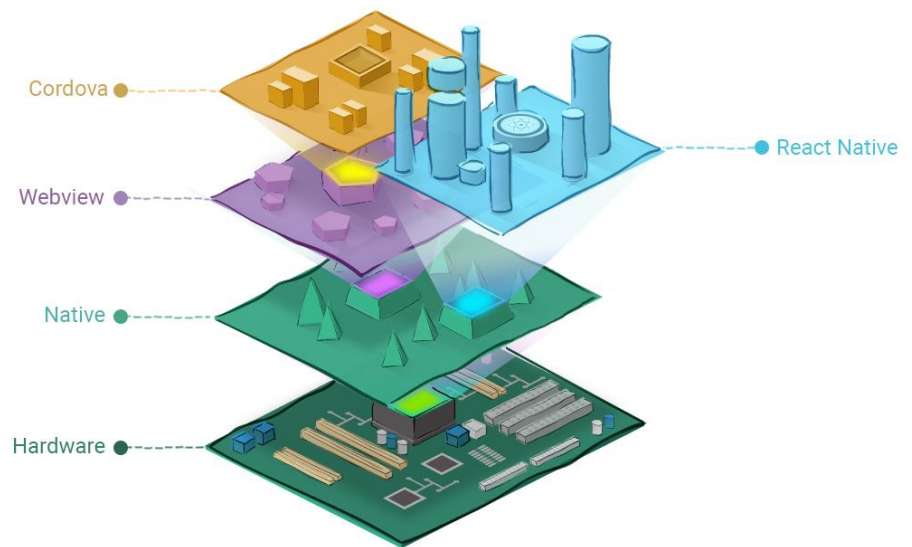


Main Points/Key Points	Notes
	<p data-bbox="863 271 1181 309" style="text-align: center;">Types of Mobile Apps</p> <ol style="list-style-type: none"> <li data-bbox="596 383 1050 421">1. Types of Mobile Applications: <ol style="list-style-type: none"> <li data-bbox="692 423 911 461">a. Mobile Web. <ol style="list-style-type: none"> <li data-bbox="796 463 1098 501">i. Responsive design. <li data-bbox="788 504 1310 542">ii. It requires an Internet connection. <li data-bbox="780 544 1305 582">iii. Unable to upload to any app store. <li data-bbox="780 584 1469 651">iv. Does not have the same physical format as the native application. <li data-bbox="692 685 1110 723">b. Hybrid Mobile Application. <ol style="list-style-type: none"> <li data-bbox="796 725 1374 837">i. It uses common web technologies for application development (HTML, CSS & JavaScript). <li data-bbox="788 840 1481 907">ii. It uses the next generation of JavaScript, which is ES6. <li data-bbox="780 909 1433 976">iii. Unified programming language reduces the development time. <li data-bbox="780 978 1310 1016">iv. Write once, run on every platform. <li data-bbox="788 1019 1214 1057">v. Suitable for web developer. <li data-bbox="780 1059 1453 1097">vi. You can upload the application to app stores. <li data-bbox="692 1173 1102 1211">c. Native Mobile Application. <ol style="list-style-type: none"> <li data-bbox="796 1214 1497 1281">i. It uses specific programming language for every mobile platform. <ol style="list-style-type: none"> <li data-bbox="884 1283 1458 1350">1. Java for android, Objective-C, Swift for iOS, .Net for windows phone. <li data-bbox="788 1352 1469 1420">ii. For an application to be run on multiple platforms it needs to be developed separately. <li data-bbox="780 1422 1481 1489">iii. It is faster compared to mobile web and hybrid applications. <li data-bbox="780 1491 1406 1529">iv. Different skill sets for different platforms. <li data-bbox="788 1532 1453 1570">v. You can upload the application to app stores.
	Summary

Main Points/Key Points

Notes

Types of Mobile Apps



React Native vs. Cordova, Phonegap, Ionic, etc. (Ye, 2018)

2. Hybrid Mobile Architecture.

- Apache Cordova, PhoneGap, Ionic are using Webview to interact with the hardware. It requires an intermediary for the interaction.
- The use of Webview slows down the realtime interaction with the hardware.
- React Native and Flutter run on top of the Native layer to interact with the hardware.
- The creation of their own interaction layer on top of Native allows faster communication with the hardware.

