

# Mobile Platforms



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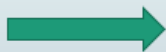




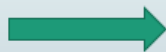
# Java Virtual Machine



Java Source File



Java Compiler



Java Class File

Java Virtual Machine

Interpreter



Operating System





Android

IOS



OEM Widget (**Material Design** - Cupertino)

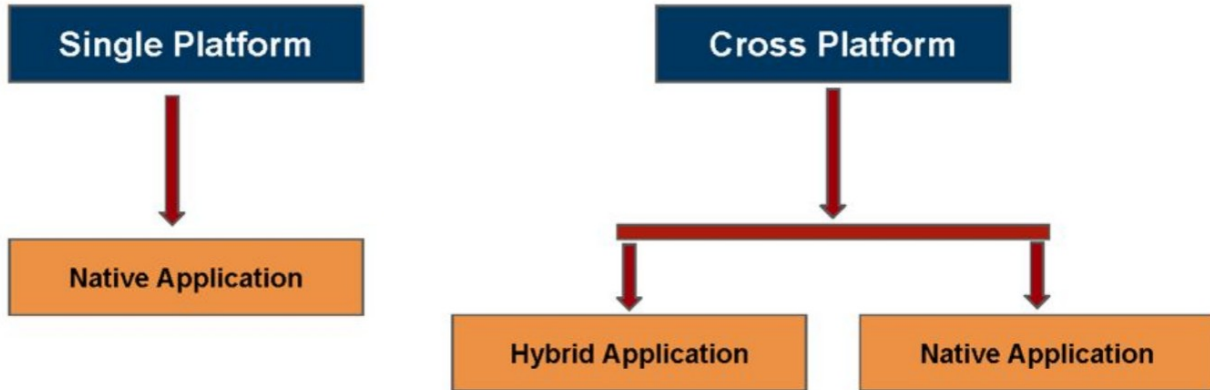
Core Services & Media

Core OS

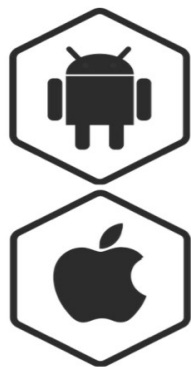
Kernel and Device Drivers



# Mobile Development Approaches



# Native Approach (Single Platform)



## Application

Java  
