### Bloc

### **Código**

#### Main.dart

```
import 'package:flutter/material.dart';
import 'bloc/counter_bloc.dart';
//ejemplo de repository
//https://www.youtube.com/watch?v=4oAwnbZOMKE&t=702s
//hacer otro ejemplo
//libreria bloc
//https://github.com/Vikkybliz/counter/blob/master/lib/main.dart
// Otro ejemplo con visualCOde
//https://www.dbestech.com/tutorials/flutter-bloc-
example https://www.youtube.com/watch?v=Auh7fVk_CX4
void main() {
 runApp(const MyApp());
class MyApp extends StatelessWidget {
 const MyApp({super.key});
 // This widget is the root of your application.
 @override
 Widget build(BuildContext context) {
   return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
       // This is the theme of your application.
        // Try running your application with "flutter run". You'll see
       // application has a blue toolbar. Then, without quitting the
app, try
       // changing the primarySwatch below to Colors.green and then
       // "hot reload" (press "r" in the console where you ran "flutter
run",
        // or simply save your changes to "hot reload" in a Flutter IDE).
        // Notice that the counter didn't reset back to zero; the
application
```

```
// is not restarted.
        primarySwatch: Colors.blue,
      ),
      home: const MyHomePage(title: 'Flutter Demo Home Page'),
   );
class MyHomePage extends StatefulWidget {
 const MyHomePage({super.key, required this.title});
 // This widget is the home page of your application. It is stateful,
meaning
 // that it has a State object (defined below) that contains fields that
affect
(in this
 // case the title) provided by the parent (in this case the App widget)
 // used by the build method of the State. Fields in a Widget subclass
are
 final String title;
 @override
 State<MyHomePage> createState() => MyHomePageState();
class _MyHomePageState extends State<MyHomePage> {
  //int counter = 0;
 CounterBloc _bloc = CounterBloc();
 @override
 void dispose() {
   // TODO: implement dispose
   bloc.dispose();
   super.dispose();
 void _incrementCounter() {
    setState(() {
     // This call to setState tells the Flutter framework that something
      // changed in this State, which causes it to rerun the build method
below
      // so that the display can reflect the updated values. If we
changed
```

```
// _counter without calling setState(), then the build method would
not be
     // called again, and so nothing would appear to happen.
   setState(() {
 @override
 Widget build(BuildContext context) {
   // This method is rerun every time setState is called, for instance
   // by the _incrementCounter method above.
   // The Flutter framework has been optimized to make rerunning build
methods
   // fast, so that you can just rebuild anything that needs updating
rather
   // than having to individually change instances of widgets.
   return Scaffold(
      appBar: AppBar(
       // Here we take the value from the MyHomePage object that was
created by
       // the App.build method, and use it to set our appbar title.
       title: Text(widget.title),
      ),
      body: Center(
       // Center is a layout widget. It takes a single child and
positions it
        // in the middle of the parent.
        child: Column(
          // Column is also a layout widget. It takes a list of children
          // arranges them vertically. By default, it sizes itself to fit
          // children horizontally, and tries to be as tall as its
parent.
          // Invoke "debug painting" (press "p" in the console, choose
          // "Toggle Debug Paint" action from the Flutter Inspector in
Android
          // Studio, or the "Toggle Debug Paint" command in Visual Studio
Code)
```

```
// to see the wireframe for each widget.
         // Column has various properties to control how it sizes itself
and
         // how it positions its children. Here we use mainAxisAlignment
         // center the children vertically; the main axis here is the
vertical
         // axis because Columns are vertical (the cross axis would be
         // horizontal).
         mainAxisAlignment: MainAxisAlignment.center,
         children: <Widget>[
            const Text(
              'You have pushed the button this many times:',
            ),
            StreamBuilder<int>(
                stream: _bloc.counterStream,
                initialData: 0,
                builder: (context, snapshot) {
                  return Text(
                    '${snapshot.data}',
                    style: Theme.of(context).textTheme.headline4,
                  );
                }),
             style: Theme.of(context).textTheme.headline4,
         1,
       ),
      ),
      floatingActionButton: Row(
       mainAxisAlignment: MainAxisAlignment.end,
        children: [
         FloatingActionButton(
            heroTag: "Button1",
            //onPressed: _clearCounter,
            onPressed: () {
              bloc.sendEvent.add(DecrementCounter());
            },
            tooltip: 'Clear',
            child: const Icon(Icons.clear),
         const SizedBox(
            width: 50,
         ),
         FloatingActionButton(
            heroTag: "Button2",
            //onPressed: incrementCounter,
```

