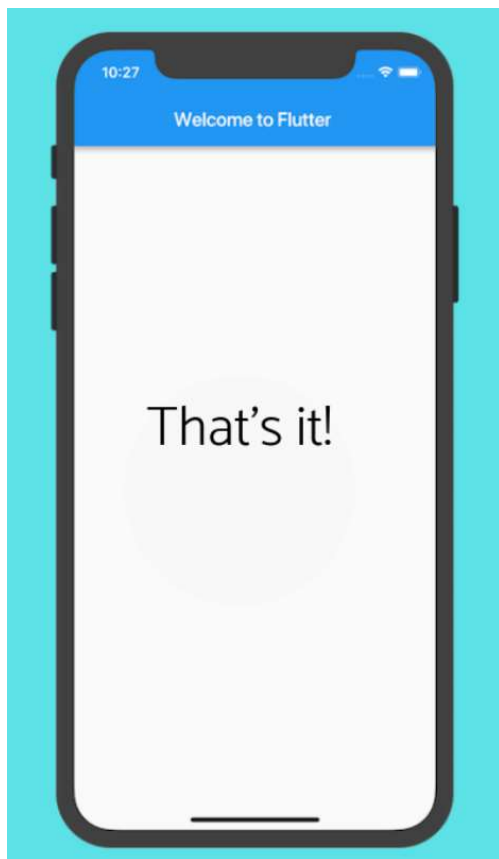




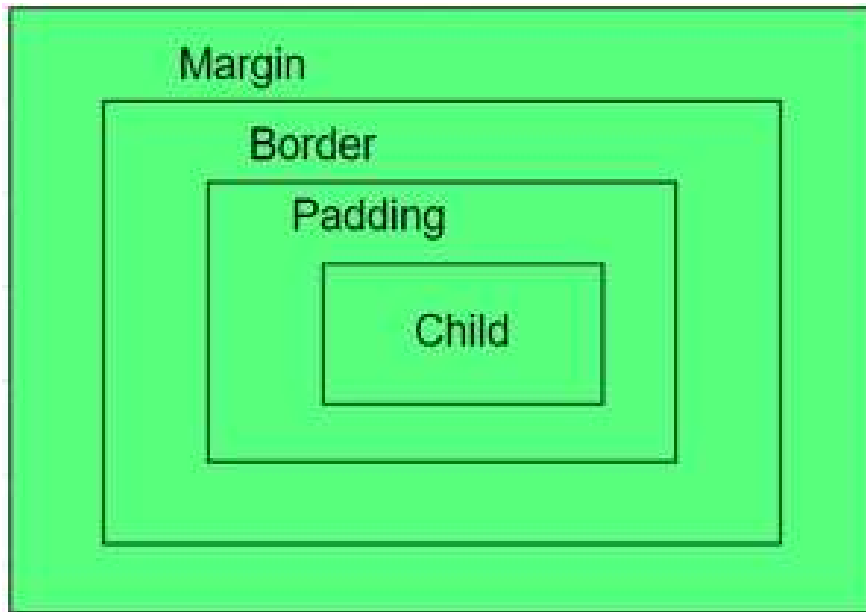
## Flutter Body





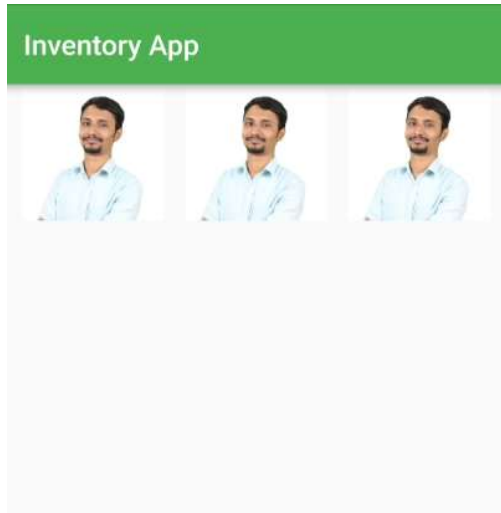
## Container in Flutter

**Container** class in flutter is a convenience widget that combines common painting, positioning, and sizing of widgets.





