

Architecture design patterns

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If you've already read through the [architecture guide](#) page, or if you're comfortable with Flutter and the MVVM pattern, the following articles are for you.

These articles aren't about high-level app architecture, rather they're about solving specific design problems that improve your application's code base regardless of how you've architected your app. That said, the articles do assume the MVVM pattern laid out on the previous pages in the code examples.



[Optimistic state](#)

[user experience](#) | [asynchronous dart](#)

[Improve the perception of responsiveness of an application by implementing optimistic state.](#)



[Persistent storage architecture: Key-value data](#)

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[Save application data to a user's on-device key-value store.](#)



[Persistent storage architecture: SQL](#)

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[Save complex application data to a user's device with SQL.](#)



[Offline-first support](#)

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[Implement offline-first support for one feature in an application.](#)



[The command pattern](#)

[mvvm](#) | [asynchronous dart](#) | [state](#)

[Simplify view model logic by implementing a Command class.](#)



[Error handling with Result objects](#)

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[Improve error handling across classes with Result objects.](#)

