

Mobile Workshop FHNW

# **MOBILE UX/UI DESIGN**

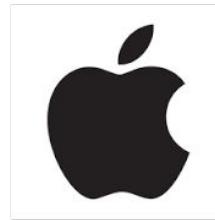
Design by Numbers

**01**

# **COMPONENTS**

## COMPONENTS

# Interface Design



IOS



Adroid

**Status bar**  
**Navigation bar**  
**Tool bar**

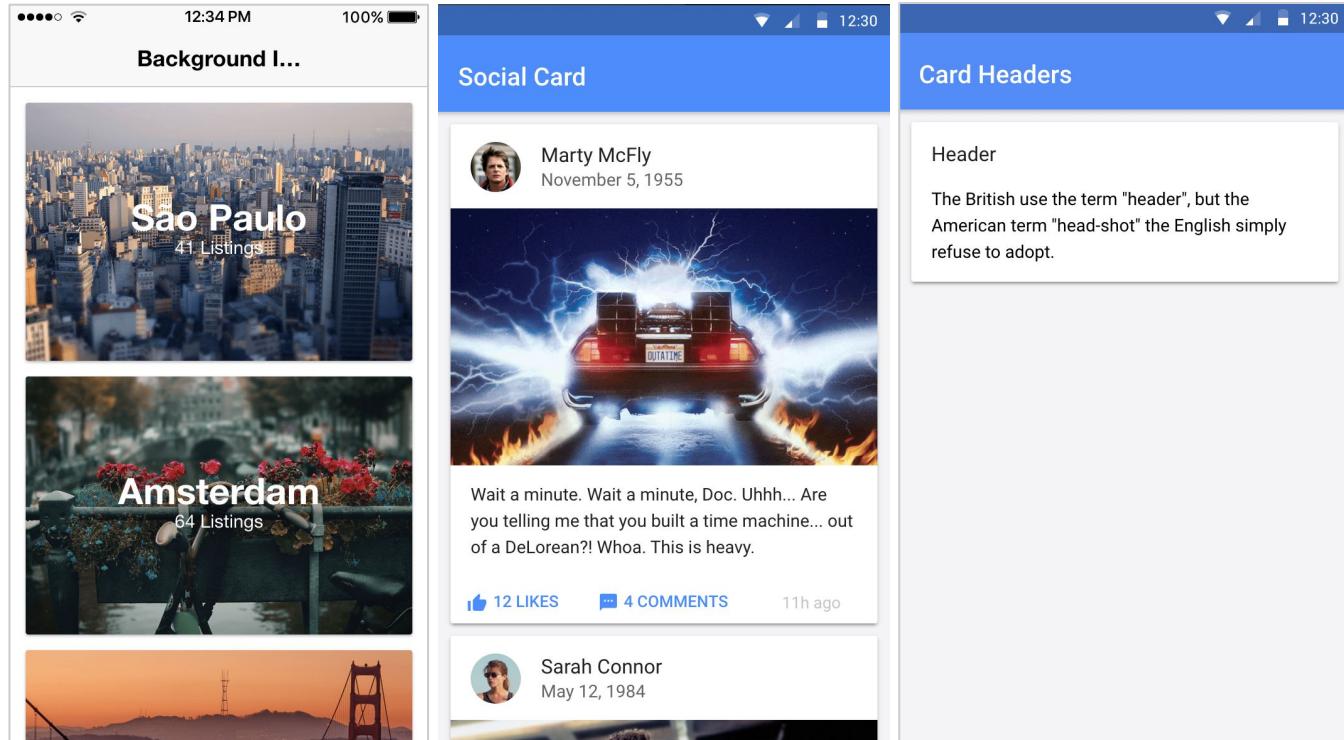
