

Widgets

About me

Yevhen Herasymenko

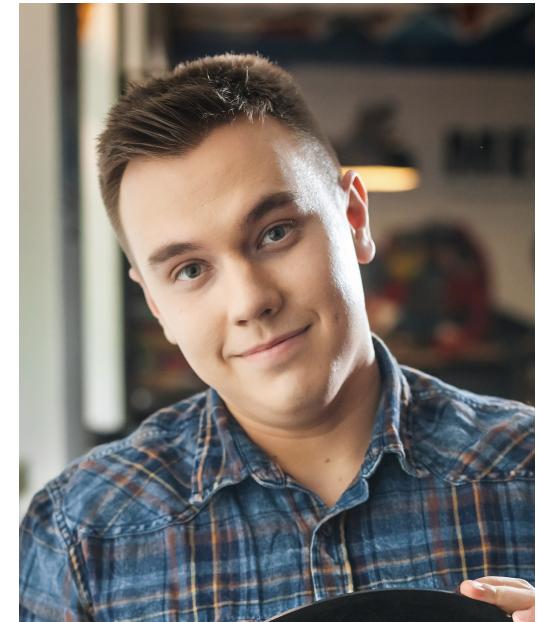
Senior iOS Dev at Ciklum

Ex Objective C lover

Mad about Swift

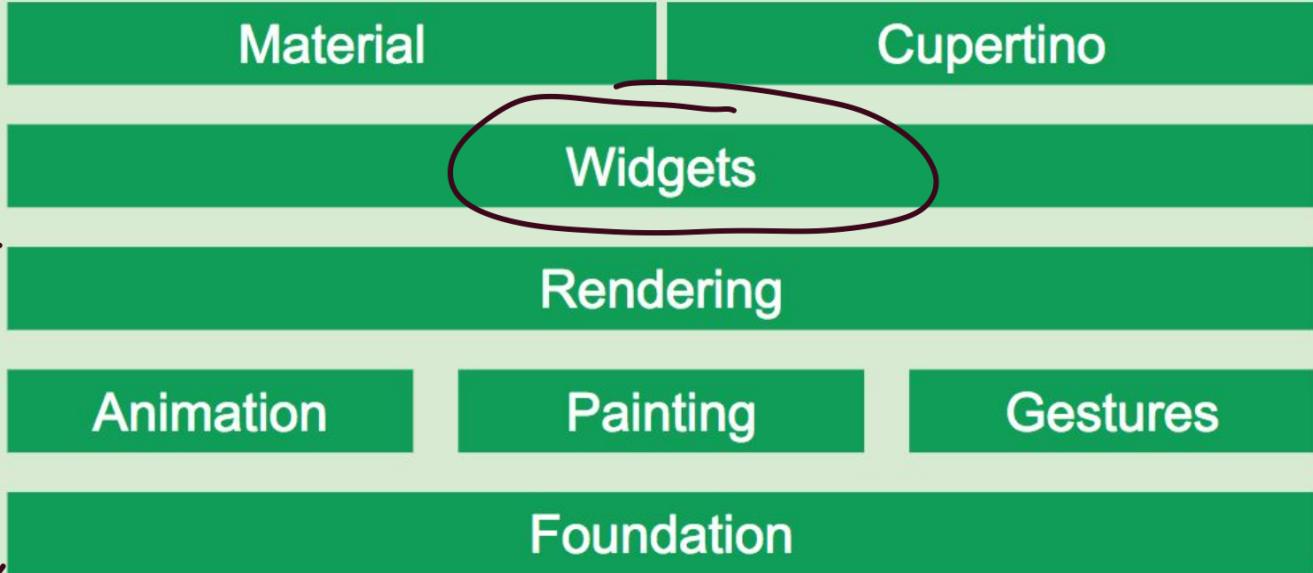
Build relations with Flutter

cheating on C/C++, .Net, Python, R



LATER →

Framework
(Dart)
FLUTTER PRO



Engine
(C++)

Skia

Dart

Text

What is a widget?

What can be widget?



What can be widget?



