



Flutter

An introduction

What is Flutter?

- Mobile Ui Development Toolkit Developed by Google
(Now it has become a kind of cross platform dev framework 🎉)
 - Android, iOS, Web, Windows, Linux, Mac
- Uses the programming language Dart (also developed by Google)

Why should you use it?

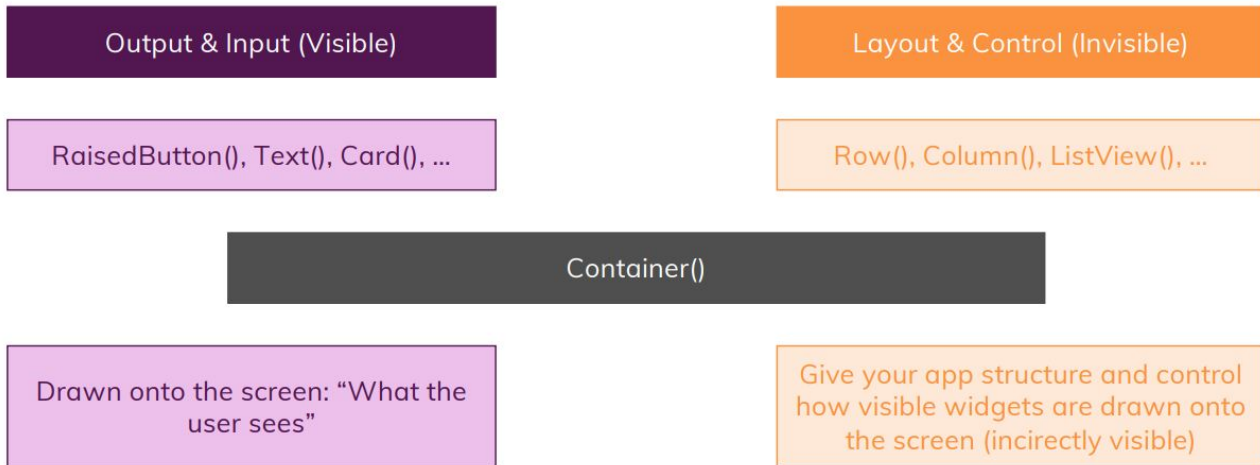
- Extremely easy to use
- Rapid deployment on various platforms
- A rapidly growing community
- Hot Reload & Hot Restart 🔥 🔥 🔥!
- Single codebase for all 😊😊😊

A Glimpse at Flutter Installation

Let's get started with the basics!

The next few slides will be dedicated to the basic components of flutter

Different Types of Widgets



Scaffold

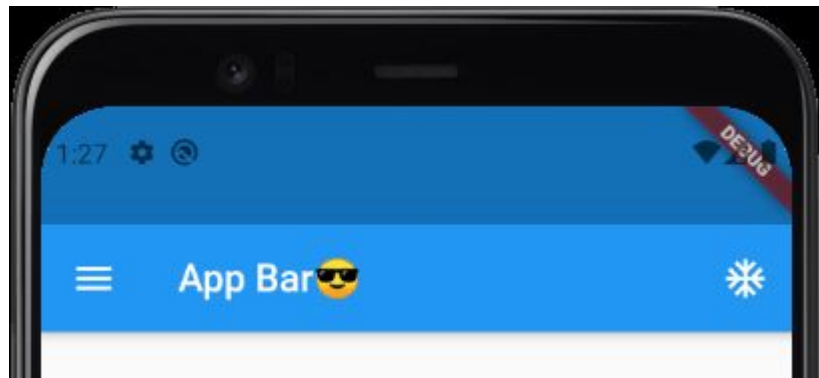
Implements the basic material design visual layout structure.