- 
- 
- 

**Status bar**  
**App bar**  
**Bottom Navigation**

- 
- 
-

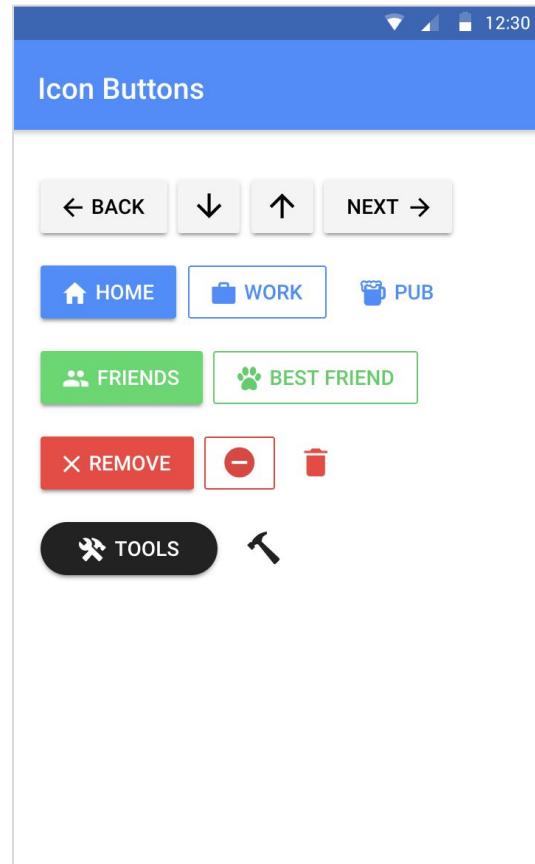
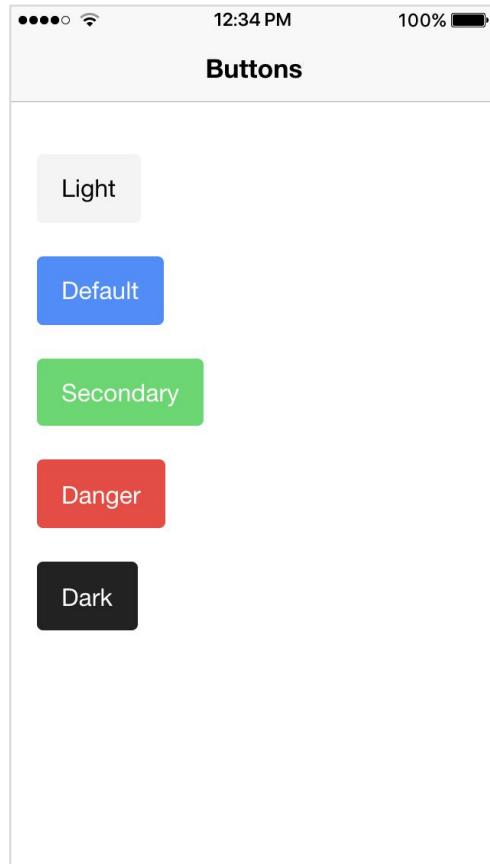
## COMPONENTS

# Cards



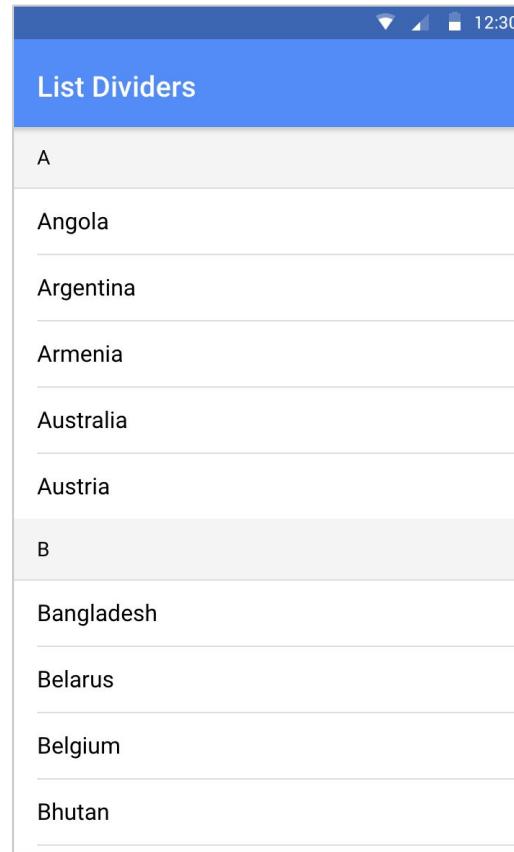
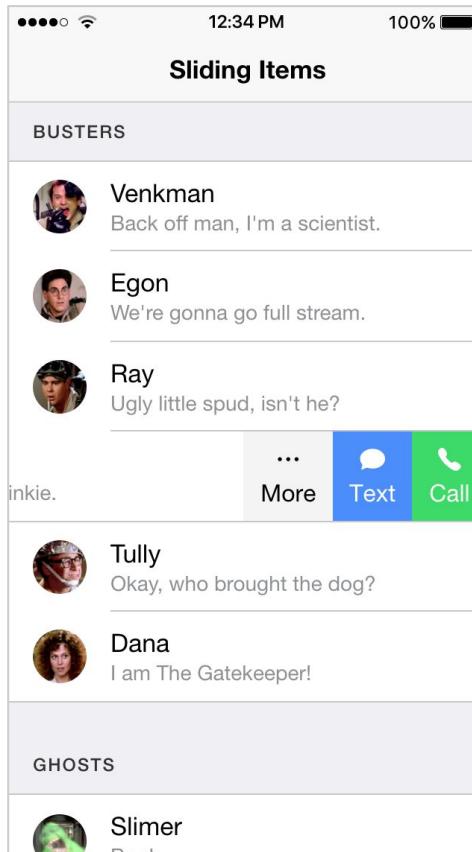
## COMPONENTS

