

Flutter Required Task 4

التاريخ: 10/12/24

الموضوع:

* How does Flutter build apps for different platforms with a single code base?

- In Flutter, the Dart source code is compiled into native code specific to the targeted platform.

- This compilation process ensures optimal performance and compatibility with the device's hardware.

- For example: If the target platform is iOS devices, the Dart source code is compiled to the native code for iOS system through 3 stage:

1- Dart code \gg source code

2- AOT - compiled - code

3- ARM - code \gg machine code

3 stages explanation

- 1- write the Dart code
- 2- Ahead of Time compilation process done results in converting dart code into Ahead-of-time compiled code, typically this format is suitable to be passed to the next stage.
This Intermediate phase is platform-Independent.
- 3- The AOT-compiled code is passed to LLVM compiler which generates the ARM machine code specifically for iOS devices.
that directly executed by the device hardware.