**Frameworks**

**Making the right language choice is yet another valuable skill for a developer. Choosing the incorrect framework can have disastrous effects on how well an application performs.**

**Kotlin native the language is continually being improved by JetBrains. It has a secure monetary system, is loyal to the project, has a significant and highly skilled staff working on it, and is even adapting some of their own main product to adopt it, also Kotlin allows no opportunity for mistake in service of a small and simple codebase, more accurate output codes are supplied. Any possible mistakes may be easily spotted by the compiler**. **[1]. However, in order for the app to gain popularity more quickly, we must create it for every mobile device, and because creating the app in two native languages would consume too much time and resources, a cross-platform is more practical like Flutter. Flutter’s biggest advantage that it allows the use of the same code base for both iOS and Android applications. And the simplicity of building a user interface that is created from the code level. Which minimize the time to complete the app and another benefit is reducing the minimize the full app reboots. can save precious development and compilation time thanks to this feature. That Native development will not provide this feature**

|  |  |  |
| --- | --- | --- |
| Factor | Flutter | Kotlin |
| popularity | **big** | **Small compared to flutter** |
| CPU Performance | **excellent** | **good** |
| Code size for same app | **125 lines** | **217 lines** |
| Animations | **Very Easy** | **moderate** |
| Hot Reload | **Supported** | **Not Supported** |
| UI Design | **Special widgets** | **No Special widgets** |

**[2]**

**So, we decided that Flutter is the best framework to work with due to the previous reasons**

**Reference**

[1] Wasilewski, Kamil, and Wojciech Zabierowski. "A comparison of java, flutter and kotlin/native technologies for sensor data-driven applications." *Sensors* 21.10 (2021): 3324.

[2] Rao, P. Srinivasa, et al. "DISTINCTION OF MOBILE FRAMEWORKS: FLUTTER VS NATIVE APPS."