## Flutter Row With Container



```
body: Row(  
  mainAxisAlignment: MainAxisAlignment.spaceEvenly,  
  children: [  
    Container(height: 100, width: 100, child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
    Container(height: 100, width: 100, child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
    Container(height: 100, width: 100, child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
  ],  
)
```



## Flutter Column With Container

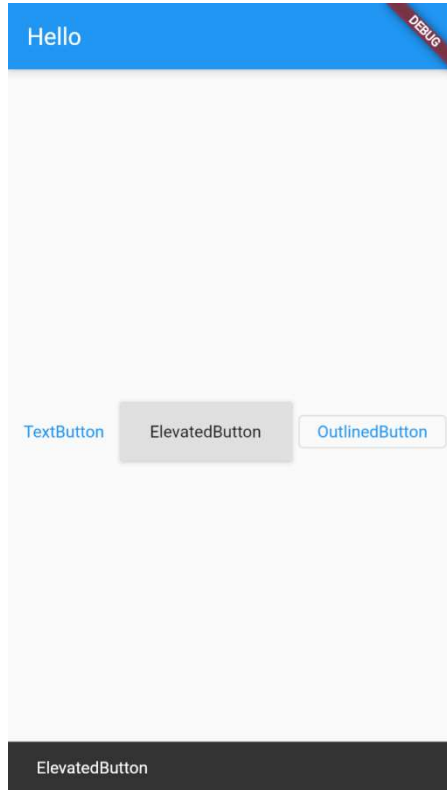
### Inventory App



```
body: Column(  
  mainAxisAlignment: MainAxisAlignment.spaceAround,  
  children: [  
    Container(height: 100,width: 100,child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
    Container(height: 100,width: 100,child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
    Container(height: 100,width: 100,child: Image.network("https://cdn.rabbil.com/photos/images/2022/11/05/rabbil.jpg")),  
  ],  
) , // Column
```



