Android App Development

Technology	Duration	Project Base
Android App Development	2 Days	Software

Introduction to Java

- Fundamentals of java programming
- Properties of java
- Working of java code
- Data types
- Loops
- Syntax
- Classes
- Methods
- OOP's Concept
- Hands-On session

Introduction to Android

- Android features Introduction to Android
- Android Flavors
- Android OS Architecture
- Gradle Build System
- Setting up Android Development Environment
    - System Requirements
    - Android Studio Installation
    - Create First Android Application
    - Understand Project Hierarchy

Android Architecture overview

- Introduction to OS layers
- Linux kernel
- Libraries
- Android Runtime
- Application framework

Android Application Fundamentals

- History of Android versions
- Introduction to Android Apps Development TOOL

- Working of android applications
- Compiling process of apk files
- What is Activity?
- Introduction to Android Java class file & its structure.

User Interface

- View Hierarchy and Layouts
- UI Events
- Forms
    - Buttons
    - TextView
    - EditText
    - RadioButton
    - CheckBox
- Building Menus
- Notifying users
- Creating dialogs
- Graphics & Animations

Main Building Blocks

- Activity
- Services
- Content Providers
- Broadcast Receivers

Resources

- Overview of Android Resources
- Creating Resources
    - Making your own resources
    - Adding premade resources

Data Storage

- Shared Preferences
- Internal Storage (Files)
- External Storage (SD Card)

Android Media API
- Playing audio/video
- camera
- Media recording

- Blue tooth
- WiFi
- Camera
- HTTP
- Database
- Telephony Manager
- Location Services
- Google Maps

Android App Development (Practical's)

Basic Application
- What is Android Virtual device (AVD)?
- How to create Android Virtual Device (AVD)?
- How to run our App on our own Android device?
- Basic widgets in android, Creating a Simple user registration page UI
- What is Android Manifest file? What is build.gradle file?
- How to find and rectify errors in program(Error Debugging)
- Creating a new Activity
- Toast application

Advance application
- Alert Messages
- Types of Intents Creating Notifications in Android Animation in android
- Weather forecasting in real world
- Splash Screen Application
- Text-To-Speech Application
- SMS Application , Call app
- Camera Application