



Flutter

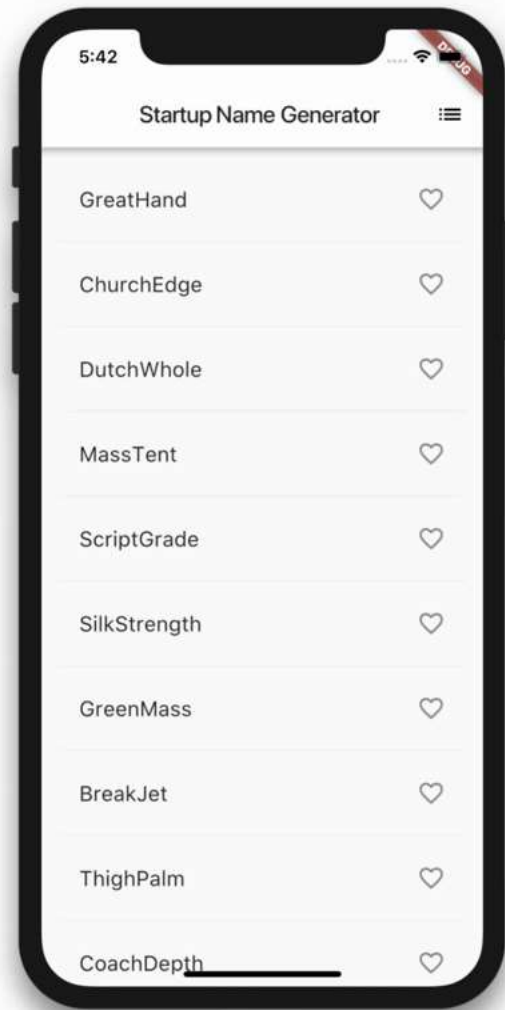
Anna Laufey Stefánsdóttir
Hugbúnaðarsérfræðingur hjá Origo

Hvað er Flutter ?

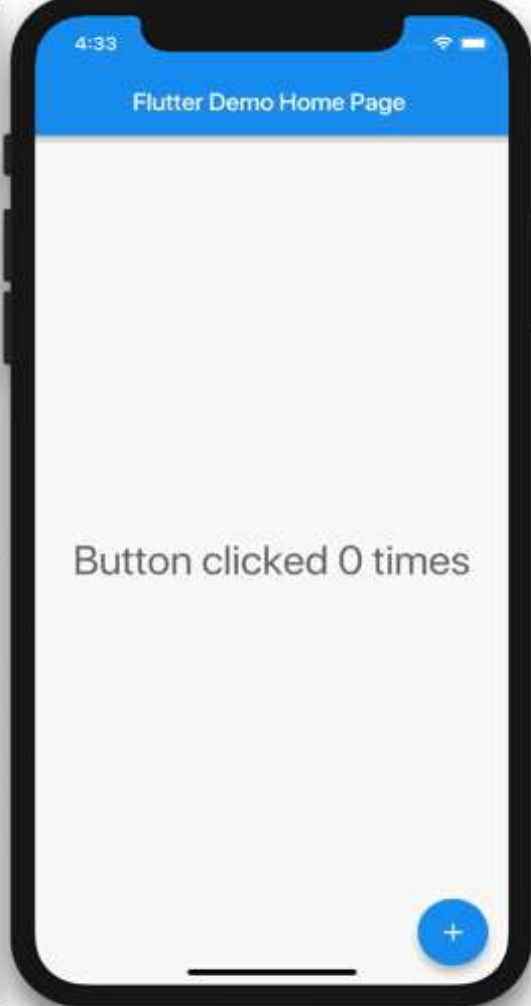
- Flutter er “Open-source mobile application development SDK”
- Cross platform - Keyrir bæði á Android & iOS
- Flutter v1.0 kom út 4. Desember 2018
- Flutter engine
 - Skia - 2D graphic rendering library
 - Dart - garbage collected & object oriented

Hvað er Dart ?

