

Flutter Required Task 1

الموضوع:

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1. What is Flutter, and why would you choose it over mobile development Frameworks?

Flutter is Google's UI toolkit used for building beautiful and natively compiled applications for four categories:-

1- mobile: whether Android or iOS operating systems.

2- web

3- Desktop: whether windows, linux or mac OSs.

so, It is clear that Flutter is a cross platform framework that serves all these 4 categories using a single code base.

Choosing Flutter over other cross platform Frameworks like: React Native, Native script and Xamarin is due to

Flutter has the best performance among those all, because Flutter source code is compiled to native code directly without using bridge like in React Native.

About choosing Flutter over native frameworks like:

Android SDK or Swift for iOS, is due to save time and effort of constructing two teams for each operating system and so save money too.

2. What are Dart's Control Flow keywords, and how do you use them?

There are 5 main Control Flow structures in Dart.

But first, what are Control Flow structures about?

Control Flows in Dart help to structure the program logic and manage flow of execution based on certain conditions.

1- If-ElseIf-Else

* When you need to check a condition and when it meets you will execute some code and if not meets you don't care » use if block only.

* When you need to check a condition and when it meets some code executed and if not another code will be done

» use IF-else block.

⊗ when you need to check a condition and another list of alternative conditions » use IF - ElseIF - Else block.

2- switch-Case

when you need to compare a variable value between many values and after finding the matched case executing some code » use switch - Case block with default case if no any matching happens. note that switch variable must be a value not having any expressions like in IF - Else IF - Else block.

3- For Loop

used to repeat a block of code when you know how many times it should be repeated.

4- while Loop

used to execute a block of code if the condition is still true, whenever it becomes false the loop terminates.

5- Do while Loop

as the same as while Loop, but it guarantee that the block will be executed at least once.

Because the action placed first before checking the condition.