

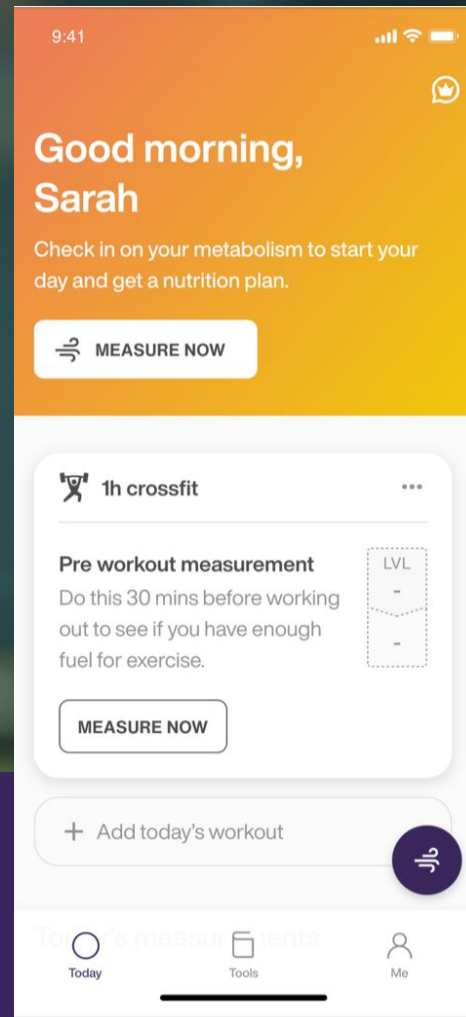
Flutter State Management

June 2021 - Ariel Ben Horesh
@arielbh



**Hello Lumen, Hello Flutter and
Hello BLoC?!**

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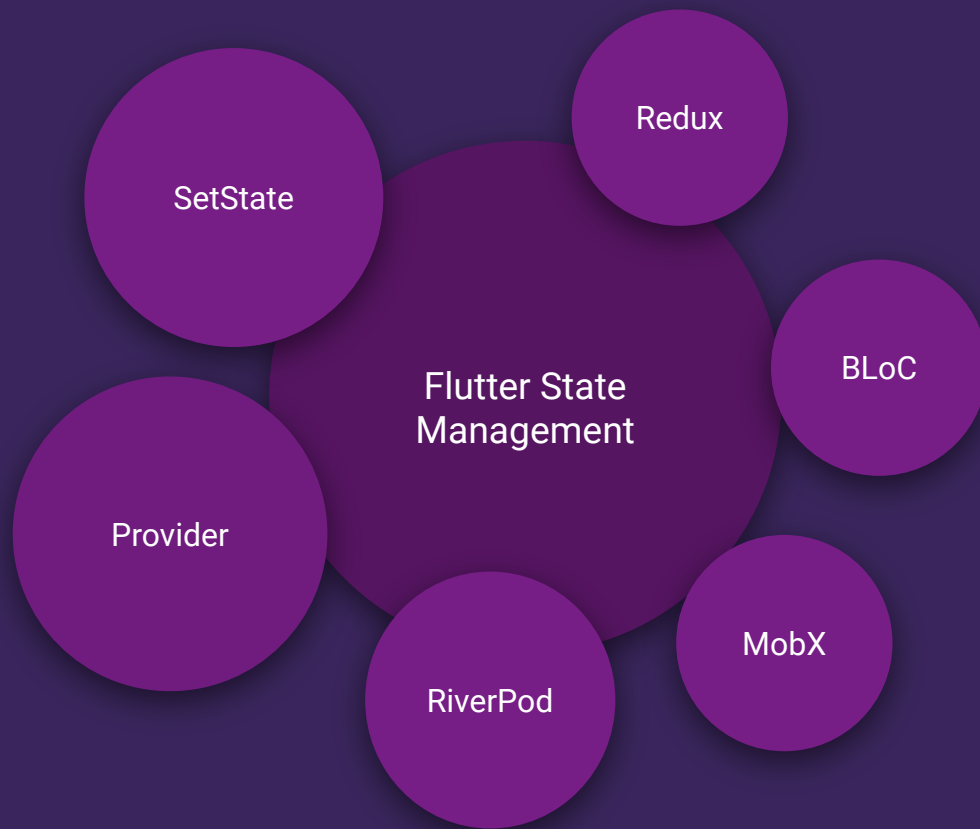
Ariel Ben Horesh