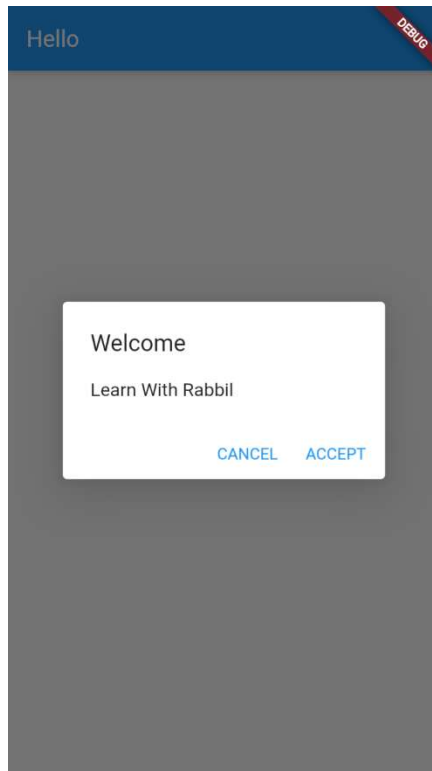
## Flutter Button



- Elevated Button
- Text Button
- Outline Button



## Alert Dialog





## Simple Form

Hello

DEBUG

First Name

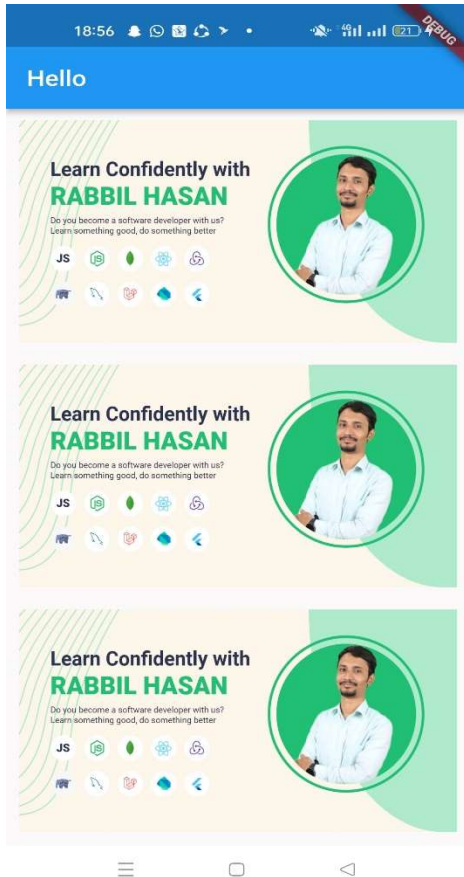
Last Name

Email

Submit



## List View Builder From Array



**Step 01:** JSON Array

**Step 02:** List View Builder

**Step 03:** Gesture Detector

**Step 04:** List Item

**Step 05:** List Item On Tap/On Press





## Grid View Builder From Array



**Step 01:** JSON Array

**Step 02:** Grid View Builder

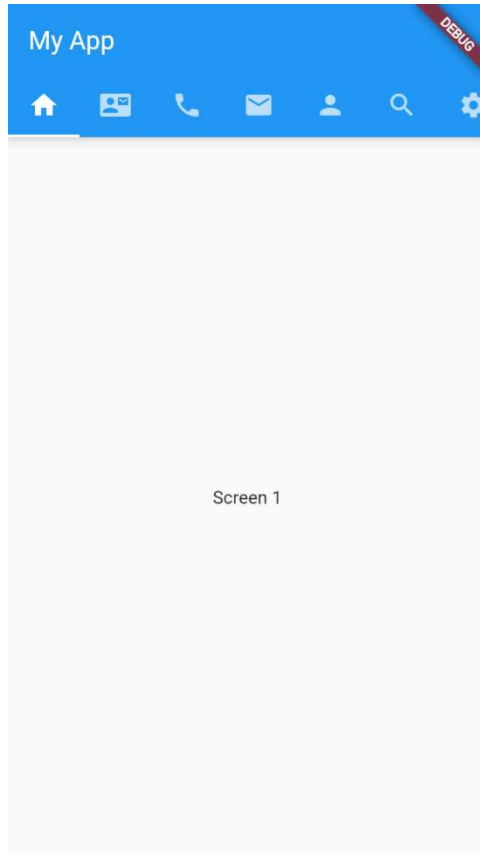
**Step 03:** Gesture Detector

**Step 04:** Grid Item

**Step 05:** Grid Item On Tap/On Press



## Tab Bar / Activity/ Fragment





## Navigation

Home

DEBUG

Go Contact Page



Contact

DEBUG

Back Home



## Working With Card Shape

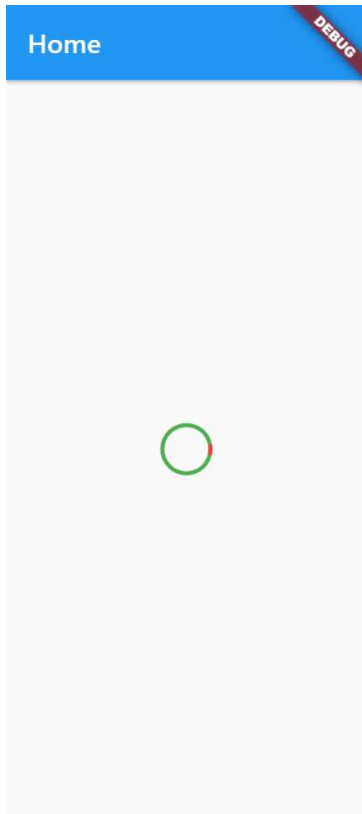
Home

DEBUG

Filled Card



## Working With Circular progress





## Working With Linear progress





## Icons Class In Flutter

Home

DEBUG

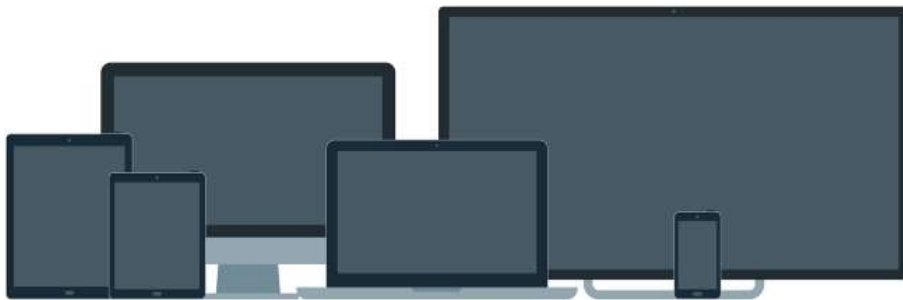




## Responsive & Adaptive

### Why?

- It is impossible to keep in mind all devices, client may use for the application using.
- Adaptive design and responsive design were created to avoid the classification.