What can be widget?



```
▼ R root ]
  ▼ M MyApp
    ▼ M MaterialApp
      ▼ H HomePage
        ▼ S Scaffold
          ▼ C Center
            ▼ ▶ AnimatedContainer
              ▼ T Text
```





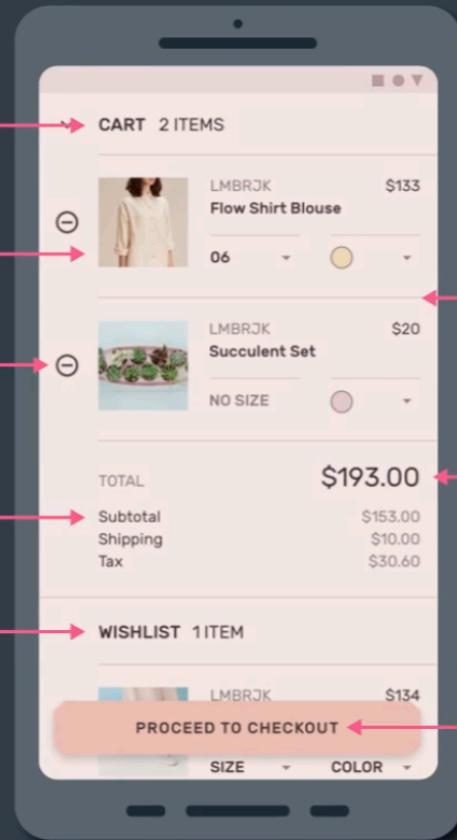
Text Widget

Image Widget

Icon Widget

Column

TextStyle



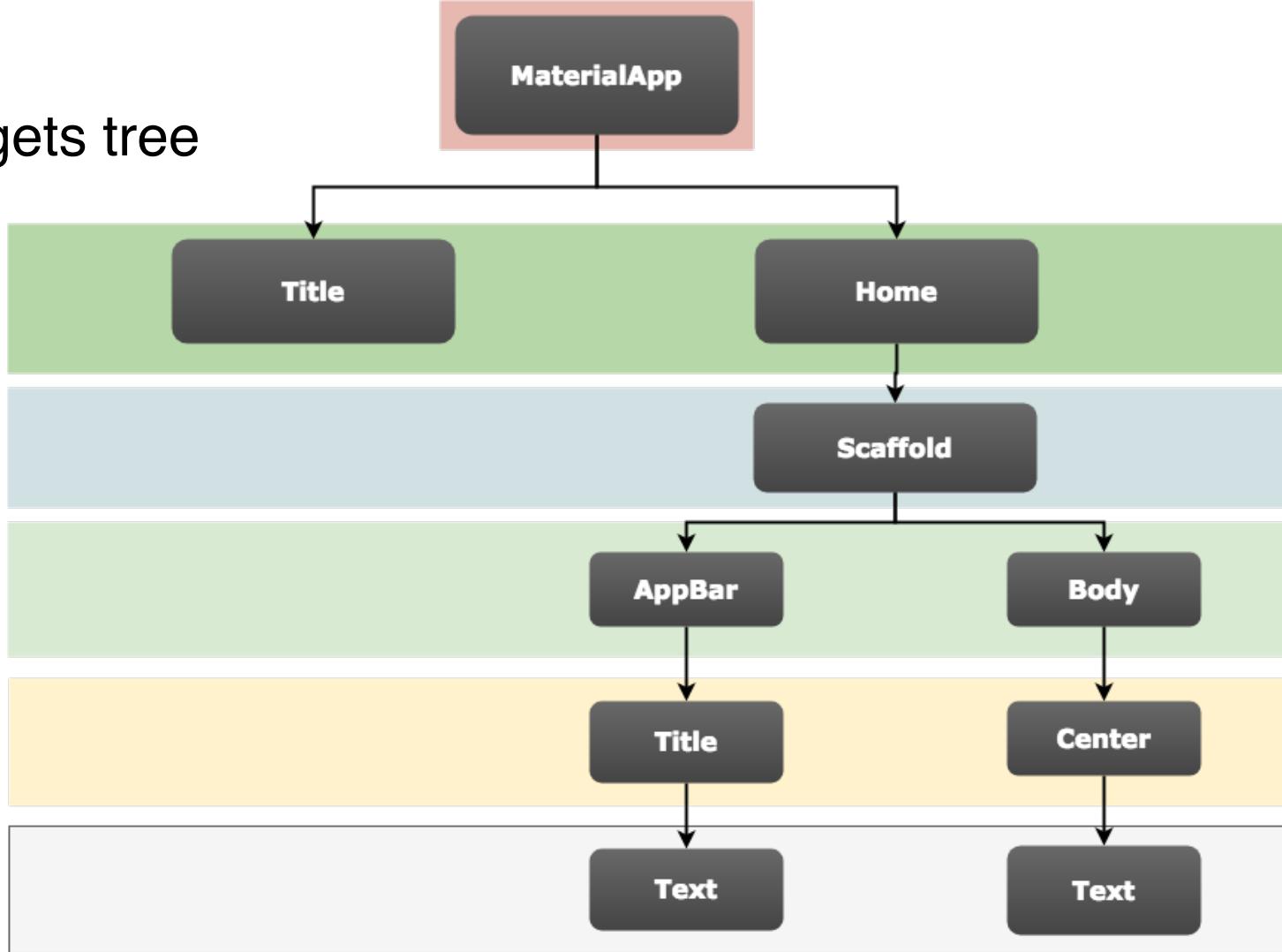
ListView Widget

Padding

RaisedButton

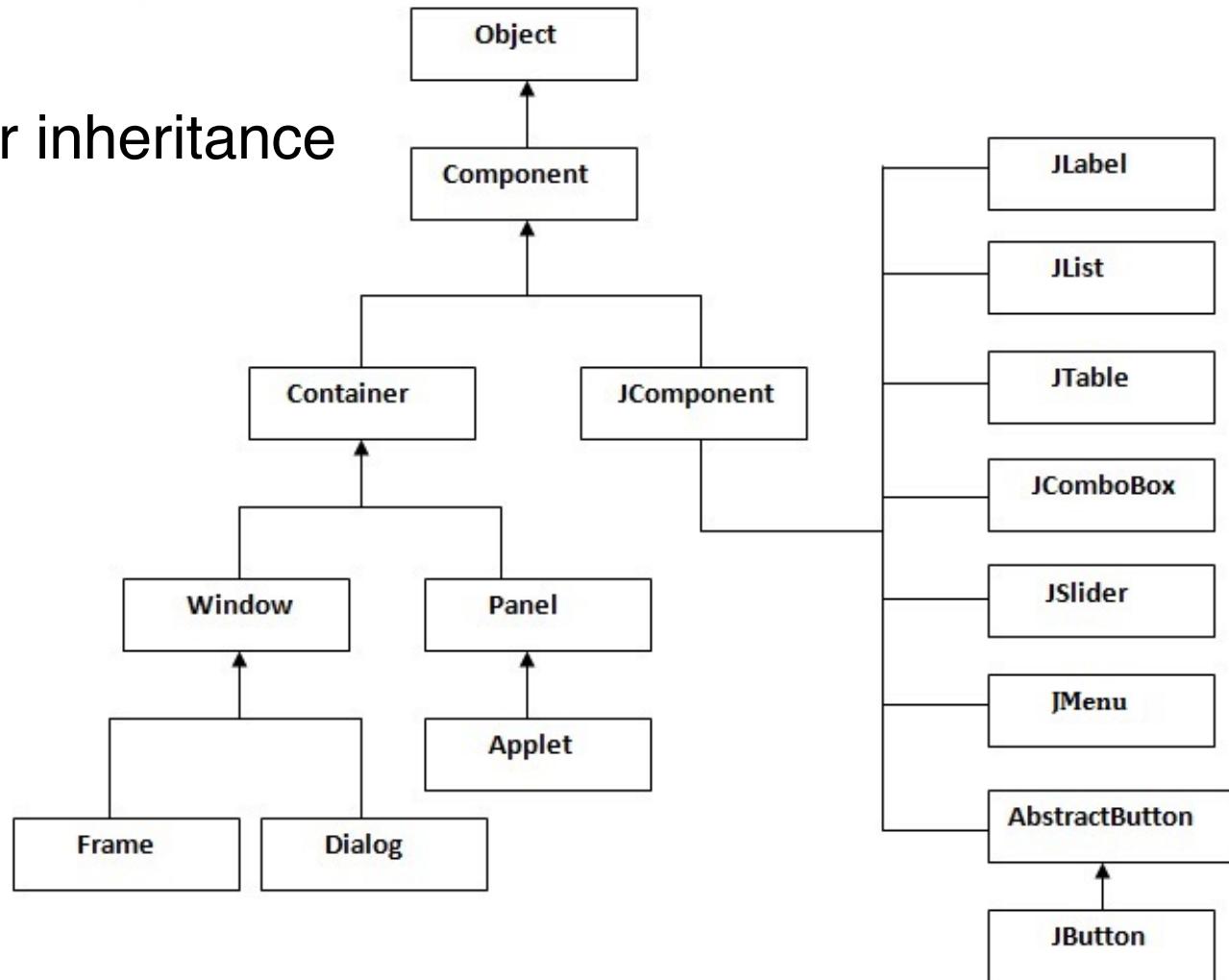
Widget - is everything

Widgets tree



Widget - is everything

Composition over inheritance



Composition over inheritance

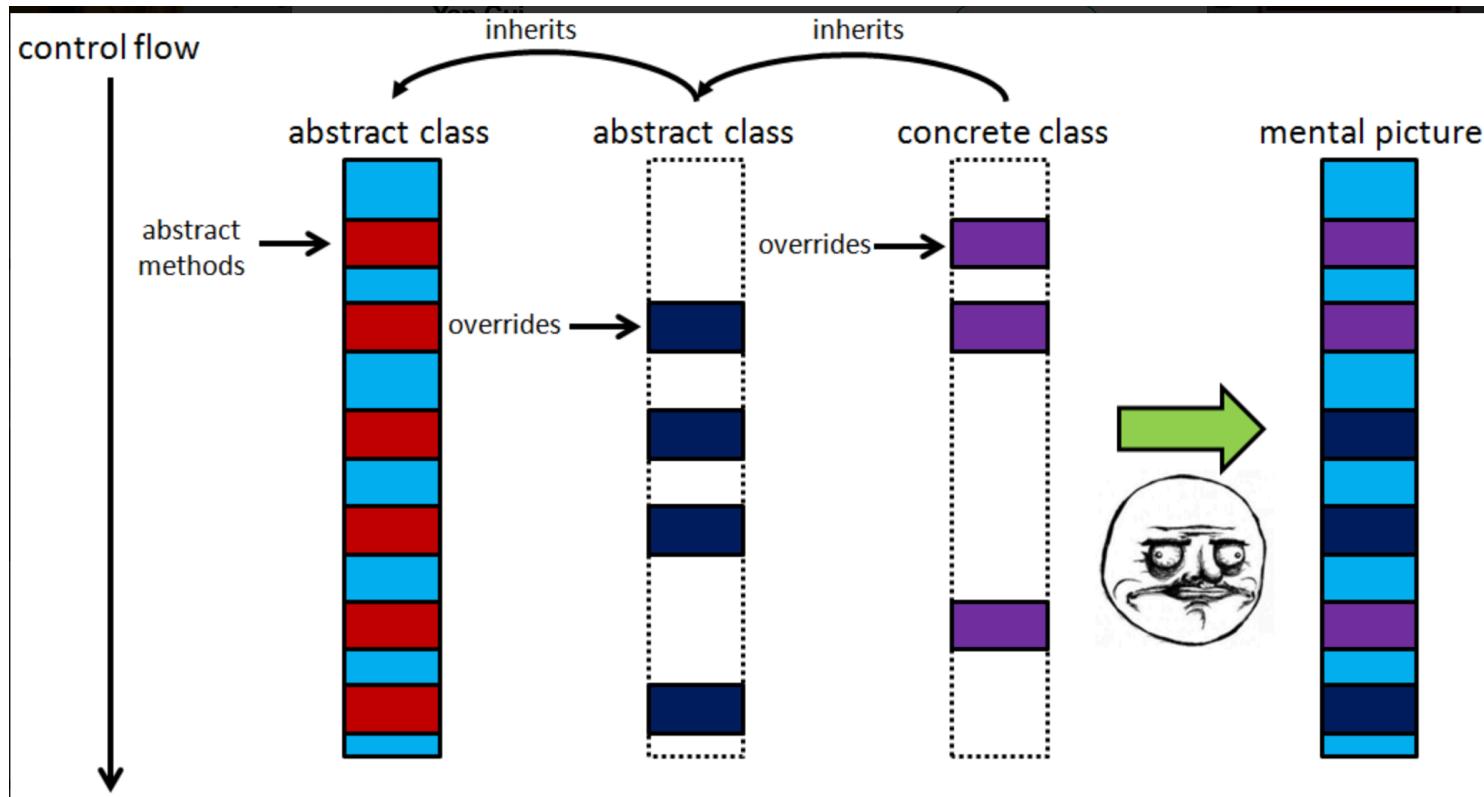
Clean Talk Walk

DESIGN FOR CAPABILITY INSTEAD OF IDENTITY



Robot CAT

Composition over inheritance



Composition over inheritance

Stateless widget