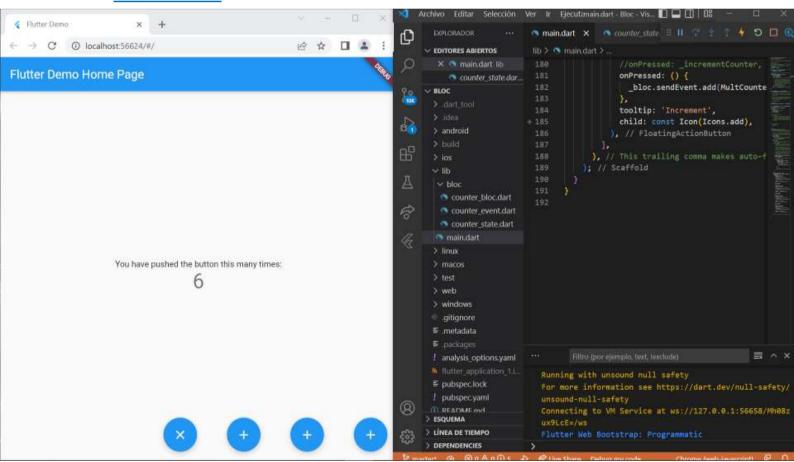
```
onPressed: () {
              bloc.sendEvent.add(IncrementCounter());
            },
            tooltip: 'Increment',
            child: const Icon(Icons.add),
          const SizedBox(
            width: 50,
          ),
          FloatingActionButton(
            heroTag: "Button3",
            onPressed: () {
             _bloc.sendEvent.add(PotCounter());
            },
            tooltip: 'Increment',
            child: const Icon(Icons.add),
          ),
          const SizedBox(
            width: 50,
          ),
          FloatingActionButton(
            heroTag: "Button4",
            onPressed: () {
             _bloc.sendEvent.add(MultCounter());
            },
           tooltip: 'Increment',
            child: const Icon(Icons.add),
          ),
        ],
      ), // This trailing comma makes auto-formatting nicer for build
methods.
```

# counter\_bloc.dart

```
/*import 'package:bloc/bloc.dart';
import 'package:meta/meta.dart';
part 'counter_event.dart';
part 'counter_state.dart';
class CounterBloc2 extends Bloc<CounterEvent, CounterState> {
 CounterBloc2() : super(CounterInitial()) {
   on<CounterEvent>((event, emit) {
import "dart:async";
class CounterBase {}
class IncrementCounter extends CounterBase {}
class DecrementCounter extends CounterBase {}
class MultCounter extends CounterBase {}
class PotCounter extends CounterBase {}
class CounterBloc {
 int _count = 0;
 StreamController<CounterBase> _input = StreamController();
 StreamController<int> _output = StreamController();
 Stream<int> get counterStream => _output.stream;
 StreamSink<CounterBase> get sendEvent => _input.sink;
 CounterBloc() {
    _input.stream.listen(_onEvent);
 void dispose() {
   _input.close();
   _output.close();
 void _onEvent(CounterBase event) {
   if (event is IncrementCounter) {
     _count++;
    if (event is MultCounter) {
      _count = (_count * 2);
```

```
if (event is PotCounter) {
    _count = (_count * _count);
} else if (event is DecrementCounter) {
    _count--;
}
_output.add(_count);
/*if(event is IncrementCounter){
    _output.add(++_counter);
} else if(event is ClearCounter){
    _counter = 0;
    _output.add(0);
}*/
}
```

## Resultados



Link: https://github.com/AlexReyes9725/GPL-3.2-Bloc.git