- Actually, AD (adaptive design) and RD (responsive design) solve the same tasks but in different ways.







## Responsive vs Adaptive

### ADAPTIVE AND RESPONSIVE WEB DESIGN

#### INFOGRAPHICS

##### ADAPTIVE

Server use HTML, which is pre-selected for different devices with different screen size.



Information is pre-selected and only specific device based information will be displayed



Templates are optimized for each device



##### DEVICE DETECTION



##### CONTENT OPTIMIZATION



##### DEVICE OPTIMIZATION



##### RESPONSIVE

Devices are detecting by "media queries". Flexible grid and images are sized correctly to screen of devices.



All content is downloading whether it is uses or not



One template for all devices





## Responsive & Adaptive For Flutter Application

### Why?

- To take the maximum advantages from Flutter
- To enable your application in different size device with web & desktop too.

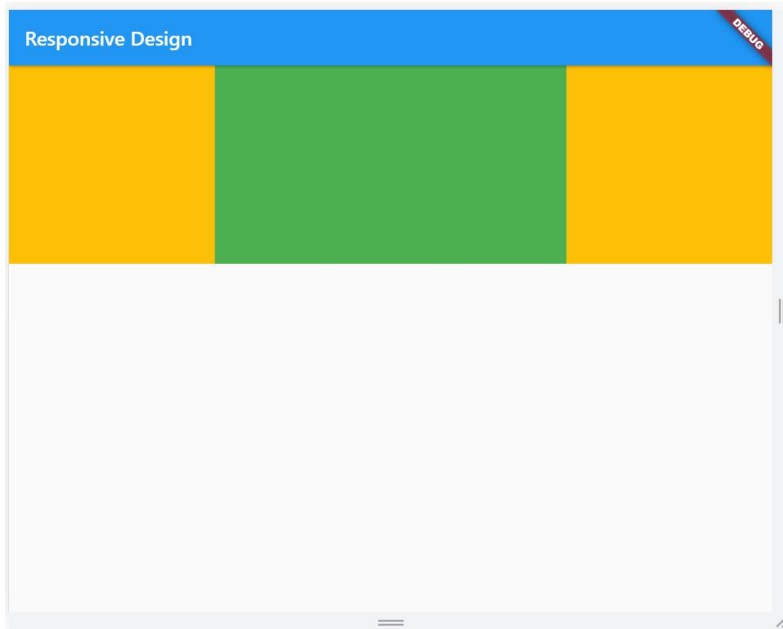
### Widgets & Packages:

- **Fractionally Sized Box**
- **Media Query**
- **Expanded**
- **Aspect Ratio**
- **Fitted Box**
- **Layout Builder**
- Responsive grid
- **Column Row**
- Responsive Framework
- **Scroll View**