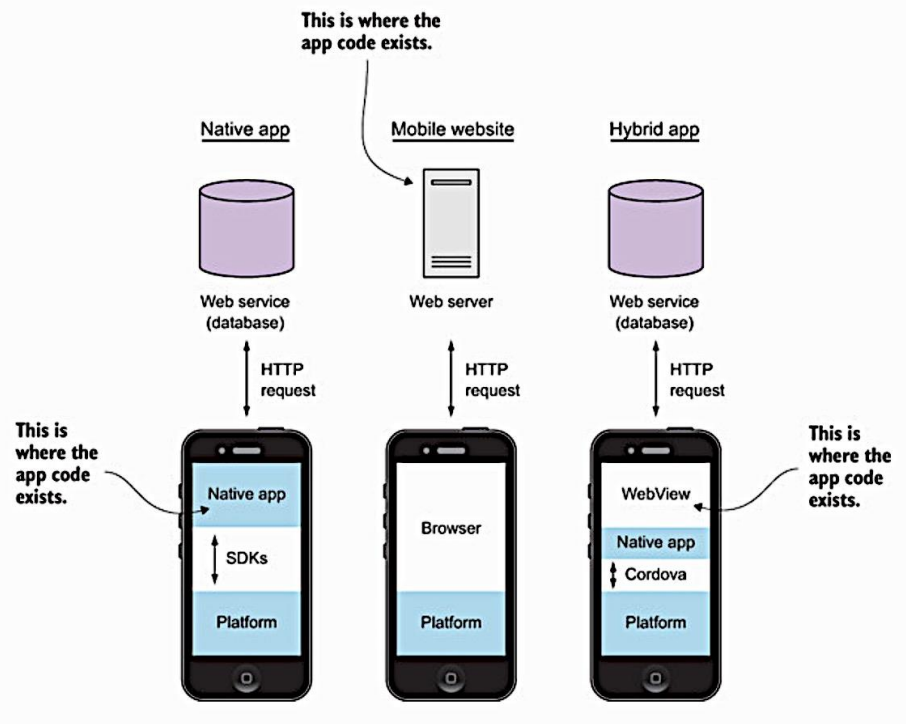
Summary

Main Points/Key Points

Notes

Type of Mobile Apps

3. Types of Mobile Apps Summary



Native, Mobile Website and Hybrid Application architectures
(Wilken, 2016, p. 4)

Summary

Main Points/Key Points	Notes
	<p data-bbox="874 271 1174 309" style="text-align: center;">Type of Mobile Apps</p> <p data-bbox="596 383 798 421">4. References</p> <ul style="list-style-type: none"><li data-bbox="692 421 1469 533">a. Wilken, Jeremy. (2016). <i>Ionic in action: Hybrid mobile apps with ionic and angularjs</i>. Shelter Island, NY: Manning Publications Co.<li data-bbox="692 568 1437 645">b. Saleh, Hazem. (2014). <i>Javascript mobile application development</i>. Birmingham, UK: Packt Publishing.<li data-bbox="692 680 1422 831">c. StatCounter Globalstats (2018). <i>Operating System Market Share Malaysia</i>. Retrieved from http://gs.statcounter.com/os-market-share/all/malaysia<li data-bbox="692 866 1469 1016">d. Ye, Linton. (2018). React Native vs. Cordova, Phonegap, Ionic, etc. Retrieved from https://learnreact.design/2018/02/14/react-native-vs-cordova-phone-gap-ionic-etc/<li data-bbox="692 1052 1437 1240">e. Interaction Design Foundation (2018). Native vs Hybrid vs Responsive: What app flavour is best for you? Retrieved from https://www.interaction-design.org/literature/article/native-vs-hybrid-vs-responsive-what-app-flavour-is-best-for-you
	<p data-bbox="957 1659 1088 1697" style="text-align: center;">Summary</p>