Stateful widget



Widgets catalog

The screenshot shows the Flutter documentation website at <https://flutter.dev/docs/development/ui/widgets>. The page features a navigation bar with links for Docs (which is underlined), Showcase, Community, a search icon, social media icons for Twitter, YouTube, and GitHub, and a 'Get started' button. On the left, there's a sidebar with sections like Get started, Samples & tutorials, Development (with User interface, Data & backend, Testing & optimization), and a prominent 'Widget catalog' link under User interface. The main content area is divided into a grid of cards:

- Accessibility**: Make your app accessible. [Visit](#)
- Animation and Motion**: Bring animations to your app. [Visit](#)
- Assets, Images, and Icons**: Manage assets, display images, and show icons. [Visit](#)
- Async**: Async patterns to your Flutter application. [Visit](#)
- Basics**: Widgets you absolutely need to know before building your first Flutter app. [Visit](#)
- Cupertino (iOS-style widgets)**: Beautiful and high-fidelity widgets for current iOS design language. [Visit](#)
- Input**: Take user input in addition to input widgets in Material Components. [Visit](#)
- Interaction Models**: Respond to touch events and route users to different views. [Visit](#)
- Layout**: Arrange other widgets columns, rows, grids, and many other layouts. [Visit](#)

Let's code!



All

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Tools

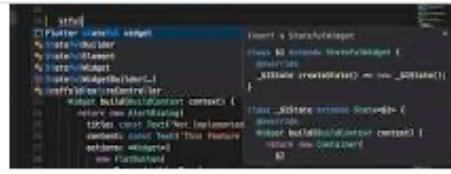
