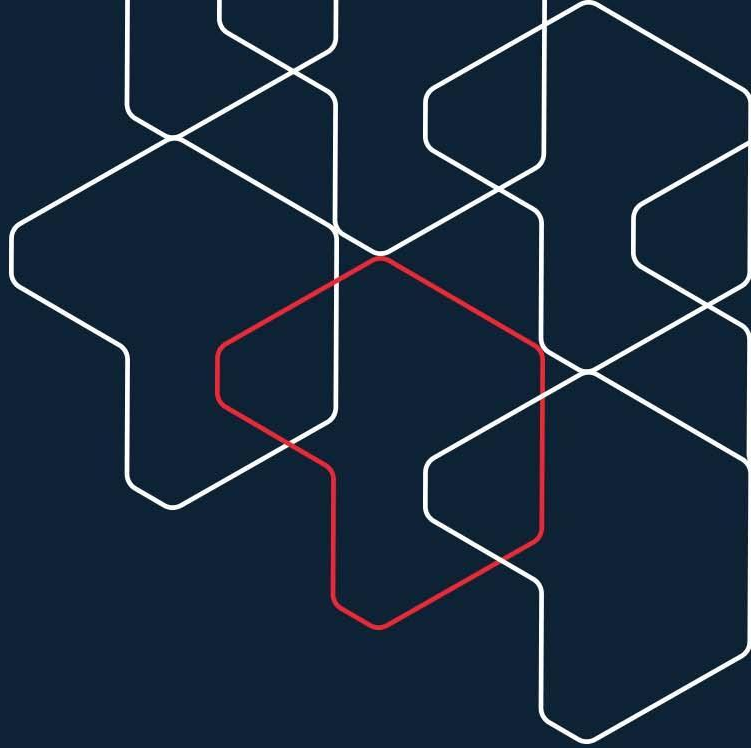


VentureDive

Flutter Training

Architectural Patterns For Better State Management

Recap

Week #5 Recorded Session:

https://drive.google.com/file/d/1A3yNXSZcvqeZ-OUdygksWcDfrd8PkCE8/view?usp=sharing

Week #5 Presentation (Persistent storage and unit tests):

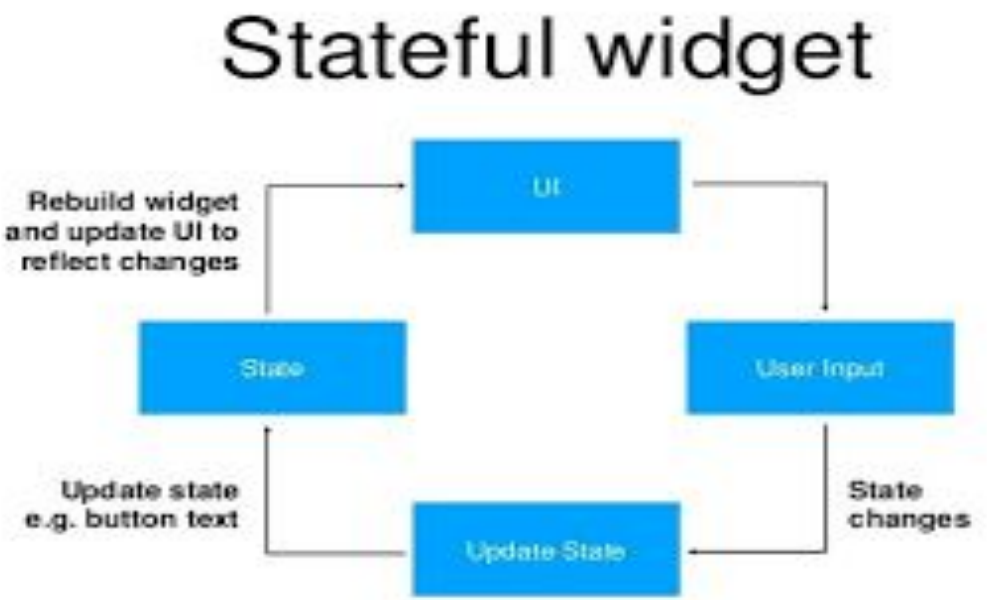
https://docs.google.com/presentation/d/1VCQoXjbcs1PiJ1-hDw41y9iI8sLIU-WSZbI7UxnKeFs/edit?usp=sharing

Agenda

- State management In Flutter
- What are architectural patterns.
- Explore famous architectural patterns in flutter.
- Reactive Programming
- Some code walk through for better understanding of architecture pattern.