- Object oriented og garbage collected
- Just in Time & Ahead of Time Compile
- Hot reload - 650 ms
- Widgets!
- Stateful widgets - Dynamic
- Stateless widgets - Final



```
main.dart x [Run] [Debug] [Refresh] [Close]
29
30 void _incrementCounter() {
31   setState(() {
32     _counter++;
33   });
34 }
35
36 @override
37 Widget build(BuildContext context) {
38   return new Scaffold(
39     appBar: new AppBar(
40       title: new Text(widget.title),
41     ), // AppBar
42     body: new Center(
43       child: new Text(
44         'Button clicked $_counter times',
45         style: Theme.of(context).textTheme.display1,
46       ), // Text
47     ), // Center
48     floatingActionButton: new FloatingActionButton(
49       onPressed: _incrementCounter,
50       tooltip: 'Increment',
51       child: new Icon(Icons.add),
52     ), // FloatingActionButton
53   ); // Scaffold
54 }
55 }
56
```



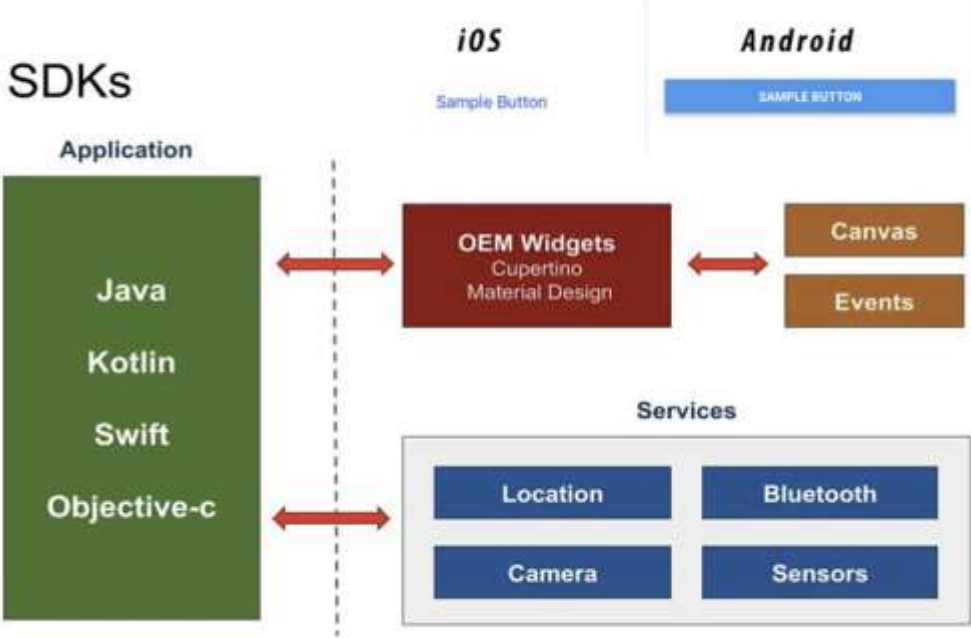
Dart & Widgets

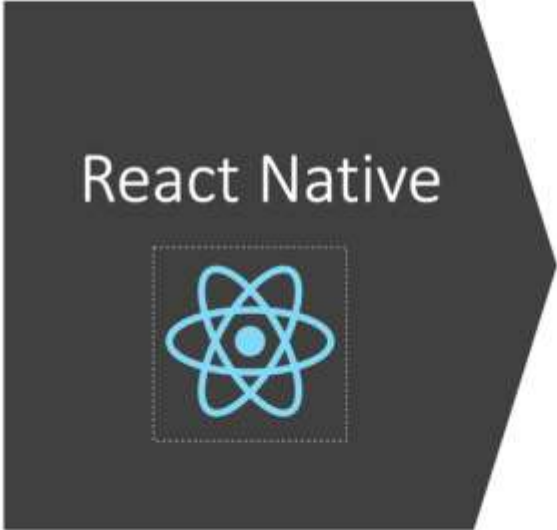
```
Widget titleSection = Container(  
  padding: const EdgeInsets.all(32.0),  
  child: Row(  
    children: <Widget>[  
      Column(  
        crossAxisAlignment: CrossAxisAlignment.start,  
        children: <Widget>[  
          Container(  
            padding: const EdgeInsets.only(bottom: 8.0),  
            child: Text(  
              'Oeschinen Lake Campground',  
              style: TextStyle(fontWeight: FontWeight.bold),  
            ), // Text  
          ), // Container  
          Text(  
            'Kandersteg, Switzerland',  
            style: TextStyle(color: Colors.grey[500]),  
          ), // Text  
        ], // <Widget>[]  
      ), // Column  
      Icon(Icons.star, color: Colors.red[500]),  
      Text('41'),  
    ], // <Widget>[]  
  ), // Row  
); // Container
```