Mobile Architect

lumen.me

@arielbh

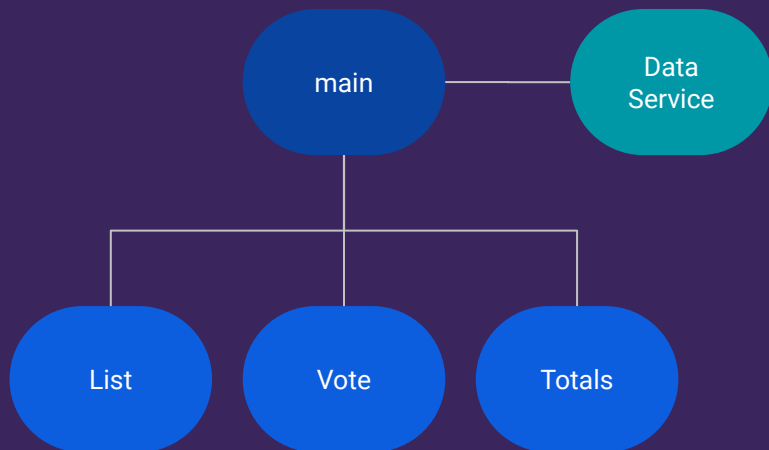






setState

- Triggers rebuilding on StatefulWidgets



setState

Pros

- Simple to use
- No need for a package
- Great for ephemeral state

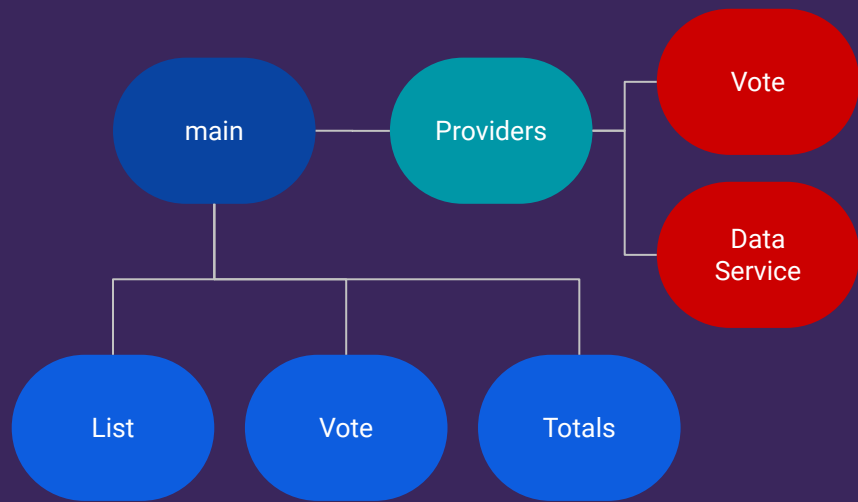
Cons

- Not the perfect tool for app wide state
- Hard to maintain and Complex when sharing state between widgets.



Provider

- Based on inheritedWidget.
- Used with Consumer to rebuild after changes.



