

Task 01

1. With your knowledge on application development frameworks provide the framework solution you would propose to develop “ToDoNotes”. Justify your answer.

React native.

React native applications can run on Android and IOS platforms.

React native is a fast framework.

Same code can be run on both platforms.

2. Compare and contrast your frameworks with other available mobile frameworks stating the pros and cons (3 points each for pros and cons)

React native

Pros:

- 80% of the code can be shared across Android and IOS Platforms
- Changes made in the code reflect within few seconds (Hot loading)
- Ability to develop native like user interfaces
- Since React-Native was created 5 years ago, currently it has a huge community support and thousands of built-in libraries
- Provide access to native functionalities like camera accelerometer, Gyroscope etc.

Cons :

- Not fully cross-platform (For some functionalities you will have to access the native components and modify the code)
 - Ex: Camera, Location access, Accelerometer
- React-Native is incapable of handling high performance 3D animations, CPU intensive work
- Involves a steep Learning curve
- The Bridge that converts JS to native code might cause performance issues

Flutter

Pros:

- 80% of code reusability across both platforms
- Intuitive Widgets on Google's Material Design
- Quick and easy development with small learning curve
- Flutter uses high performance rendering engine (SKIA 2D)
- Hot reloading and hot restart
- Can have almost similar user interfaces as native applications

Cons:

- Lack of community support (Since flutter is quite new)
- Lack of in-built libraries when compared to React-Native
- Dart – Since this is a new programming language. Developers should have to learn Dart first in order to develop apps using flutter. And flutter is the only platform that uses dart.

Xamarin

Props:

- 75% of the code can be shared across any platform
- Consistent look across all platforms
- Ability to use NuGet Packages
- Supports for latest APIs and Libraries
- Large community support
- Fast development

Cons:

- Not recommended to develop apps with graphics and large calculations

- Building UI is a bit time consuming task
- Bit costly compared to other frameworks

3.Suggest a value-added feature for “ToDoNotes” showing your creativity
Changing the colour when task is done

4.What are the considerations done when deciding a mobile application framework?

- Platform feature support
- Speed considerations
- Security risk
- Enhance efficiency
- After-launch updates

5.State your favourite mobile application explaining why
Instagram

It have awesome navigation features such as swipe back