## Aspect Ratio

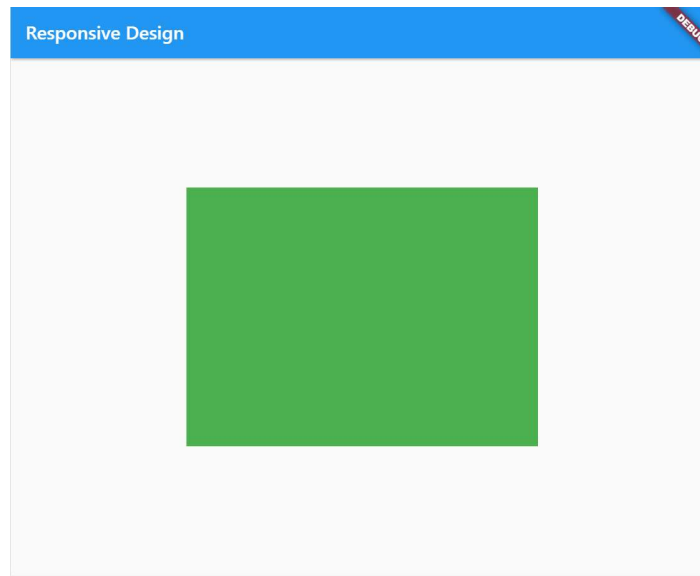
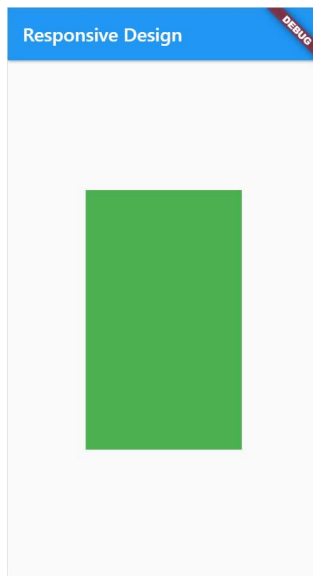
- A widget that attempts to size the child to a specific aspect ratio
- The widget first tries the largest width permitted by the layout constraints.
- The height of the widget is determined by applying the given aspect ratio to the width





## Fractionally Sized Box

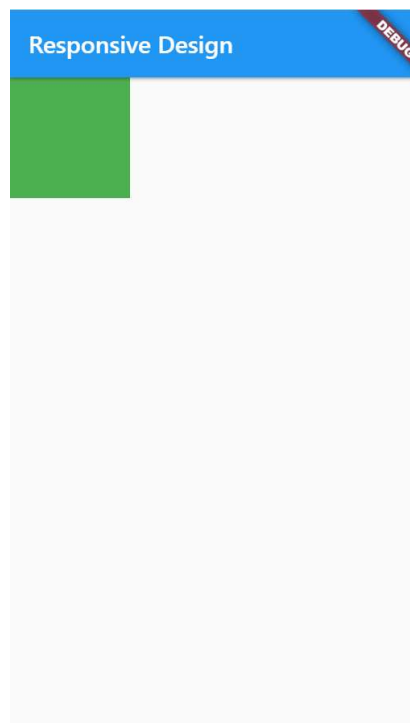
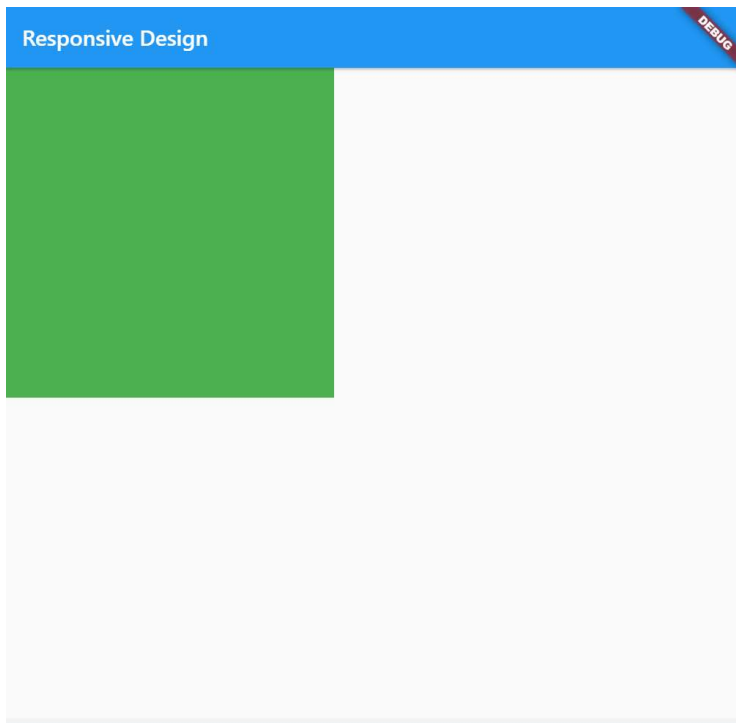
- A widget that sizes its child to a fraction of the total available space.