# Buttons



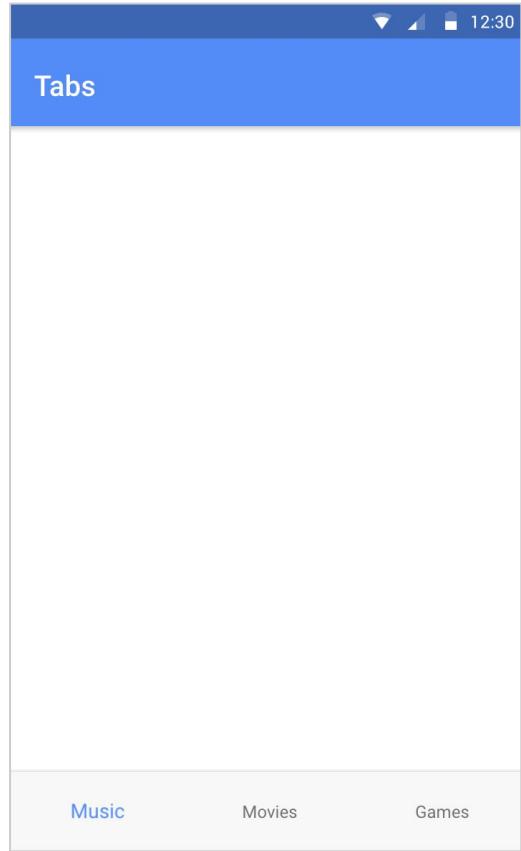
## COMPONENTS

# Lists



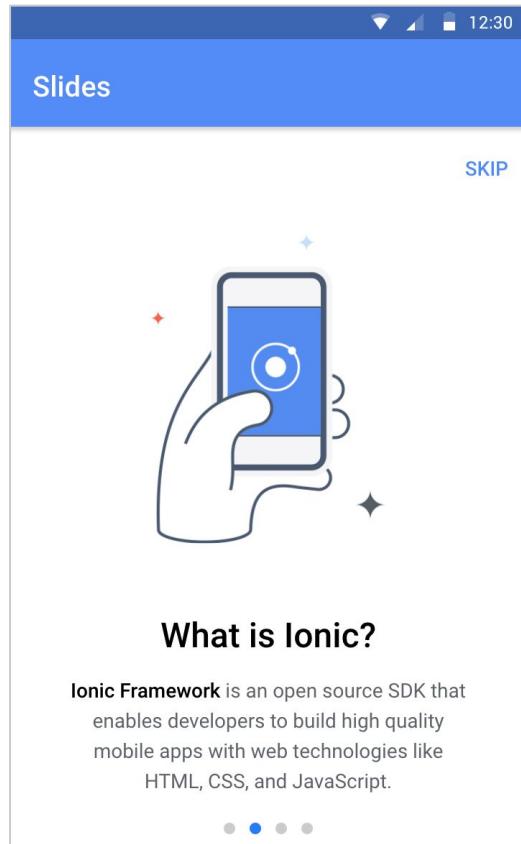
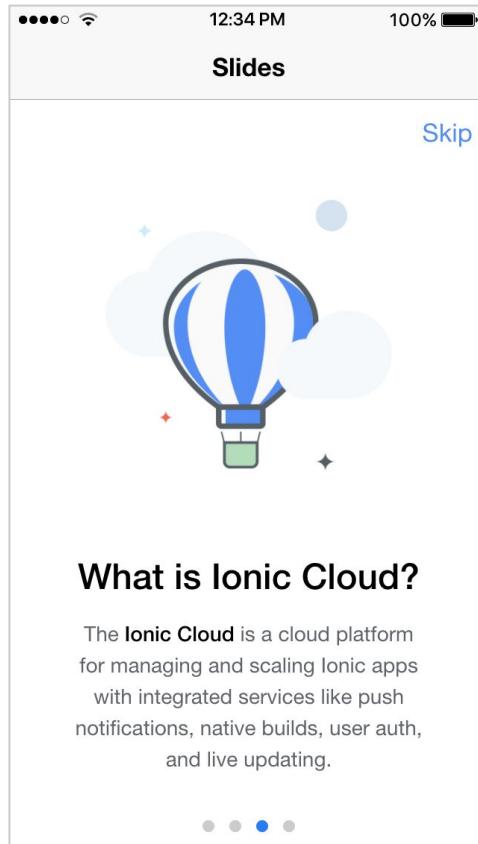
## COMPONENTS

