

Yandex



Widgets

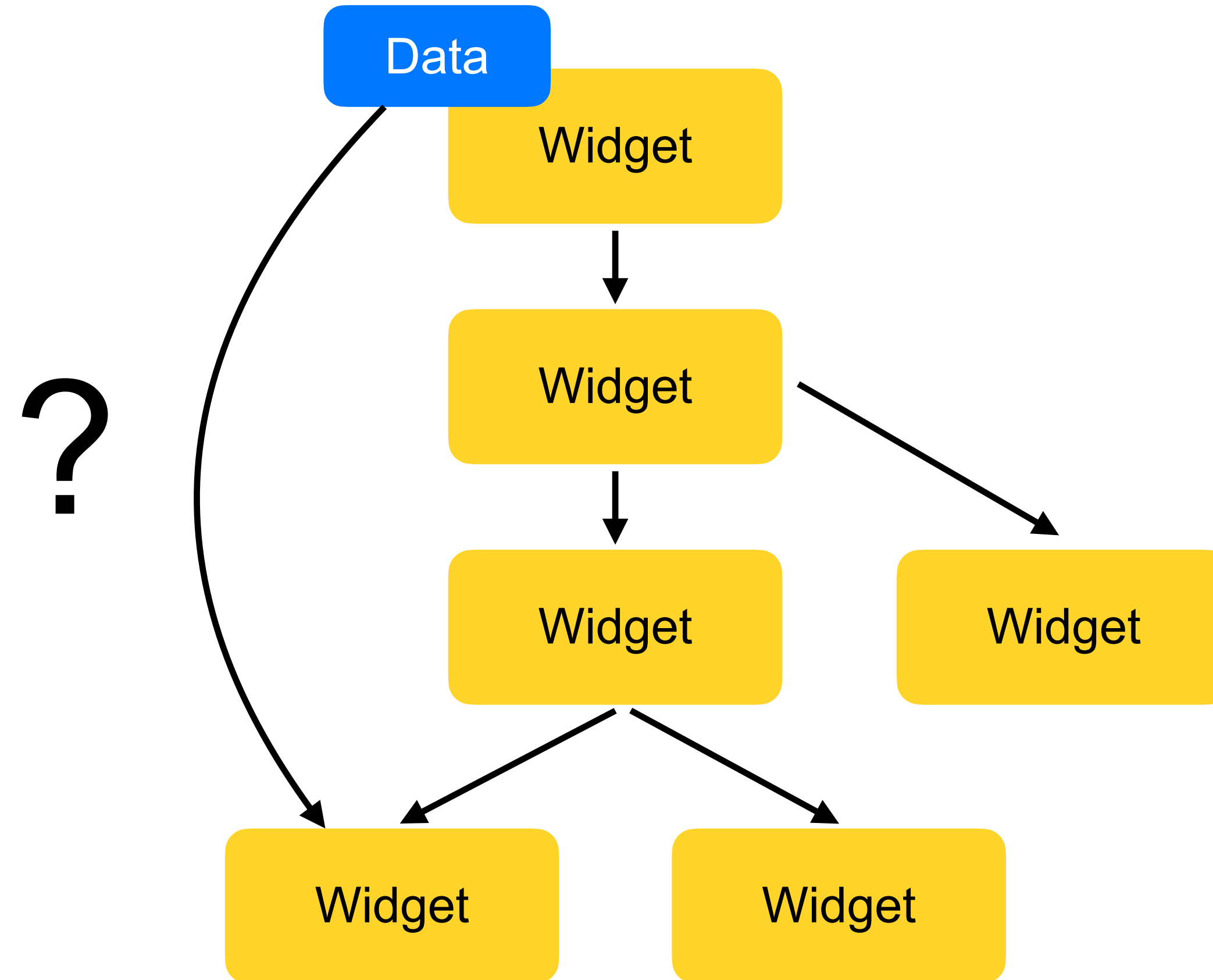
Sergey Koltsov, Yandex.Pro Team Lead

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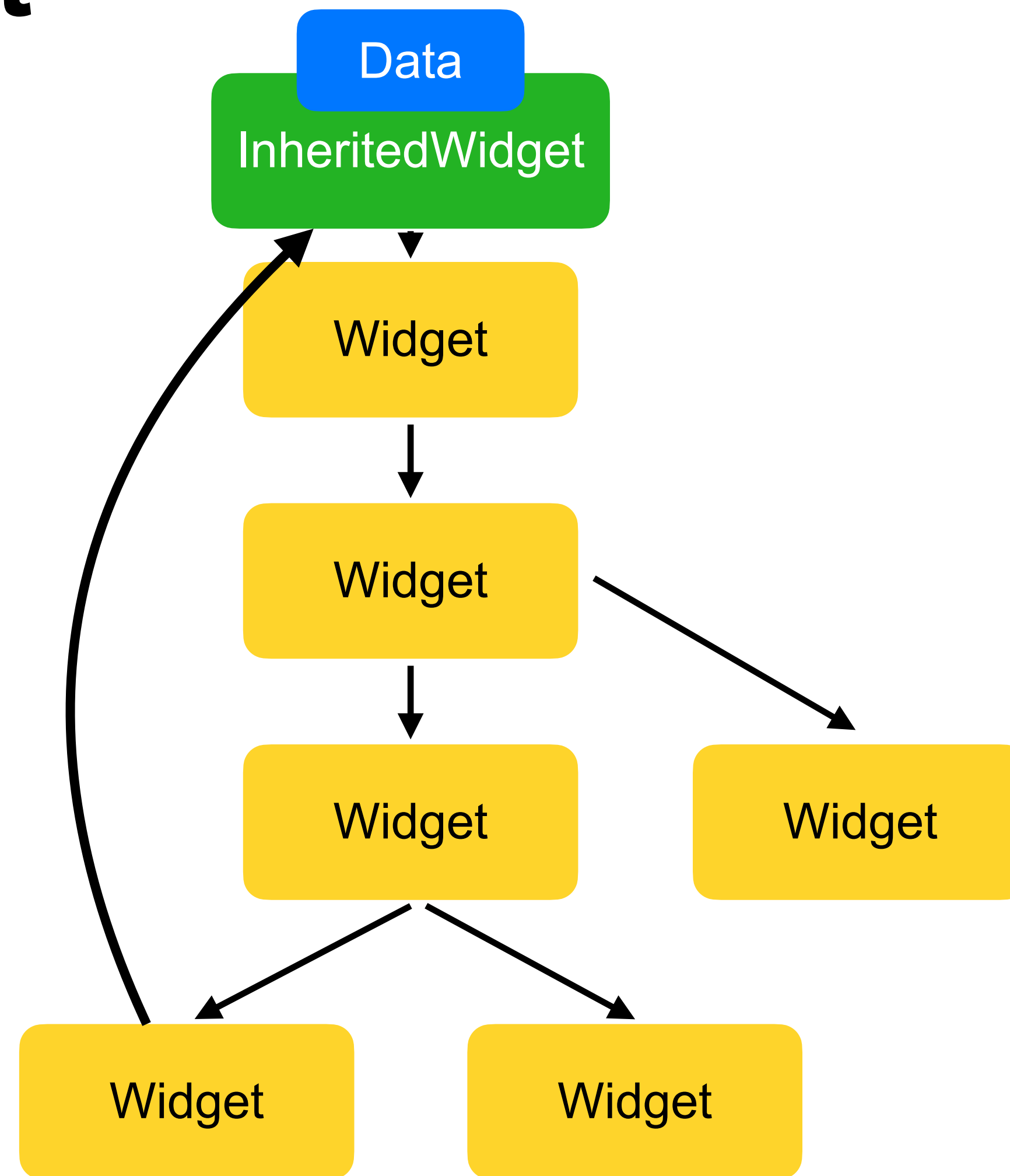
1. InheritedWidget
2. Scrollable widgets
3. Builders

InheritedWidget

InheritedWidget



InheritedWidget



InheritedWidget

```
class DataProvider extends InheritedWidget {  
  const DataProvider({  
    Key? key,  
    required this.data,  
    required Widget child,  
  }) : super(key: key, child: child);  
  
  final String data;  
  
  static String? of(BuildContext context) {  
    final DataProvider? result =  
      context.dependOnInheritedWidgetOfExactType<DataProvider>();  
    return result?.data;  
  }  
  
  @override  
  bool updateShouldNotify(DataProvider oldWidget) => data != oldWidget.data;  
}
```

InheritedWidget

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class DataProvider extends InheritedWidget {  
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Scrollable widgets

Scrollable widgets

- | ListView

- | SingleChildScrollView

- | PageView

- | Slivers

ListView

`ListView(children: [])`

`ListView.builder(builder: (context, index) ⇒
Widget(), itemCount: 0)`

`ListView.separated`

`SingleChildScrollView`

<https://api.flutter.dev/flutter/widgets/ListView-class.html>

<https://api.flutter.dev/flutter/widgets/SingleChildScrollView-class.html>

ListView

ScrollController

ScrollPhysics

Axis scrollDirection

<https://api.flutter.dev/flutter/widgets/ListView-class.html>