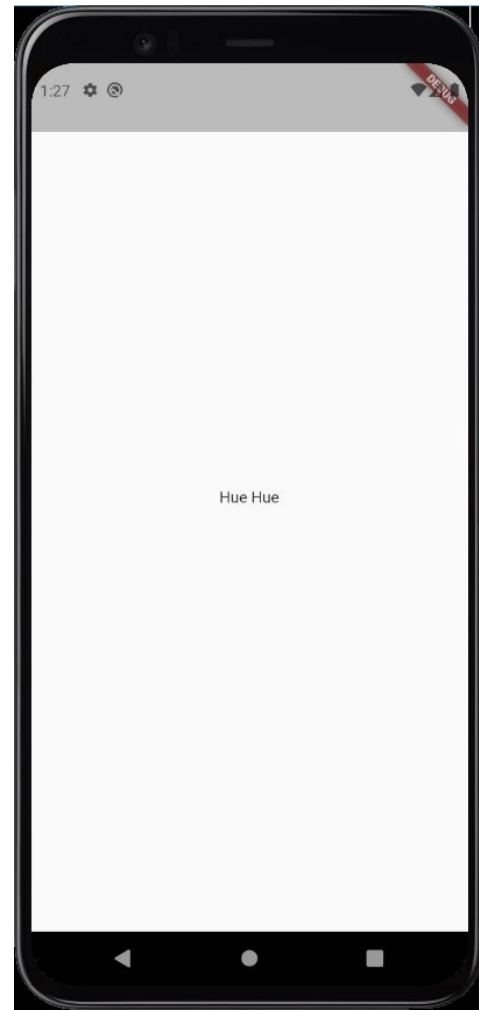
The Scaffold is designed to be the top level container for a [MaterialApp](#). This means that adding a Scaffold to each route on a Material app will provide the app with Material's basic visual layout structure.

AppBar

Property of Scaffold

`appBar : AppBar()`





Stateless Widgets

Widgets which don't have or maintain any state

Simple as that 😂

Wondering what is a state ??? 🙄🙄🙄🙄🙄🙄

Most Important Widgets

App / Page Setup

MaterialApp /
CupertinoApp

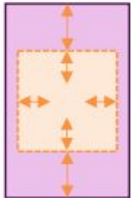


Scaffold /
CupertinoPageScaffold

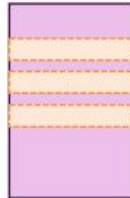


Layout

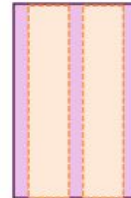
Container



Row



Column



Containers(Very important)

- Extremely versatile widget !
- Can be sized (width, height, maxWidth, maxHeight), styled(border, color, shape) and more...
- Can take a child (not necessarily) which can be aligned in different ways
- We'll use this widget quite often

Rows, Columns

- Must-use if you need multiple widgets to sit next to each other horizontally or vertically
- Limited styling options => Wrap with a Container (or wrap child widget) to apply styling
- Children can be aligned along main-axis and cross-axis

Special Widgets(Text)

- A widget that simply outputs some text on the screen
- Text can be styled such as font family, font weight, font size etc
- Text behaviour can be controlled. Eg. clipping and overflows