# Tabs



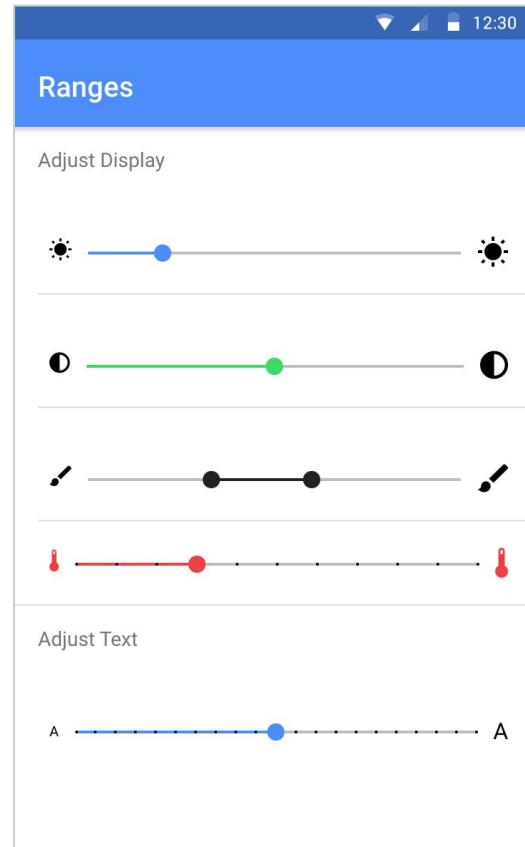
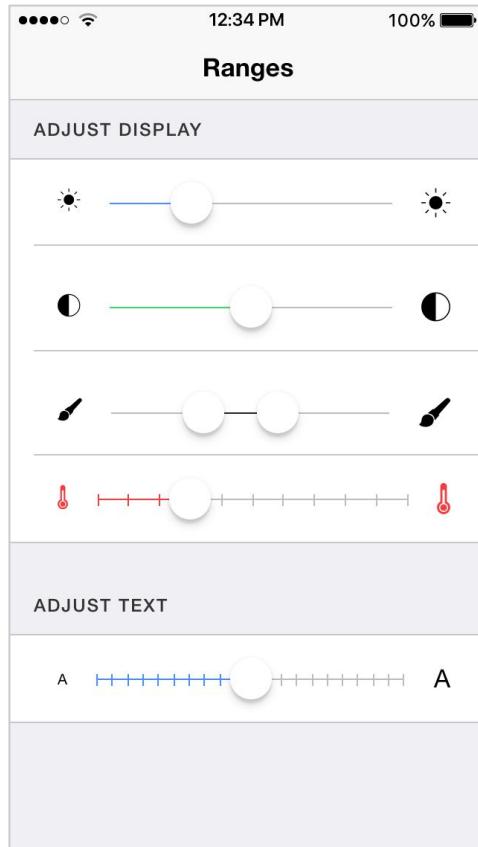
## COMPONENTS