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Provider

Pros

- **Allows Dependency Injection**
- **Allows sharing state between widgets**

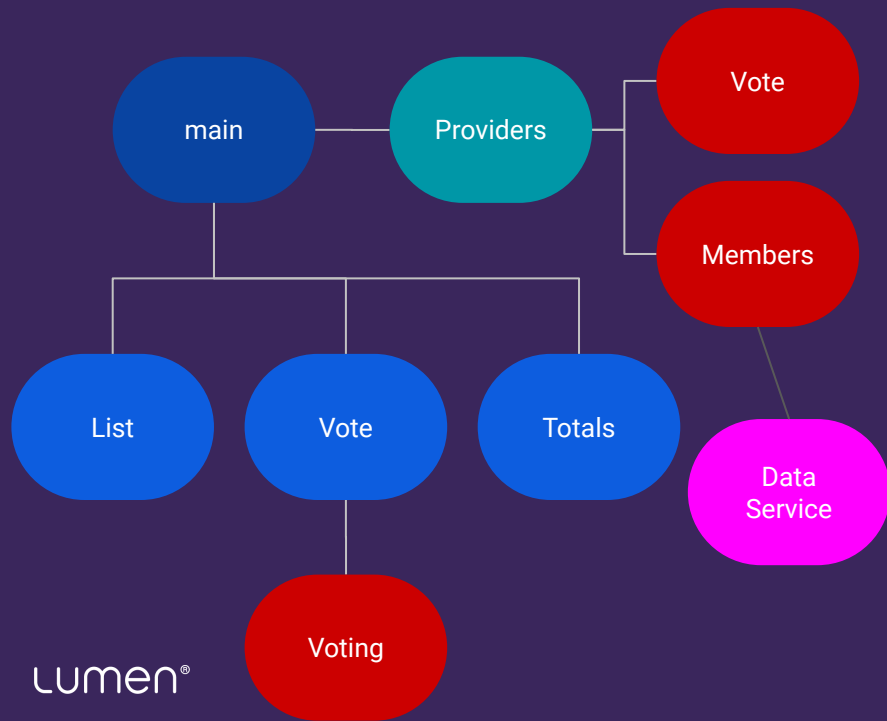
Cons

- **Depends on BuildContext**
- **Cumbersome to implement**
- **Manual notifiers**



BLoC

- Event driven state machines



BLoC

Pros

- Same pattern for local and app state
- Clean
- Easy to test

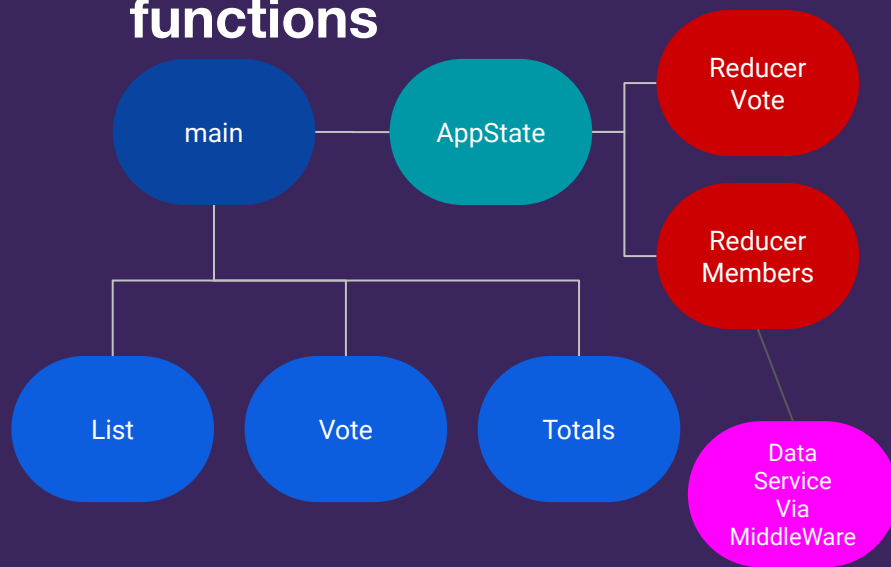
Cons

- Prone of misuse
- Hard to separate UI concerns
- Generate boilerplate



Redux

- AppState - Single point of truth
- Immutability of state
- State changes via pure functions



