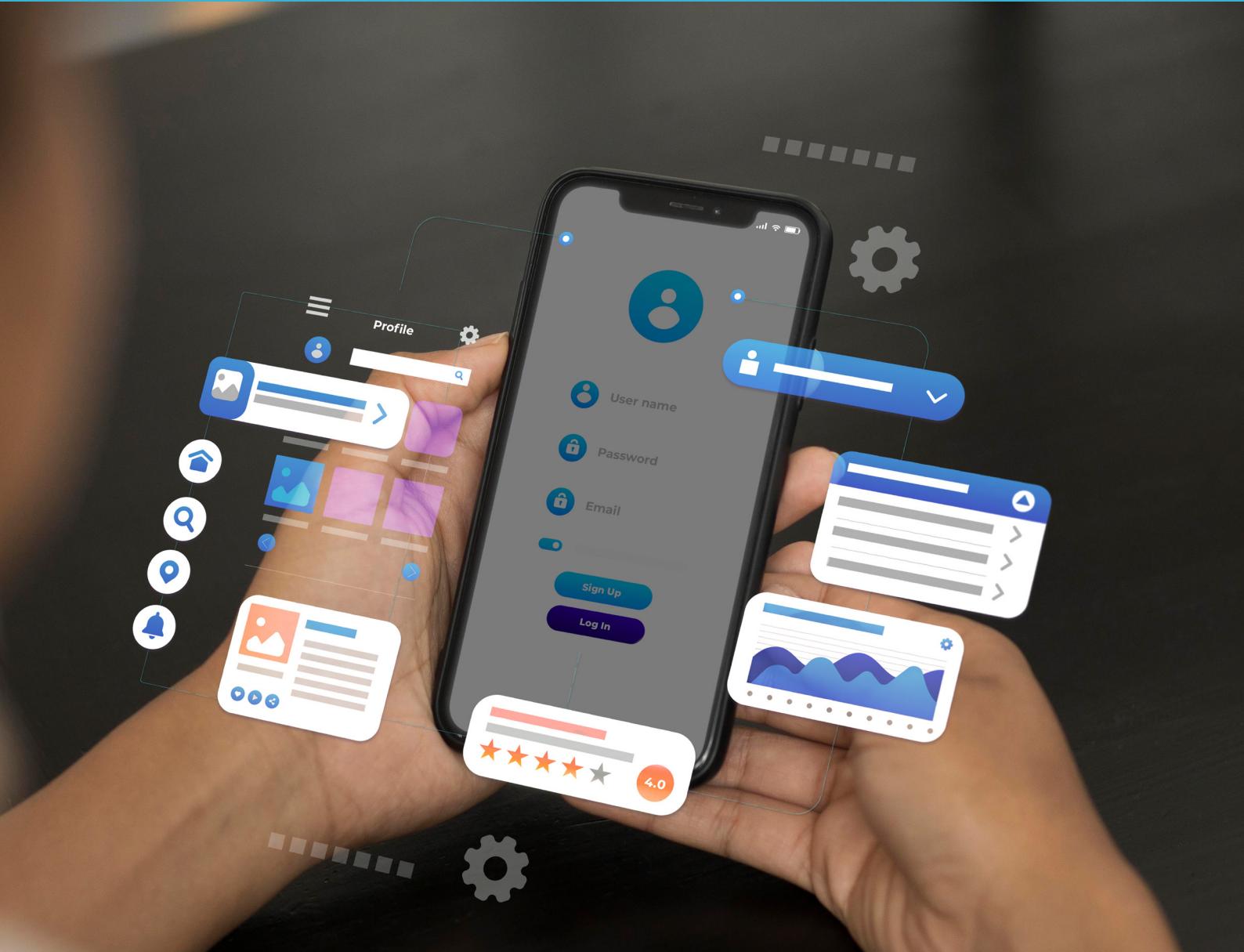
6 Data Storage and Persistence

- ▶ SharedPreferences
- ▶ SQLite & Room Database

7 Networking and Background Tasks

- ▶ REST API basics
- ▶ Parsing JSON Responses
- ▶ Notifications
- ▶ BroadcastReceivers
- ▶ AsyncTask





 alok@webmyne.com

 +91 94276 02525

 702, Ivory Terrace , Opp. Circuit House
R.C. Dutt Road, Vadodara-07
Gujarat - India.

