

F03P. Four layout widgets

Requirements

- Make a Stateful Widget with layout widgets in a Scaffold:
 1. Column
 2. Row
 3. Container
 4. Stack

Practice 1

- Read the code `counter_in_container.dart`.
- This code uses many widgets for decoration and configuration.
- It also uses the `SingleChildScrollView` widget to prevent screen overflow.

- `SizeBox(height: 20)` is a decoration widget that is used to space between widgets.
 - This is a widely used Flutter technique to make spaces between widgets.

- ```
...List.generate(N, (index) =>
• Container(...))
```

is used to generate N Containers using the List generate factory function.

- This is a widely used Flutter technique to build multiple widgets.

# Practice 2

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- Read the code `crcs.dart` (column-row-container-example).
- Understand how these widgets are used to lay out widgets.
- Find what widgets you already know and don't know yet.

- This app is a typical Flutter app that uses MaterialApp/Scaffolding.
- Understand the app's structure to see how Row, Column, Container, and Stack widgets are used to position widgets.

```
MyApp
├── MaterialApp
│ ├── LayoutComparisonExample
│ │ ├── Scaffold
│ │ │ ├── AppBar
│ │ │ │ ├── Text ("Layout Widget Comparison")
│ │ │ │ └── SingleChildScrollView (body)
│ │ │ │ ├── Column
│ │ │ │ │ ├── [Column Example]
│ │ │ │ │ ├── [Row Example]
│ │ │ │ │ ├── [Container Example]
│ │ │ │ │ └── [Stack Example]
```



# Practice 3 (HW)

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- Read the code Practice 1 and 2.
- Find all the widgets you did not know.
- Learn how to use them and make a note.
  - Make the note as if you will use it to teach Flutter to your (future) team members when you become a team leader.

# Self-grading for HW

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- You finished Practice 1 and 2. (50%)
- You finished Practice 3 and submitted the note. (50%)