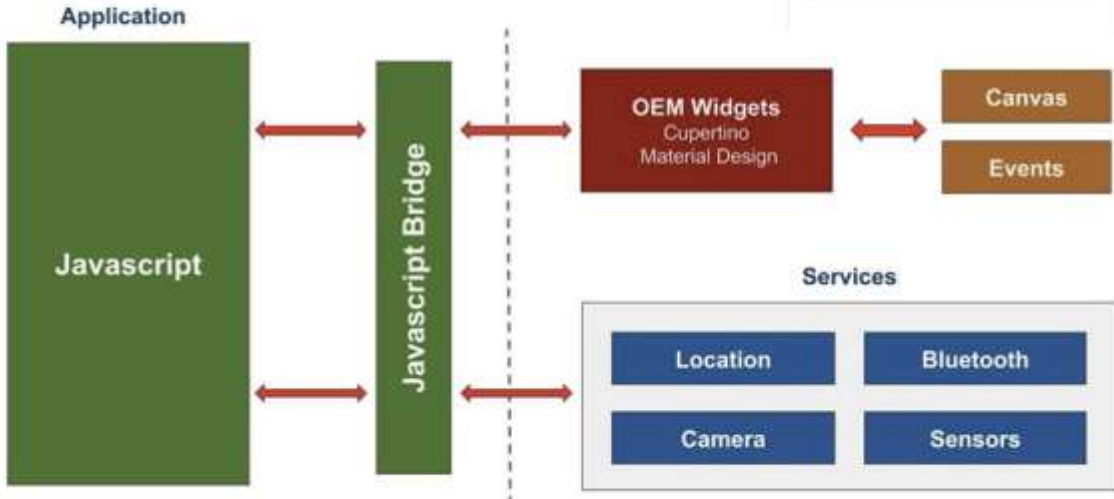


OEM SDKs





Reactive Views



iOS

Android

Sample Button

SAMPLE BUTTON

Application

Javascript

Javascript Bridge

OEM Widgets
Cupertino
Material Design

Canvas

Events

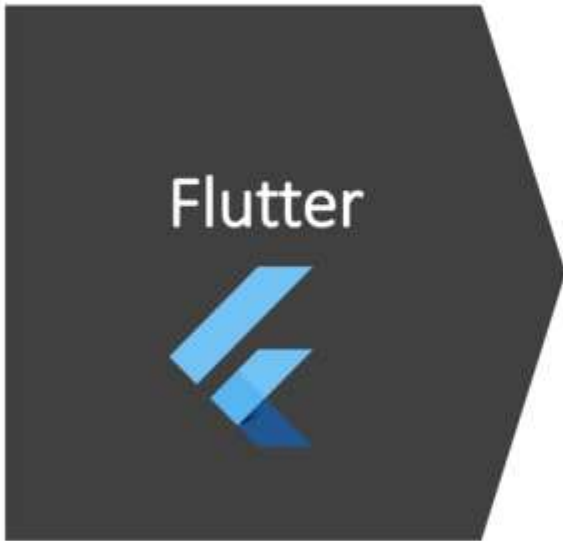
Services

Location

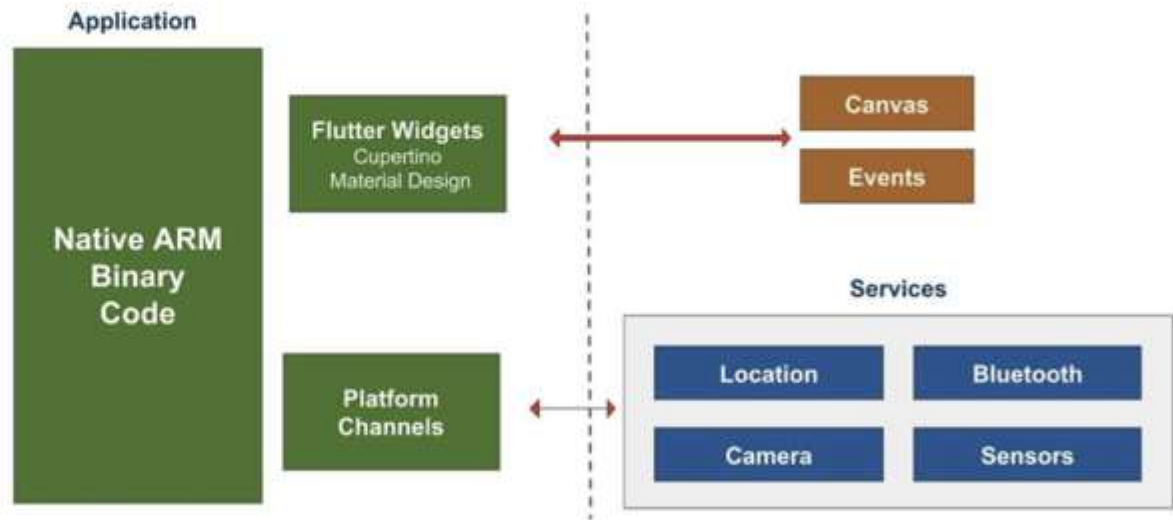
Bluetooth

Camera

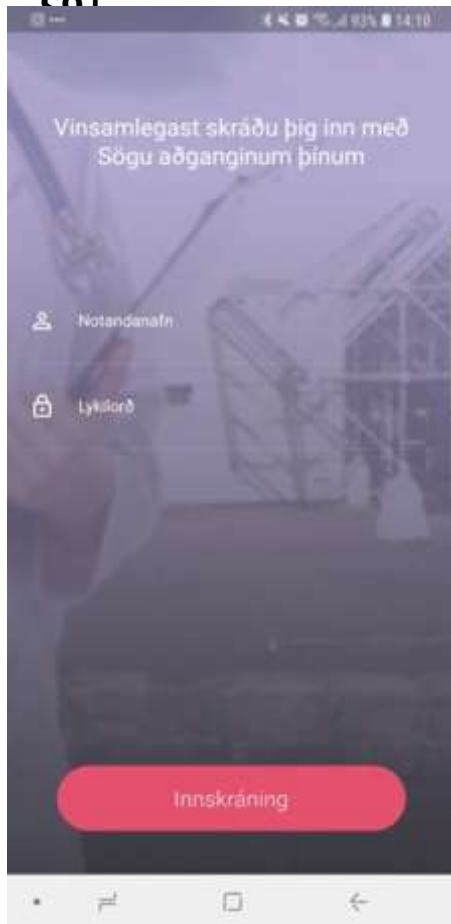
Sensors



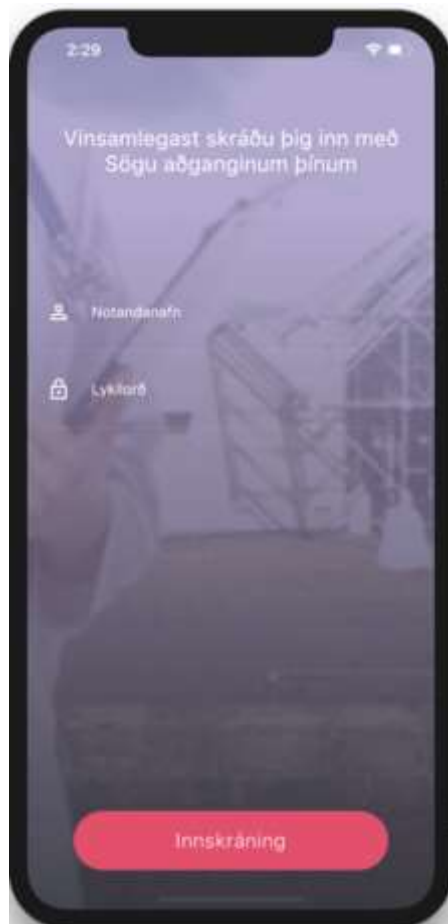
Flutter Approach



