

# **Flutter Lectureflow**

The below given flow should be followed by each faculty while taking lectures. If the faculty decides to change the flow - he/she will need to first take permission from the Training coordinator at the HO (Ahmedabad office)

Module 6) Flutter - Introduction	1
• Introduction to student Career in Android Understanding Student Login of TOPS ERP Exam Process Working on Project and Assignment Using Lab Assign Project	
Module 7) Fundamental - Dart Programming	7
<ul> <li>Dart SDK</li> <li>Flutter Installation - Android Studio Configuration - Flutter doctor</li> <li>Dart Introduction</li> <li>Data types in Dart</li> <li>String interpolations</li> <li>Operators</li> <li>Working on Control Statements</li> <li>conditional statements : if statement , ifelse statement , nested if ,switch statement</li> <li>looping statements : for loop , while loop , for in loop</li> <li>Jumping statements</li> <li>Working with collection</li> <li>Working with list , set , map and methods</li> <li>working with function</li> <li>Advance Dart Programing</li> <li>Class, Object, Inheritance, Polymorphism</li> <li>Keywords : this , super , static , async</li> </ul>	
Module 8) Flutter - UI Designing and Development	13



- Text, elevated button
- Project creation in Flutter run project in read device and emulator hot reloading app
- Flutter Architecture
- Working with Row and Column Widgets
- Flutter widgets, Flutter layout
- State ful Widgets
- Stateless Widgets
- Material App
- Scaffold, contain
- Properties of container widgets
- Stateless widgets row and column widgets
- Working with text and button ontap and onpress event
- $\bullet$  icons , alert dialogs , radio button , checkbox , switch , TextFormField - working with all style properties
- Working with forms
- Design registration form
- Design Login Form
- Working with Form key
- Customize widgets
- Form validation , apply email validation password hide and unhide
- Change dynamic background color on button click
- working with setState, init
- images , network images working with assets
- Floating Action button with types
- · Working with pageviewbuilder and dots controller

## Module 9) Flutter - Advance UI Designing and Development

7

- working with init method
- working with them
- Working Routing
- Named Routes
- Arguments in routes
- Return data from screen
- · Send data to screen
- · Navigation, navigator, push and pop navigation between different screens
- · Listview and list item
- · Working with grid view
- working with bottom navigation bar
- working with tab bar with icons
- working with navigation drawer with navigation screens
- Splash screen
- working with listview dividers
- Flutter gestures

# Module 10) Flutter - Offline Database- Sqlite

6

- Database Introduction
- working with Sqflite Database
- Dependencies
- working with model class
- CRUD operations using sqflite database
- · working with async , await , future

#### Module 11) Flutter - Advance App Development

15



- Gallery Access , Camera access in Flutter
- Fetch data from internet
- Working on json parsing
- Animation
- retrieve data and display in listview format
- working with listview indexing
- working with gridview
- working with firebase database
- firebase authentication
- firebase real time database
- notification with firebase
- working with background services
- Google map integration and social media integration with flutter application
- Project implementation Splash Screen Login registration Screen Database integration or api integration working with listview navigation navigation drawer with user header layout and list tile items
- Making phone calls , sms and url launcher
- Flutter state management
- Bloc concept

### **Module 12) Flutter - Deployment**

1

- Generating Application , build application
- • Build a release for android device and deployment on playstore