

## Designing a decision tree for cross-device communication technology aimed at iOS and android developers (Conference Paper)

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### Abstract [View references \(21\)](#)

This analysis proposes a decision tree for selecting cross-device communication technologies for iOS and Android mobile devices. This tree accelerates the selection of cross-device technologies by taking into account known use cases of interaction. Five different communication technologies were tested (Real-time Multiplayer, Nearby Messages, PeerJS, iBeacon and Eddystone) by means of 13 proof of concept applications distributed between both operating systems (Android-iOS, iOS-iOS, Android-Android) and the design of 20 architecture diagrams of three types: sequence (connection to services and message sending), deployment and component. The decision tree was validated by mobile development experts resulting in a maximum reduction of up to 30 days of technology selection research. The effectiveness of the tree as a tool is 60%, its usefulness 80% and its ease of comprehension 90%, according to the results obtained from the experts. © 2018 Association for Computing Machinery.

### Author keywords

Android Beacons Bluetooth low energy Cross-device Cross-platform Hybrid apps iOS Mobile development Native apps Software architecture

### Indexed keywords

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