About 953,000 results (0.52 seconds)

To create a new Flutter project from the Flutter starter app template:

1. Open the Command Palette (Ctrl + Shift + P (Cmd + Shift + P on macOS)).
2. Select the **Flutter: New Project** command and press Enter .
3. Enter your desired **Project name**.
4. Select a **Project location**.

Visual Studio Code - Flutter

<https://flutter.dev/docs/development/tools/vs-code>



About Featured Snippet

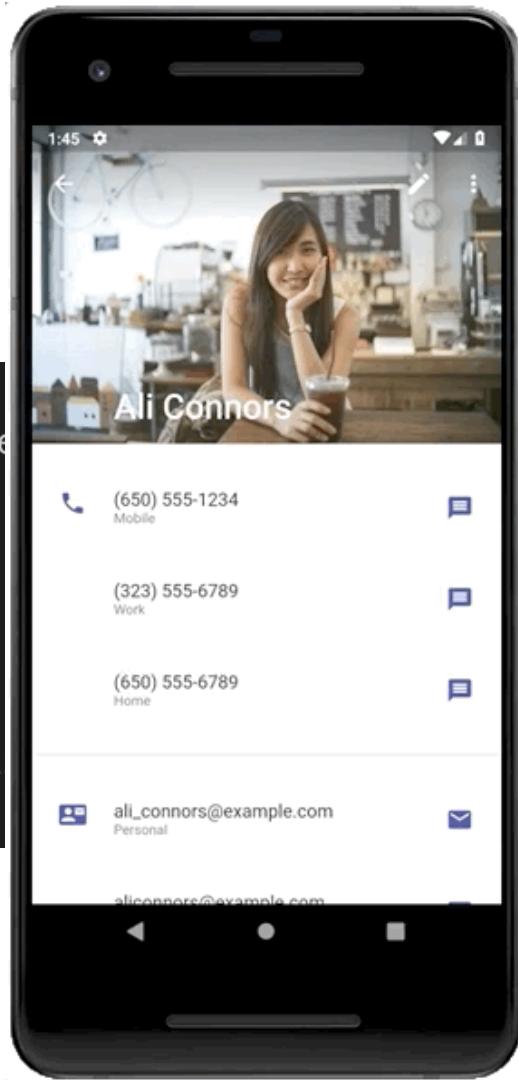
Transformations

```
child: Transform(  
    alignment: Alignment.center,  
    transform: Matrix4.skewY(0.3)..rotateZ(-math.pi / 12.0),  
    child: Container(  
        color: Theme.of(context).accentColor,  
        child: Text('Just a plain text!'))), // Container //
```