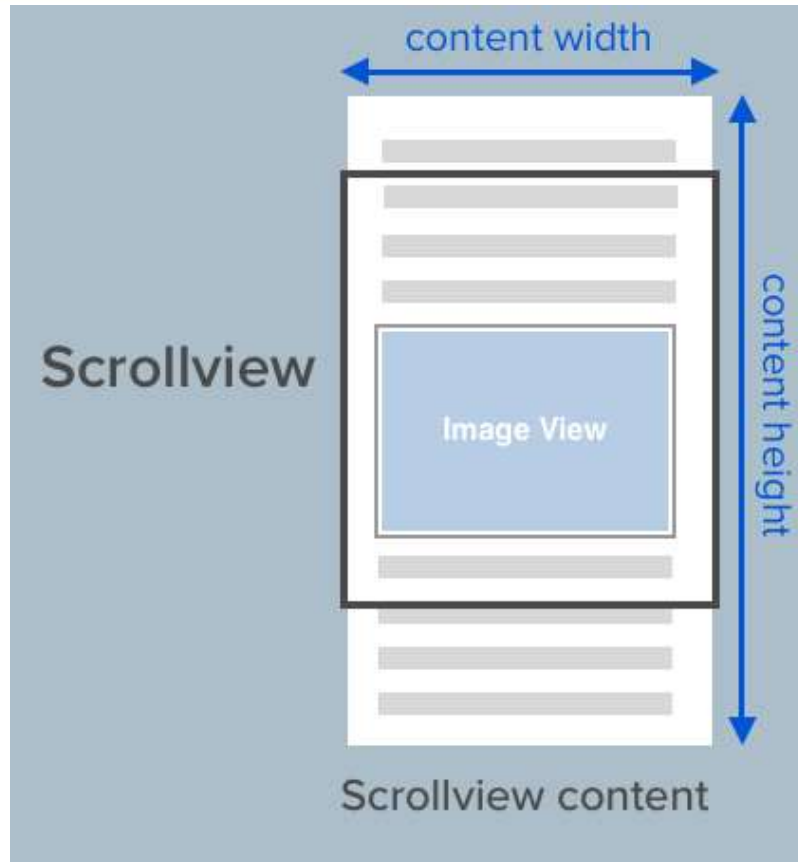
## Layout Builder

- Builds a widget tree that can depend on the parent widget's size



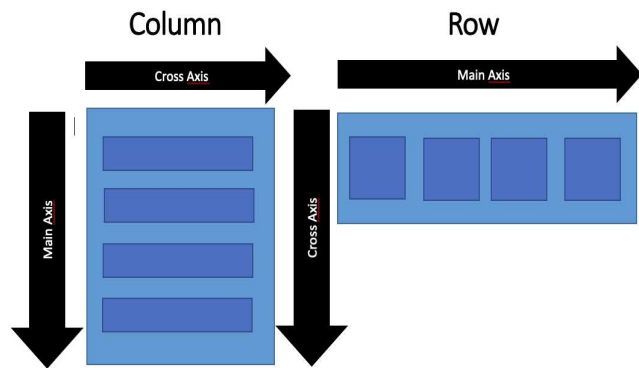


## Scroll View

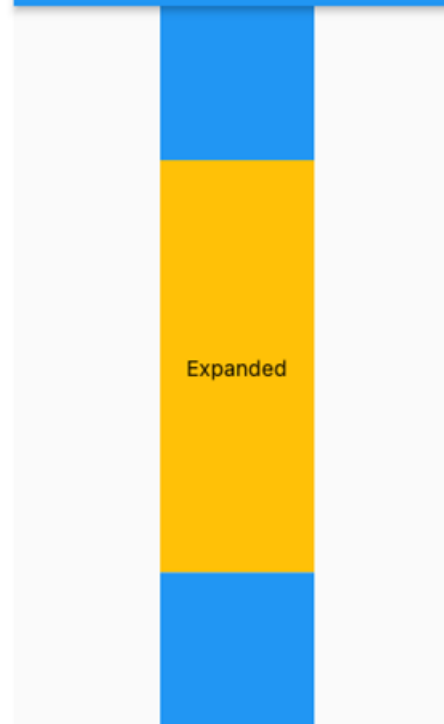