State Management

- Creating stateful widgets
- Maintaining states for each widget manually.
- Using simple setState()
- Is there a better way to manage it ?



Architectural Patterns

- Why we use architecture patterns?
- Its Advantages
- Does it make your app scalable ?
- Is it helpful when you work with a team developer ?

Flutter Provider

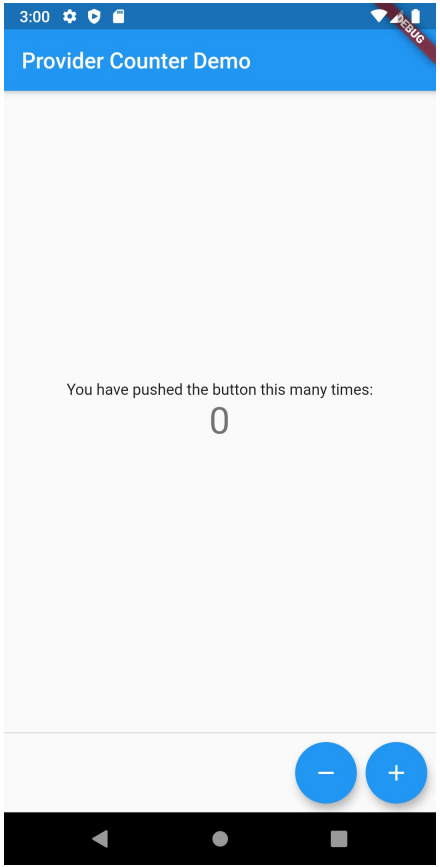
- An implementation of observer pattern
- In which consumer waits of observable to emit changes using callbacks..

