ANDROID KOTLIN
BEGINNER

Introduction

- Object Oriented Programming
- Data Structure
- Conditional expressions and loops
- SOLID Principles
- Algorithm
- Git commands and Git flow (*Branching Master, Develop, Feature*)

Basic Specific Kotlin

- Kotlin Introduction
- Mutability & Access Modifier
- Null safety
- Extension Function
- Basic Lambda
- Class Type (data class, sealed class, open class)
- Class Properties & Constructor (*JVMOverload*)
- Tuple (*Pair & Triple*)

Basic Android

Material

- Android project structure
- Android application lifecycle
- Activity, Intent, Context
- Gradle Structure & dependencies (*Project & Module level*)
- View and ViewGroup
- Bundle
- Parcelable and Serializable (Parcelize)
- Semantic Versioning
- Error reading and error handling (*Log*)
- Permissions handling (*Runtime Permission*)
- Using Anko (*Anko Common not Anko Layout*)

Android Resources & Layout

Material

- Android layout xml
- Android strings xml
- Styles xml
- Manifest
- Drawable files (*VectorDrawables*)
- ConstraintLayout, LinearLayout, RelativeLayout, ToolBar, etc
- RecyclerView
- TabLayout, ViewPager, Fragment, BottomNavigation
- Customizing view based on UI design

ANDROID KOTLIN
BEGINNER

Data Storage

Material

- Using ORM "*Object Relational Mapping*" libraries from third party (*GreenDao, Cupboard, SugarORM, Realm, ObjectBox*)
- SQLite (**Optional*)
- SharedPreference

Networking

Material

- JSON parsing Serialize / Deserialize (*GSON, Moshi, LoganSquare*)
- REST Client (*Retrofit, FAN, HttpURLConnection, Volley*)
- Debugging Http Request / Response (*OKHTTPLoggingInterceptor*)
- CRUD data using API (**using provided endpoint*)

References :
https://in.udacity.com/courses/android
https://developer.android.com/training/basics/firstapp/
https://www.tutorialspoint.com/android/ (More Technical)
https://kotlinlang.org/docs/reference/android-overview.html
https://kotlinspringcrud.herokuapp.com/swagger-ui.html#/student-controller (provided endpoint)

www.binar.co.id