

SYLLABUS

This add on course contains both Flutter and Server Side modules with each covering a specialized aspect of development. Each sub module comprises of lessons that describe how to accomplish a specific task with code samples, slides, etc.

Module 1 –Introduction to Software Development Areas

Introduction to Desktop Application Development

Introduction to Enterprise Application Development

Introduction to Mobile Application Development

Introduction to Cross Platform Application Development

Visual Presentation

Q&A Session

Reference Materials (Introduction.ppt)

Module 2 – Introduction to Flutter

Introduction to Flutter Application Development

Important & benefits of Flutter over other cross platforms

Flutter Architecture

Introduction to Flutter SDK

Visual Presentation

Q&A Session

Reference Material (flutter.ppt)

Module 3 – Introduction to Dart

Introduction to Dart Programming Language

Introduction to OOPS Concept

Introduction to Dart SDK

Visual Presentation

Q&A Session

Reference Material (dart.ppt)

Module 4 – Dart & Flutter Installation & Configuration

Install & Configure Visual Studio Code

Install & Configure Dart SDK

Install & Configure Flutter SDK

Install Dart Extension in Visual Studio Code

Install Flutter Extension in Visual Studio Code

Visual Presentation

Q&A Session

Reference Materials (Introduction.ppt)

Module 5 – Dart

Create a Dart Project using Visual Studio Code

Structure of Dart Project

Dart Data Types [Numbers,String,List,Sets,Maps,etc]

Control Flow Statements [if,else,else if,switch,for,while and do while loop,etc]

Dart Functions

Dart Object Oriented [Class,Object,Constructor,Getter, Setter,Inheritance,etc]

Exception Handling

Visual Presentation

Q&A Session

Reference Materials (dart.pdf)

Module 6 – Flutter

Create a Flutter Project using Visual Studio Code

Detailed Discussion about the structure of Flutter Project

Explain android,ios and lib folder and pubspec.yaml in detail

Explain main method runApp , MaterialApp and Scaffold in detail

Statefull & Stateless Widgets in detail

Floating Action Button, Center, Column ,Row widgets

Assignment 1: Flutter Counter Example: Text,TextField, Button, Form Widgets

Assignment2:Flutter User Login Page Example

RadioButton, CheckBox, Container, Card, Image Widgets

Assignment 3: Flutter User Registration Page Example

List,Grid,Stack,Drawer,Bottom Navigation

Persistence: Shared Preference

Assignment 4: Shared Preference Example

Introduction to Rest Apis and JSON

JSON Object & JSON Array in detail

Rest Api Integration

Assignment 5: User Registration & Login Example using Rest Api & JSON

Visual Presentation

Q&A Session

Reference Materials (flutter.pdf)

Module 7 – Web Application Development [JSP & MySQL]

Introduction to Web Application Development

Introduction to HTML

HTML tags in detail

CSS in detail

JavaScript in detail

Bootstrap

Introduction to JSP

Install Netbeans

Create , Deploy and Run Web Application in Netbeans

Introduction to GET and POST Methods

Dart Data Types in Java

Control Flow Statements [if,else,else if,switch,for,while and do while loop,etc]

Introduction to MySQL

Create database, table and SQL Queries,etc

Interact with MySQL database from JSP

Login & Registration Module

Crud[Create,Read,Update,Delete] Operation Example

Creating Rest Apis for Flutter Mobile Application

JSON Object & JSON Array Creation and Integration with flutter application

Sessions & Cookies

Visual Presentation

Q&A Session

Reference Materials (webapplication.pdf)