Main Concepts

- Notifier
- Provider
- Consumer

Code Walk Through For Provider

In a simple Counter Application



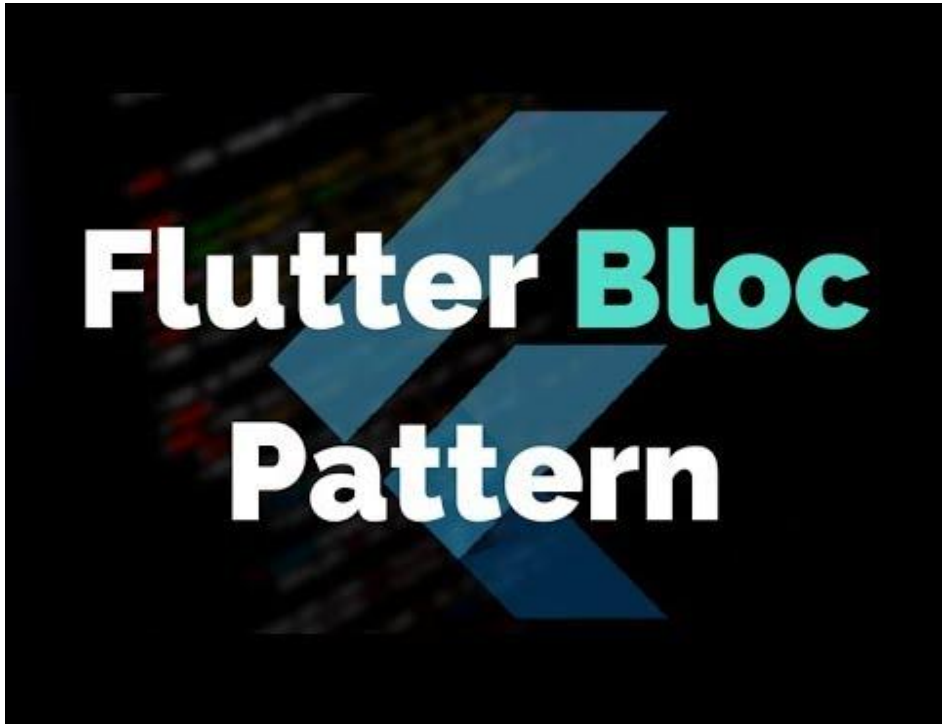
What is reactive programming

- Streams
- Async*
- yield

Bloc

A reactive support architecture

to update states based on streams



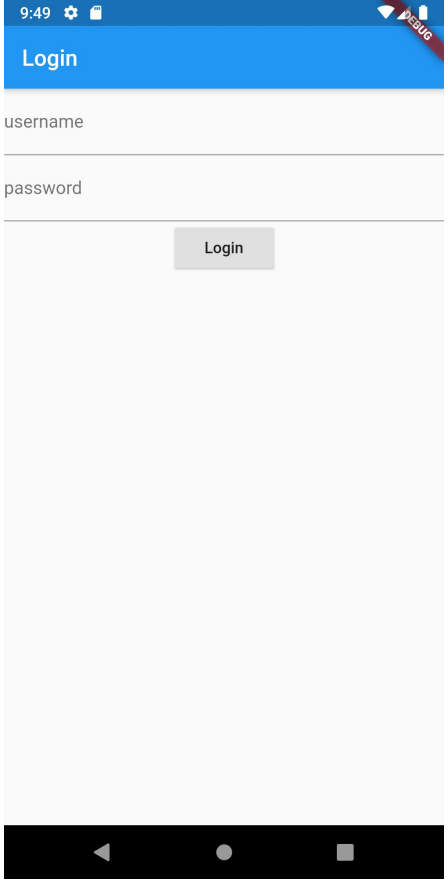
Main Concepts

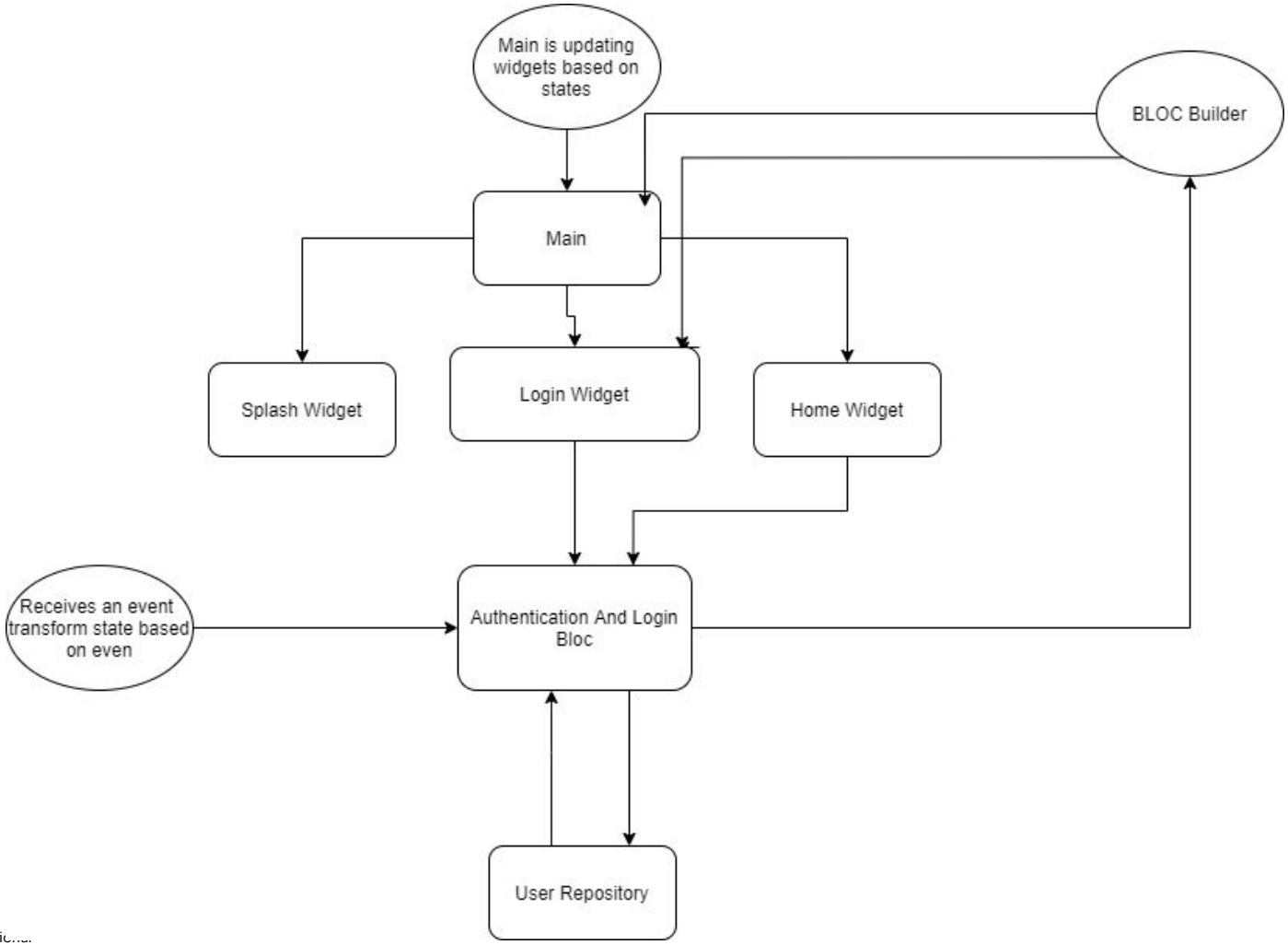
- Event
- States
- Bloc
- Bloc Builder
- Repository