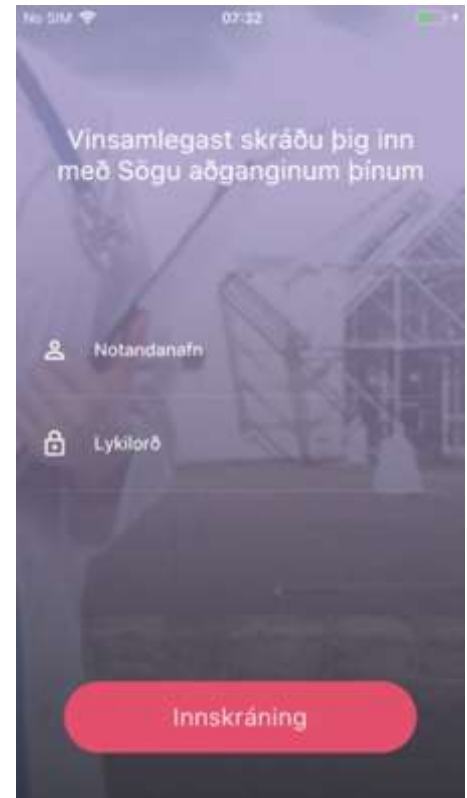
Samsung Galaxy



Iphone X



Iphone 8



2019 Developer Survey Results

Most Loved, Dreaded, and Wanted Other Frameworks, Libraries, and Tools



% of developers who are developing with the language or technology and have expressed interest in continuing to develop with it



Flutter

Developer

Android



Hummingbird



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Come to the Dart side...

