Flutter Assignments

Module 1: Introduction to Mobile Development and Flutter

1. Explain the benefits of using Flutter over other cross-platform frameworks :

* Flutter uses a single language “dart” to code which makes , easy to code over android and IOS , also for web apps .
* Also it performes faster , takes less time to code .

1. Describe the role of Dart in Flutter. What are its advantages for mobile development?

* “Dart” is the single language in flutter which is used for frontend and backend both.
* Dart makes code easy and takes less time
* Dart is allow to use it for cross platforms like android , ios , web app .
* Dart also have many official third party libraries or packages which reduces the code and make seamless UI .

1. Outline the steps to set up a Flutter development environment.

* Install flutter SDK from official website
* Extract that SDK file in c:\program files
* Set the path of bin folder path in Environment variables
* Install IDE (Android studio or VS code)
* In VS code install Flutter and Dart extension to run flutter projects in it .
* In Android Studio install flutter Plugin and dart Plugin

1. Describe the basic Flutter app structure, explaining main.dart, the main function, and the widget tree.

* Basic flutter app structure – flutter app structure is built using main.dart , which contains main function , here’s is the breakdown :
* Main.dart- It is a entry point of flutter application , it conatins main fuction which starts the app
* Main function – It is a function from where the execution begins , it calls runapp() and takes widget as an argument also called root of widget tree.
* Widget tree – Flutter app is made up of many widgets which are in structured manner this should be called widget tree.There are two types of widget in this : Stateless widget (Does not change state) , Statefull widget (It can change state dynamically)