Slivers

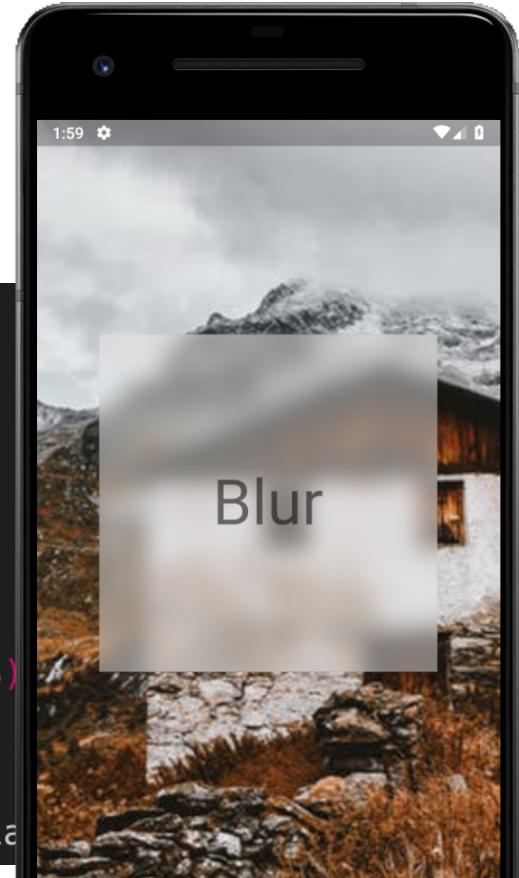
```
CustomScrollView(slivers: <Widget>[  
  SliverAppBar(title: Text('Not Boring Widgets'), expandedHeight:  
  SliverFixedExtentList(  
    itemExtent: 150.0,  
    delegate: SliverChildListDelegate([  
      Container( // Container  
      Container( // Container  
    ])) // SliverChildListDelegate // SliverFixedExtentList  
) // <Widget>[] // CustomScrollView
```



BackdropFilter

```
Center(
```

```
    child: BackdropFilter(  
        filter: ImageFilter.blur(sigmaX: 10, sigmaY: 10),  
        child: Container(  
            width: 300.0,  
            height: 300.0,  
            decoration: BoxDecoration(  
                color: Colors.grey.shade200.withOpacity(0.45)  
            child: Center(  
                child: Text('Blur',  
                    style: Theme.of(context).textTheme.display
```



Homework

Add the ability to remove an item from the list. Do it as you want.

We suggest choosing one of the variants:

1. Add 'minus' button to each item in the list.
2. Add swipe action for removing an item.
3. The simplest variant, add one more button to the screen and remove items in some order.

Additionally, you can try to update UI for items. It can be borders, different fonts, etc. Just start exploring widget catalog. You can customise our [ListTile](#) for creating more friendly item's UI.

Less is more. We only need

lib

folder of your project

How to share

1. Archive or folder via GoogleDrive, iCloud, Dropbox, etc.
2. Github, Gitlab, Bitbucket, etc

Data in Slack can be deleted. Mail can go to spam.

See you next week