ANDROID APP SYLLABUS

Android Development Environment

- Installing Android Studio
- Android SDK & Emulator
- Project Structure
- Gradle Build System
- Running First Android App

Programming Basics for Android

- Variables & Data Types
- Conditional Statements
- Loops
- Functions
- OOPS Concepts
- Classes & Objects
- Interfaces
- Exception Handling

ANDROID APP SYLLABUS

Android App Components (CORE 🔥)

- Activity
- Fragment
- Intent (Explicit & Implicit)
- Services
- Broadcast Receiver
- Content Provider
- Android Manifest File

User Interface (UI) Design

- Views & ViewGroups
- Layouts
  - LinearLayout
  - RelativeLayout
  - ConstraintLayout
- TextView, EditText
- Buttons & ImageView
- RecyclerView
- CardView
- Material Design Basics

ANDROID APP SYLLABUS

Navigation & App Flow

- Activities Lifecycle
- Fragment Lifecycle
- Navigation Drawer
- Bottom Navigation
- Intent-based Navigation

User Input & Events

- Click Listeners
- Form Handling
- Validation
- Toast & Snackbar
- Dialogs & Alerts

Data Storage in Android

- Shared Preferences
- Internal & External Storage
- SQLite Database
- Room Database (Intro)

ANDROID APP SYLLABUS

Networking & API Integration

- Internet Permissions
- REST API Basics
- JSON Parsing
- HTTP Requests
- API Integration
- Error Handling

Firebase Integration (VERY IMPORTANT 🔥)

Using Firebase
- Firebase Project Setup
- Firebase Authentication
- Realtime Database
- Firestore
- Firebase Storage
- Push Notifications