<https://api.flutter.dev/flutter/widgets/SingleChildScrollView-class.html>

PageView

- | PageController
- | ScrollPhysics
- | onPageChanged

Slivers

In the next episode!

Builders

```
@override
Widget build(BuildContext context) {
  return Scaffold(
    body: Center(
      child: Text(
        'hasAppBar: ${Scaffold.of(context).hasAppBar}',
      ),
    ),
  );
}
```

Builder

```
@override
Widget build(BuildContext context) {
  return Scaffold(
    body: Center(
      child: Builder(
        builder: (context) {
          return Text(
            'hasAppBar: ${Scaffold.of(context).hasAppBar}',
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          );
        },
      ),
    ),
  );
}
```

LayoutBuilder

```
@override
Widget build(BuildContext context) {
  return Scaffold(
    body: LayoutBuilder(
      builder: (BuildContext context, BoxConstraints constraints) {
        if (constraints.maxWidth > 600) {
          return _buildWideContainers();
        } else {
          return _buildNormalContainer();
        }
      },
    ),
  );
}
```

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```

FutureBuilder

- | Resolves `Future<T>` into UI

- | Uses `AsyncSnapshot<T>`

- > `connectionState` (none, waiting, active, done)

- > `data`

- > `error`

- > `stacktrace`

StreamBuilder

- | Resolves `Stream<T>` into UI

- | Uses `AsyncSnapshot<T>`

 - > `connectionState` (none, waiting, active, done)

 - > `data`

 - > `error`

 - > `stacktrace`



Thank you for attention

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