Code Walk

Through For Bloc

Creating Login Flow





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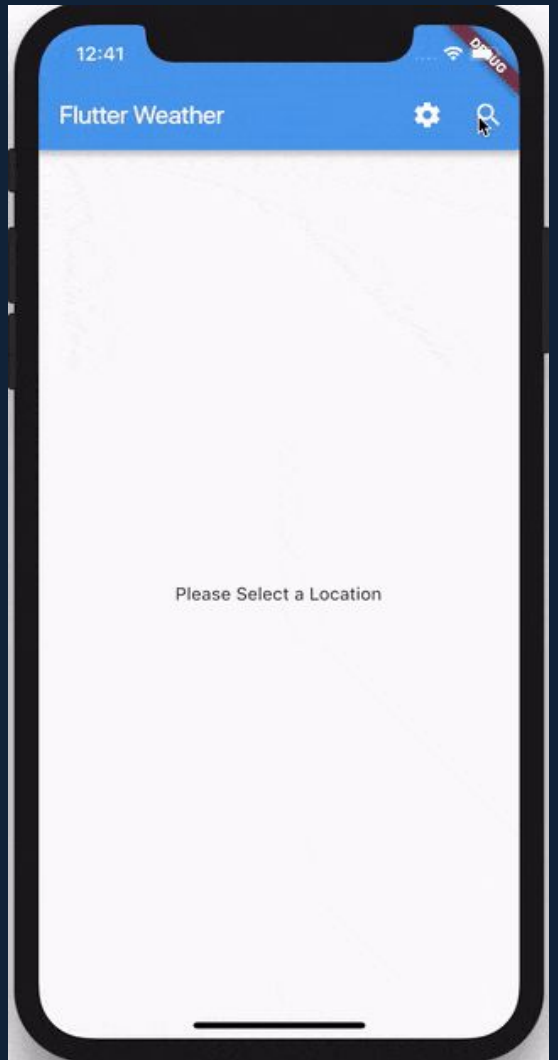

Take home assignment
Weather App Using Bloc Architecture

Assignment submission

Upload your code on github and submit it’s link on the Google chat group.

References

- https://www.youtube.com/watch?v=nQBpOIHE4eE&list=PLjxrf2q8roU2HdJQDjJzOeO6J3FoFLWr2&index=17&t=0s
- https://pub.dev/packages/flutter_bloc
- https://pub.dev/packages/provider
- https://flutter.dev/docs/development/data-and-backend/state-mgmt/simple

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End