Redux

Pros

- Popular
- Unyielding structure
- Immutability
- Debugging

Cons

- Drives you towards single yet coupled 'AppStore'
- Asynchronous is difficult
- Lots of boilerplate code



Get-It

Pros

- Can be used as DI Container
- Doesn't depend on BuildContext

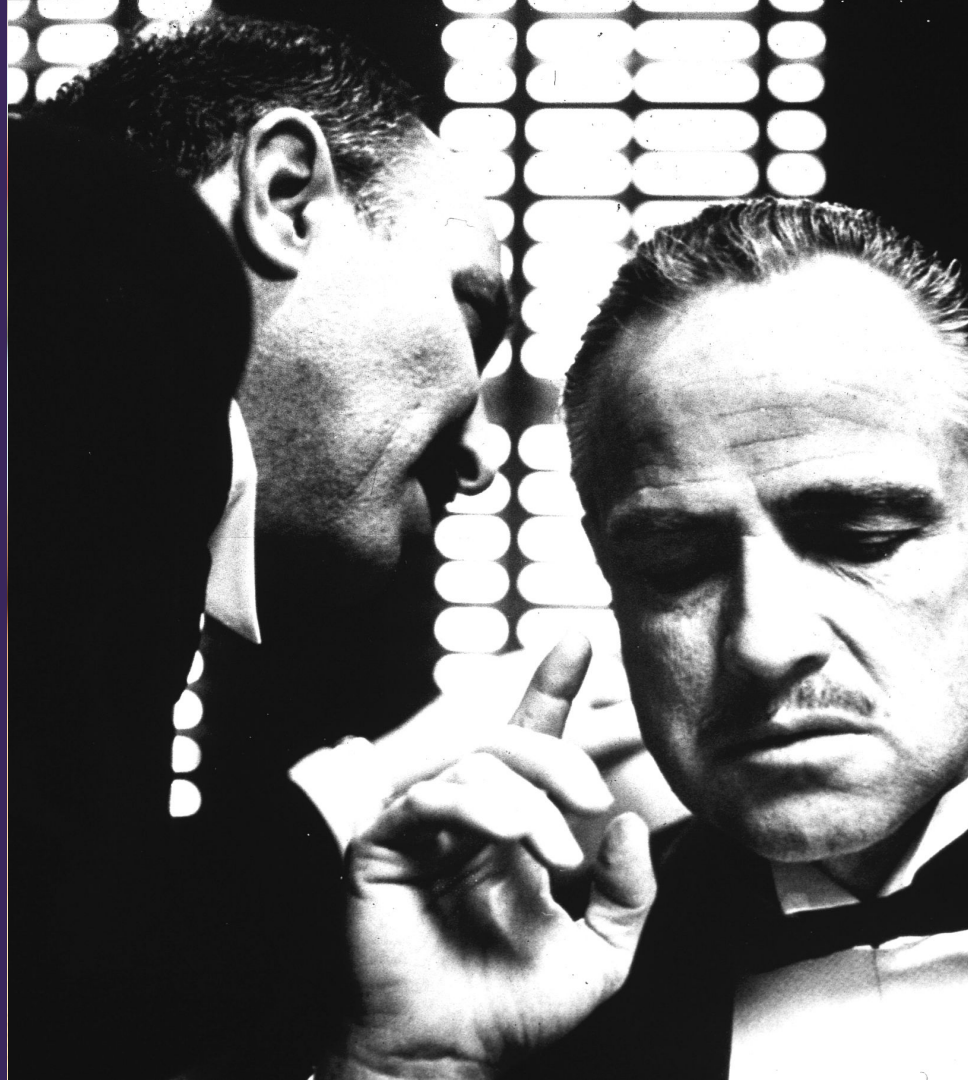
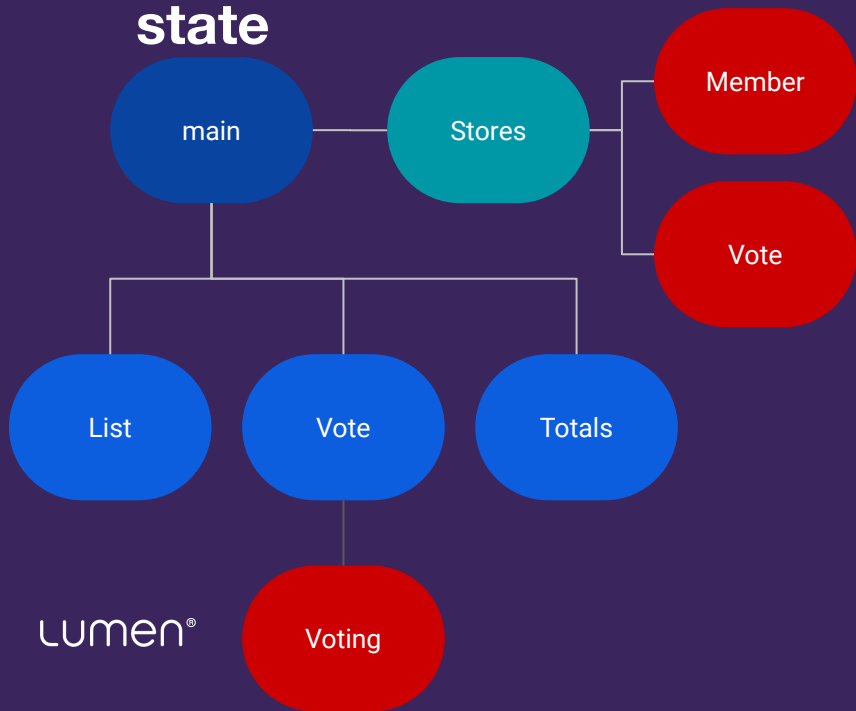
Cons

