





# A new hope:

UI development for humans (Android, iOS and Flutter)





## Gustavo Campos





@gustereo



@guseducampos







# Pablo Reyes











## Rodrigo Miranda





@RMiranda77



@RodrigoMirandaMarenco



@rodrigo.miranda.marenco





## Agenda

- 1. Intro (Declarative vs Imperative)
- 2. SwiftUI Live Coding
- 3. Jetpack Compose Live Coding
- 4. Flutter Live Coding
- 5. Q & A





# Ul development for Imperative humans?

- Turn on the coffee machine.
- Let it warm up to 90 C.
- Grind the coffee beans.
- Pour water into the machine...
- Blah blah blah...



#### Declarative

Coffee, please.



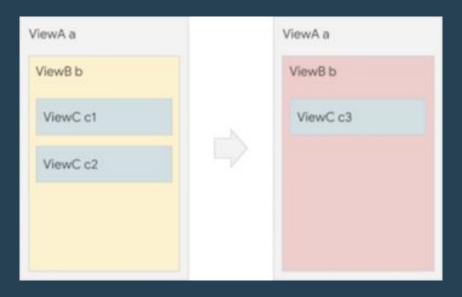
## Imperative UI

"How"

#### **Declarative UI**

"What"

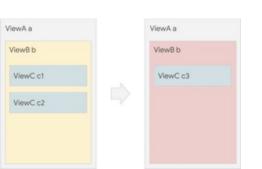




Consider this UI change Source: <u>https://flutter.dev/docs/get-started/flutter-for/declarative</u>



The old way:
Imperative
Ul



```
// Imperative style
b.setColor(red)
b.clearChildren()
ViewC c3 = new ViewC(...)
b.add(c3)
```





# Enter: Declarative UI

```
ViewA a

ViewB b

ViewC c1

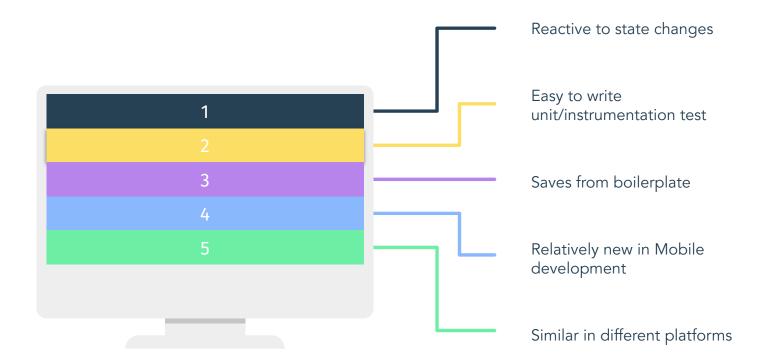
ViewC c2
```

```
// Declarative style
return ViewB(
  color: red,
  child: ViewC(...),
```





### Declarative UI







Now let's see the same UI, 3 different approaches...

https://github.com/RodrigoMirandaMarenco/Declarative-UI





## Swift UI

Apple making UI fun







#### What is SwiftUI?

- SwiftUI is an UI Framework released By Apple in 2019
- SwiftUI only runs in Apple platform (maybe someday in other OSes)
- Is inspired by Elm Architecture and React
- Use Swift's type system to apply view diffing



 $\sqrt{2}$ 

Let's do some SwiftUI!





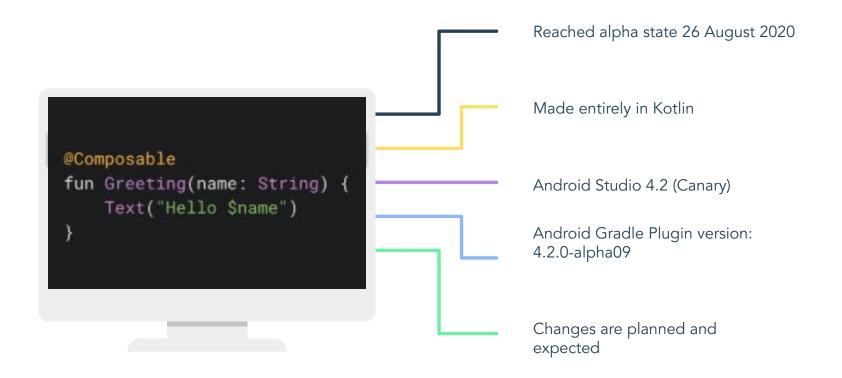
# Jetpack Compose

Native Declarative UI in Android





## Jetpack Compose





 $\nabla$ 

Let's do some Compose!





## Flutter

Una nueva forma para desarrollar aplicaciones





# Porque Flutter?













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Let's do something awesome!

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Q & A



