

# Device orientations & universal applications

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# As an introduction...



## Remember!!!

- ∃ «small» and «larges» classes of devices
- Numerous screen sizes
  - ▶ Even for a givent class («small» or «large»)
- Behavioral differences between devices classes
  - ▶ In the «landscape» situation, menu display, multi-view, etc.



## Building applications for a given device?

- Maintenance would be unreasonable
  - ▶ You must «think Universal»
- Moreover, the multi-view mode (iOS9)
  - ▶ SplitView (iPad)
  - ▶ Multitasking capabilities (view in view)



# Universal? Orientation?

## **Handled by StoryBoard**

- Unified management of the interface
- Definition of relative constraints
- Possible to have dedicated layout
  - ▶ For a given device
  - ▶ For a given orientation

## **Main advantage: you just draw**

- No care about positions
- StoryBoard shows warning (orange) and errors (red)
  - ▶ You can do the same in the programmatic way

## **Be aware!!!**



- A wrong operation is so easy to perform
  - ▶ Is'n it easier to read code?





# As a conclusion...

## Some people love it!!!

- StoryBoard and InterfaceBuilder allows teenagers to win
  - ▶ A good idea
  - ▶ A great help for programming...



**What about today's «killing Apps»?**  
They need much more polishing

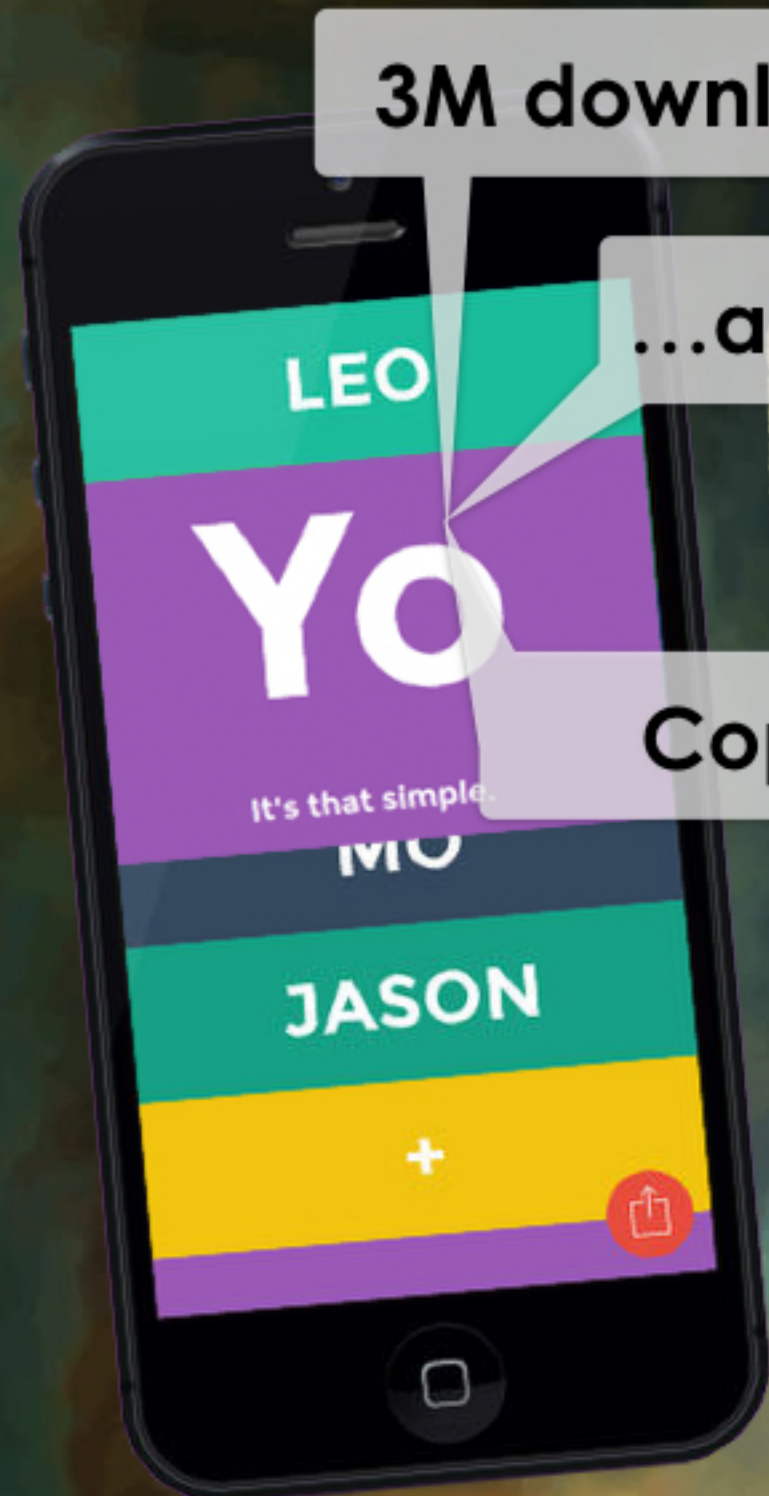




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3M downloads in months...

...and 100M «Yo»'s

Copycat with «Hodor»

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**Despite...**