- Needs another lib for actually being a state builder
- Local State is hard to isolate
- Buggy



MobX

- Glue observers with observable stores + actions that manipulate state



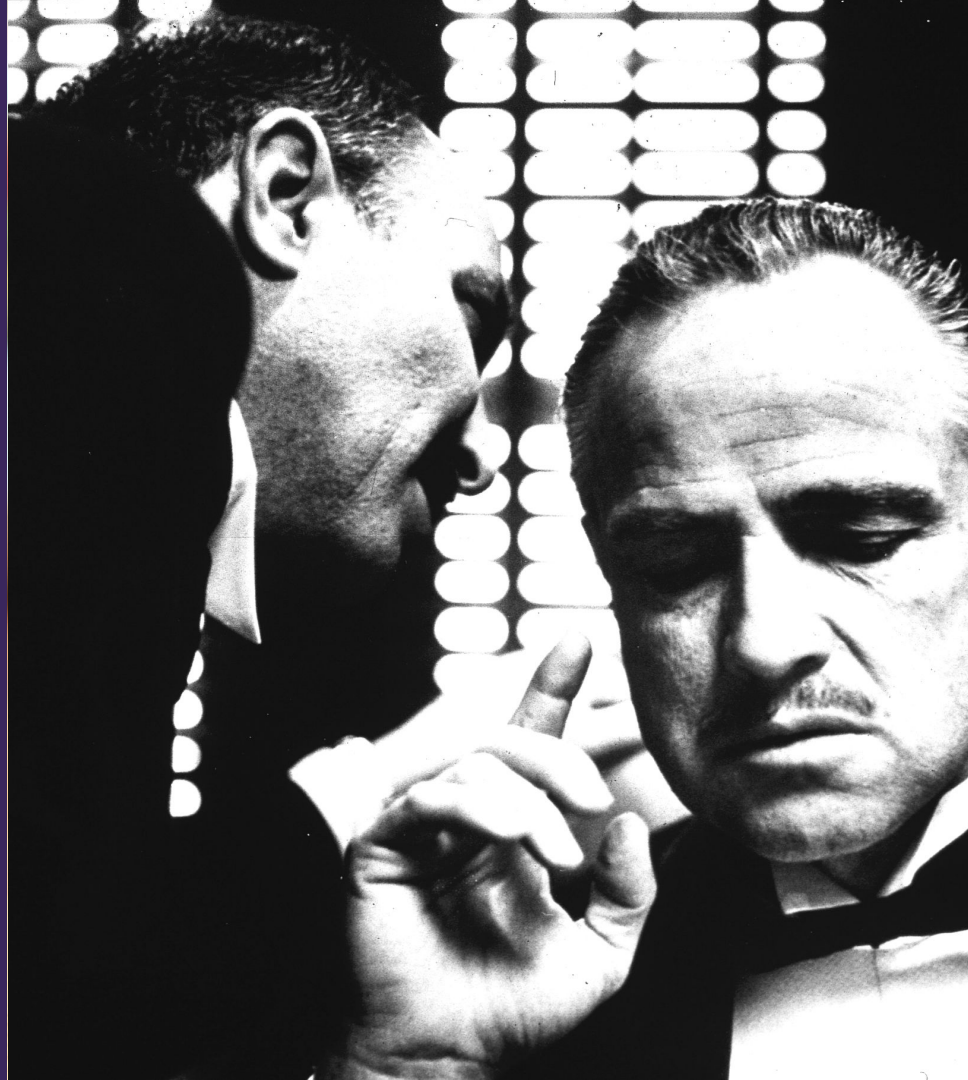
MobX

Pros

- Expressive with Metadata
- Reduces boilerplate code

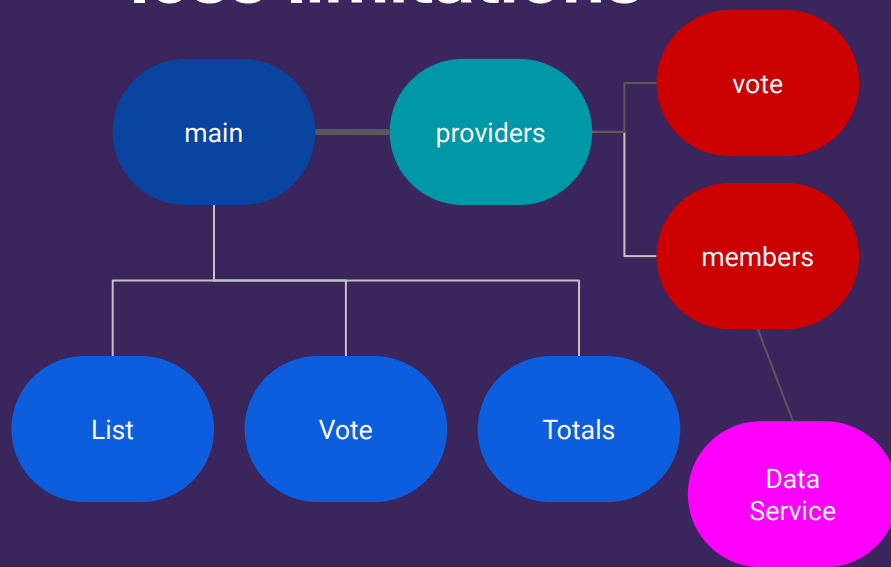
Cons

- Code Generations is not everyone's cup<T>
- Observer feels like voodoo



Riverpod

- Friendlier
“Provider” with
less limitations



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Riverpod

Pros

- Improved “Provider” without BuildContext
- Easier to test

Cons

- Need to use ConsumerWidget for most advanced features
- Docs and examples



What did you like the best?

1. `setState` (122K)
2. `Provider` (3.7K)
3. `BLoC` (7.3K)
4. `Redux` (1.5K)
5. `MobX` (1.9K)
6. `RiverPod` (1.7K)

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Thank you.

@arielbh

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