Image, Icon assets

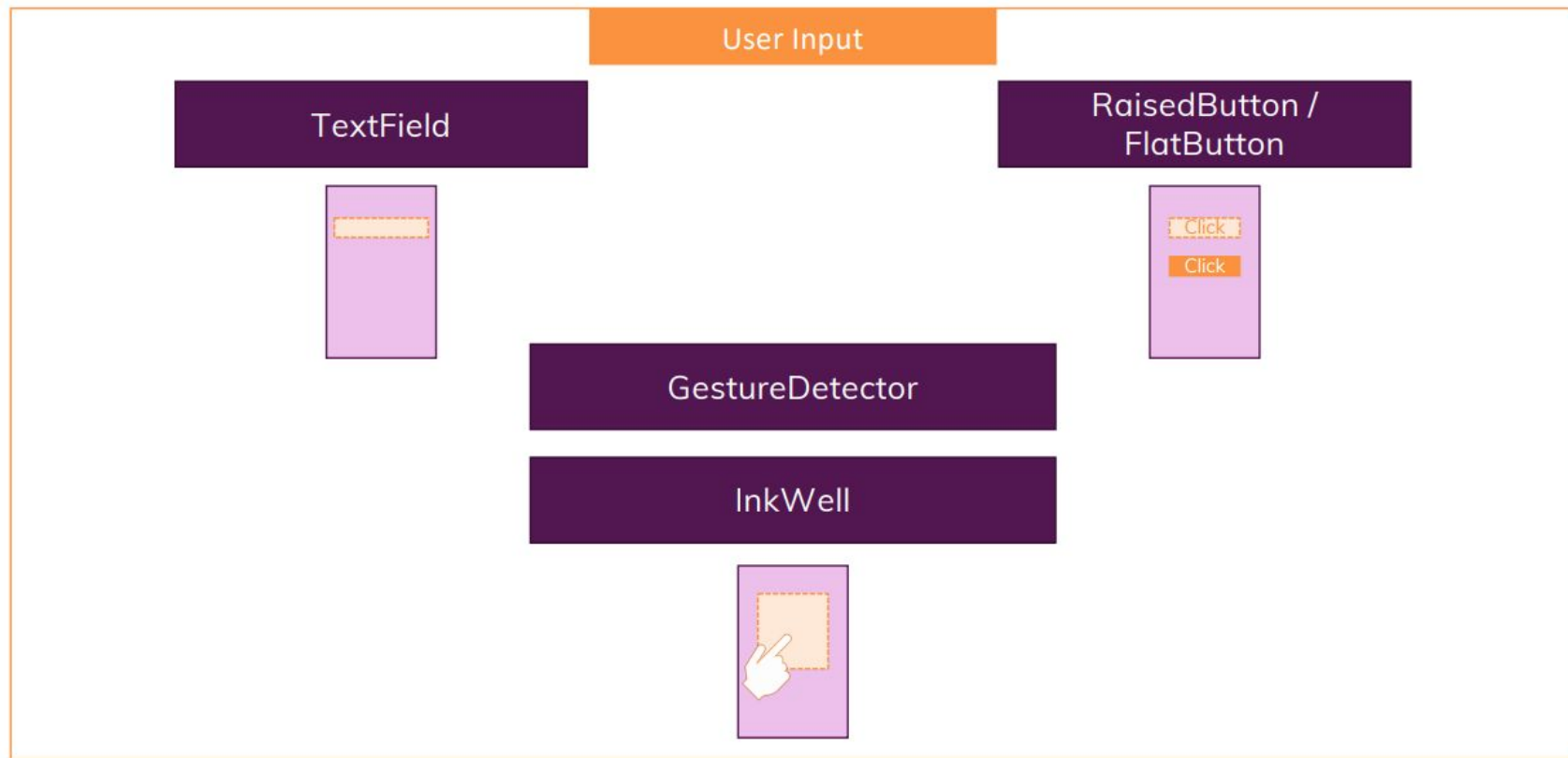
Image

- Used to render an image on the screen
- Supports different sources (included in app, web image, ...)
- Can be configured to size itself in different ways into a wrapping container

Icon

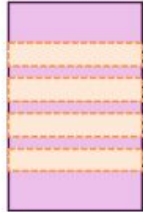
- Renders an Icon onto the screen
- Flutter ships with many default Material (Android) and iOS icons which you can use
- There also is an `IconButton()` widget in case you need a button with an icon

Others



Repeat Elements

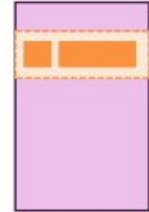
ListView



GridView

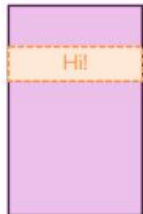


ListTile

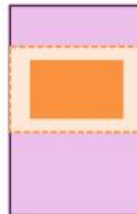


Content Types

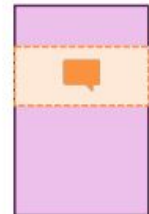
Text



Image



Icon



So...

Roll your sleeves up and let's get our hands dirty