Kotlin  
Swift  
Objective-c



**OEM Widgets**  
Cupertino  
Material Design



Canvas

Events

## Services

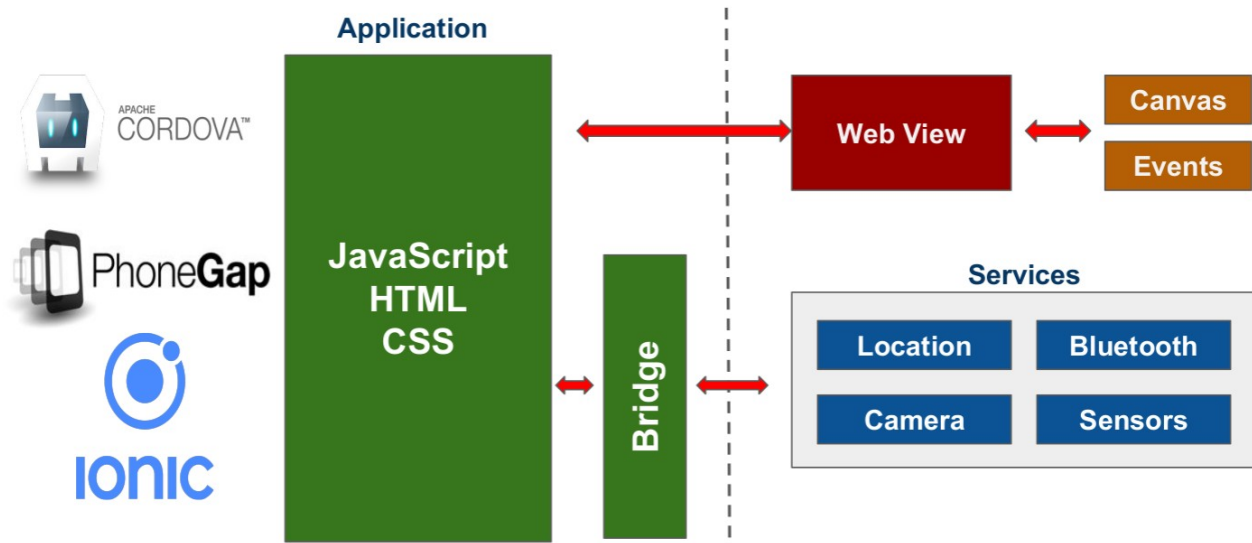
Location

Bluetooth

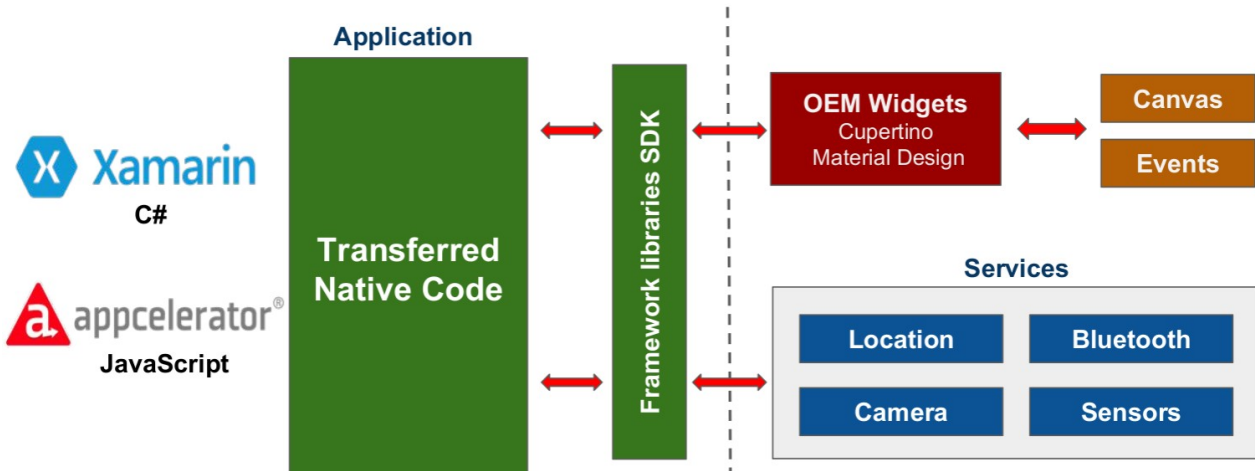
Camera

Sensors

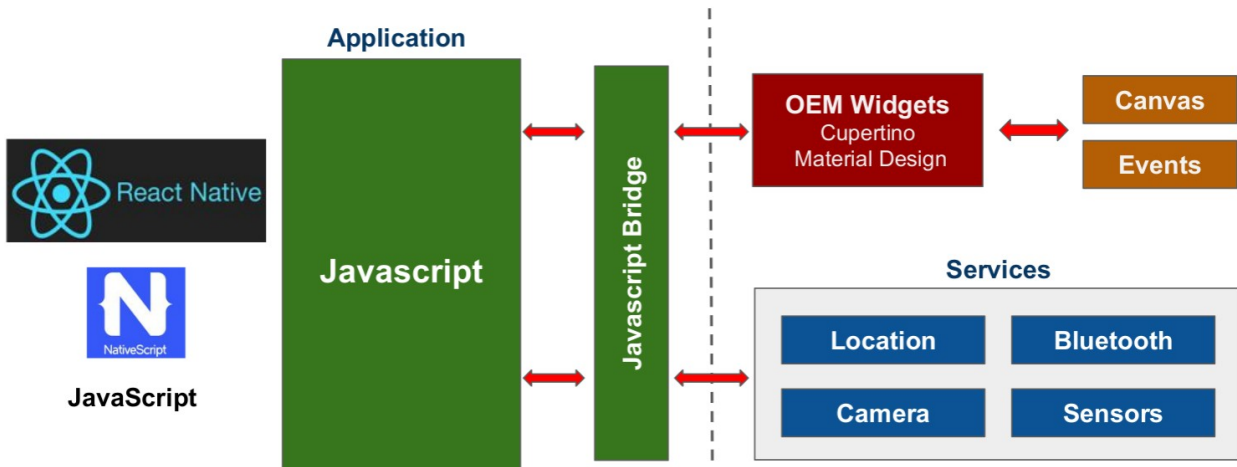
# Hybrid Approach



# Cross-Platform Approach



# Cross-Platform Approach





Application

Native ARM  
Binary  
Code

Flutter Widgets  
Cupertino  
Material Design

Platform  
Channels

Canvas

Events

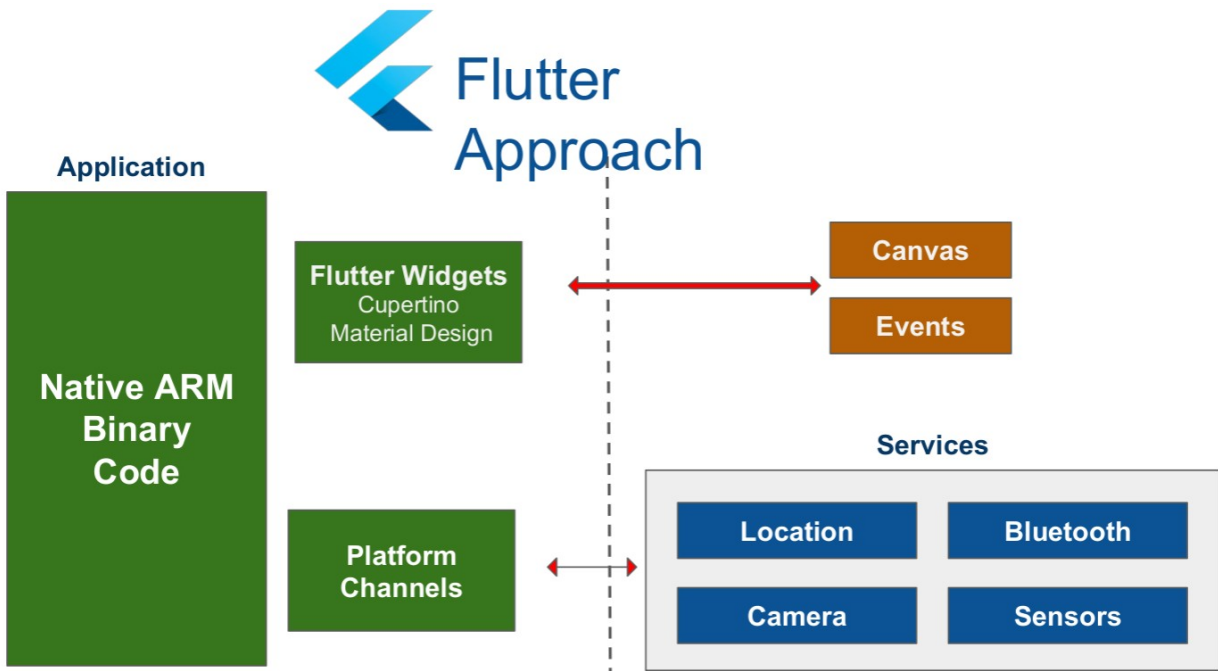
Services

Location

Bluetooth

Camera

Sensors





**Dart**



Google Fuchsia