

ANDROID MOBILE APPLICATION

(Duration: 64 Hours)

ANDROID FOUNDATION

Introduction

- Android Architecture
- Android Versions
- Building Blocks
- Installing SDK
- Hello Android!

Data Types

- Java Virtual Machine
- Data Types
- Arrays
- Strings
- Exceptions
- Packages and Imports

Object Oriented Programming

- Classes
- Inheritance & Overriding
- Overloading
- Interfaces
- Abstract Class

Inner Classes

- Inner Classes
- Static Inner Classes
- Anonymous Classes
- Local Classes

Collections

- Interfaces - Set, Lists, Maps
- Implementations
- Iterating, Searching & Sorting

Threads

- Thread Objects
- Interrupts
- Joins
- Synchronization

ANDROID PROGRAMMING

Activities

- Lifecycle
- Preferences
- Options Menu
- Activities & Intents

User Interface

- Layouts
- Button & CheckBox
- TextView & EditText
- Dialogs
- Lists
- Notifications

Data Storage and Permissions

- Process & Application Context
- Permission Systems
- Internal Storage
- External Storage
- Cache Management

Databases

- SQL Review
- DBHelper
- Database Operations
- Cursors

Content Providers & Contacts

- Content Providers & URIs
- Accessing Contacts
- Insertion, Deletion, Updation
- Managed Cursors

Services

- Lifecycle
- Bound Services
- Notifications
- Running in Foreground

Broadcast Receivers

- Broadcast Receivers
- Lifecycle
- Permissions
- Broadcasting Intents