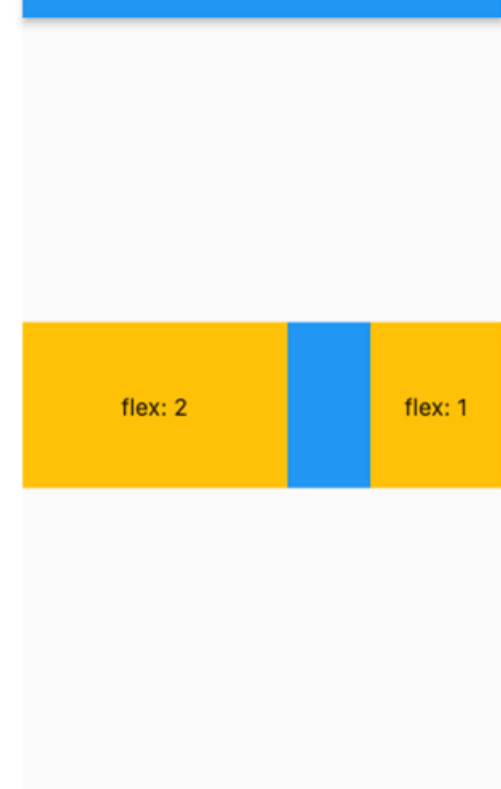
## Expanded & Flexible



Expanded Column Sample

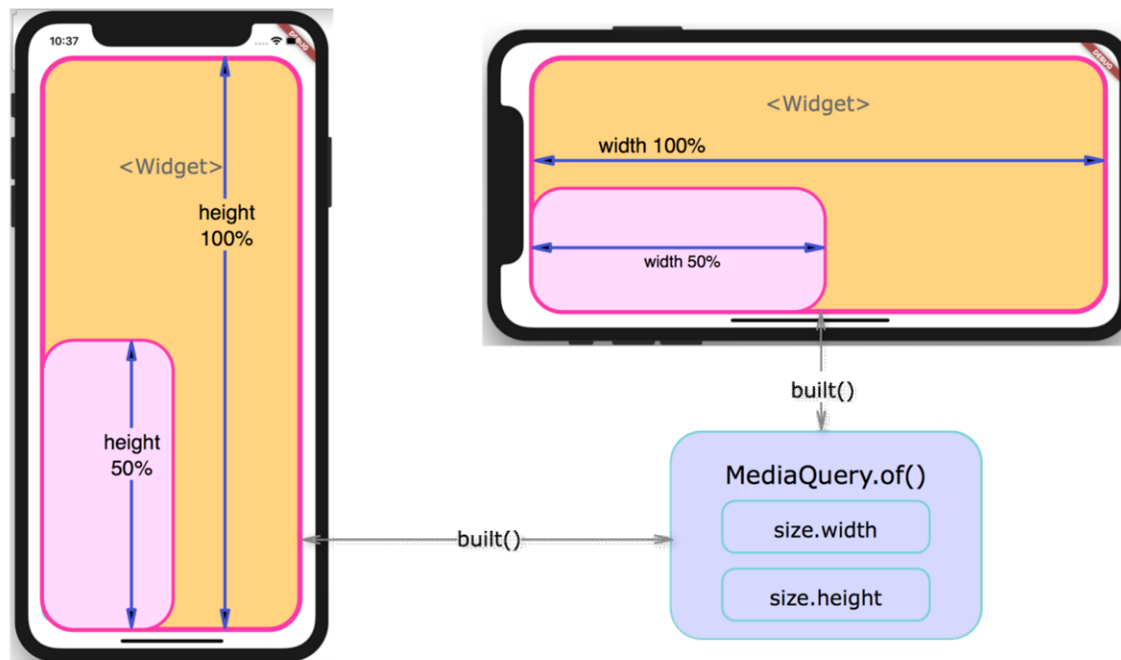


Expanded Row Sample





## Media Query







## Responsive Grid

