Creating a BMI Calculator

Simone Alessandria

Author, Trainer and Proud Developer

www.softwarehouse.it

Overview

State and Stateful Widgets

TextField

TextEditingController

ToggleButtons

Null Safety

State

State is information that can be used when the widget is built and might change during the lifetime of the widget.

Classes that inherit StatefulWidget are immutable.

The State is mutable.

Stateless vs Stateful Widgets

Stateless Widget	Stateful Widget
Does not require a mutable state	Has mutable state
Overrides the build() method	Overrides the createState() method, and returns a State
Use when the UI depends on information in the object itself	Use when the UI can change dynamically

Using Stateful Widgets
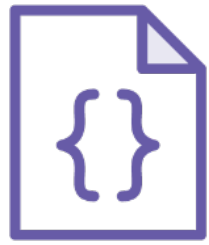
Create a Class that Extends a Stateful Widget

Create a State class, with properties that may change

Implement the build() method

Call the setState() method to make changes

Null Safety

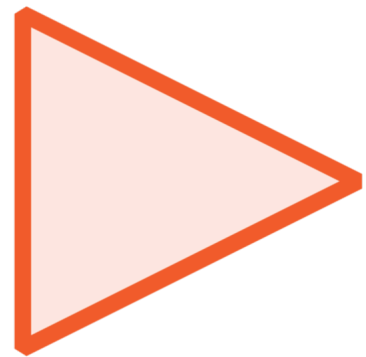**By default, variables cannot be assigned a null value.**

```
ToggleButtons(

    children: [                          ◄ The List of widget for the user choices

      Icon(Icons.home),

      Icon(Icons.details),

    ],

    isSelected: isSelected,              ◄ A List of booleans specifying the selected
                                           items
    onPressed: () { // more code here }, ◄ Deal with the user selection

),
```

Stateful Widgets Lifecycle Events

initState
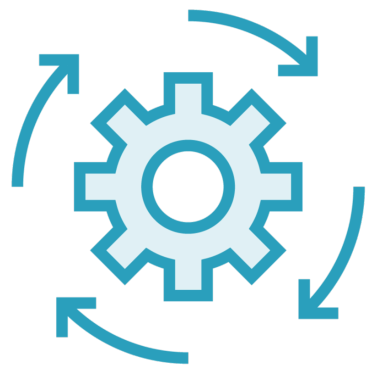
build
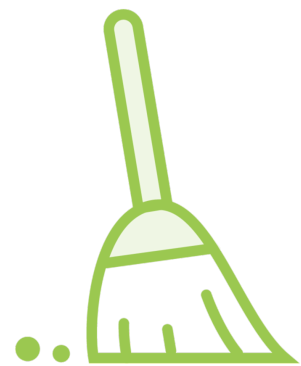
dispose

Summary

Stateful Widgets and State
– initState()
– build()

Null Safety
– late
– ?
– ??

Column, ToggleButtons, TextField, TextEditingController, SingleChildScrollView