# Slides



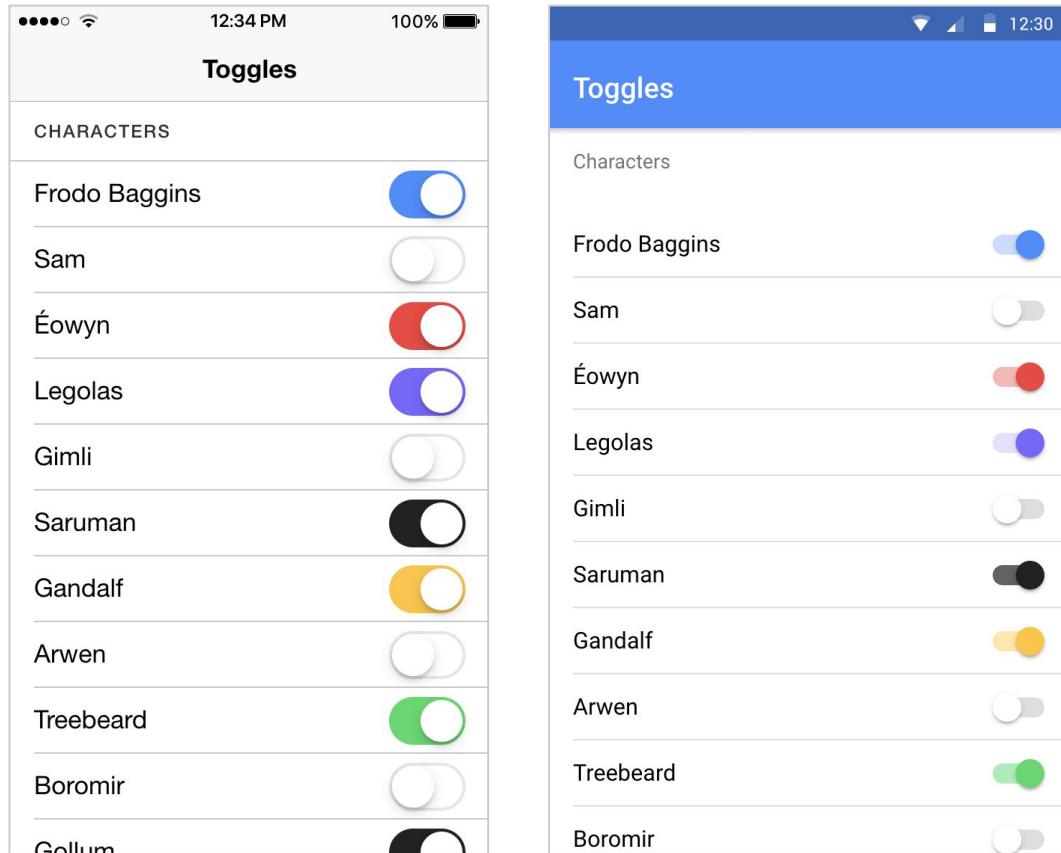
## COMPONENTS

# Range



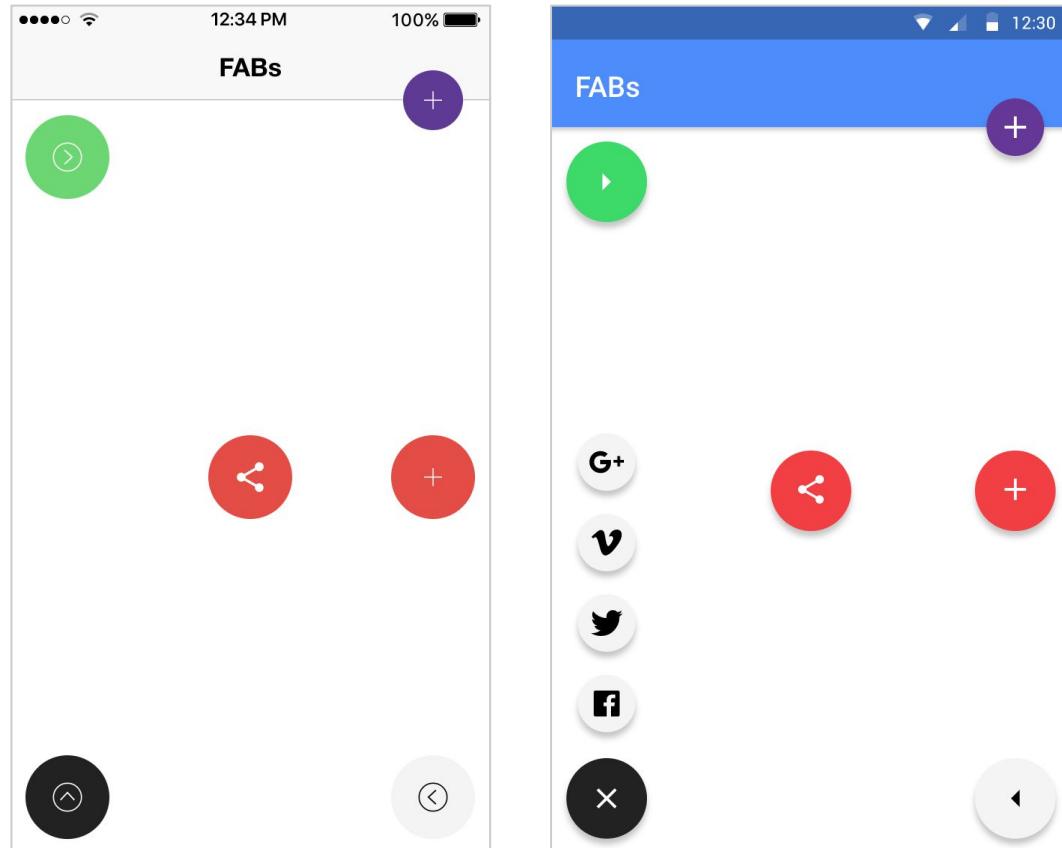
## COMPONENTS

# Toggles



## COMPONENTS

# FABs

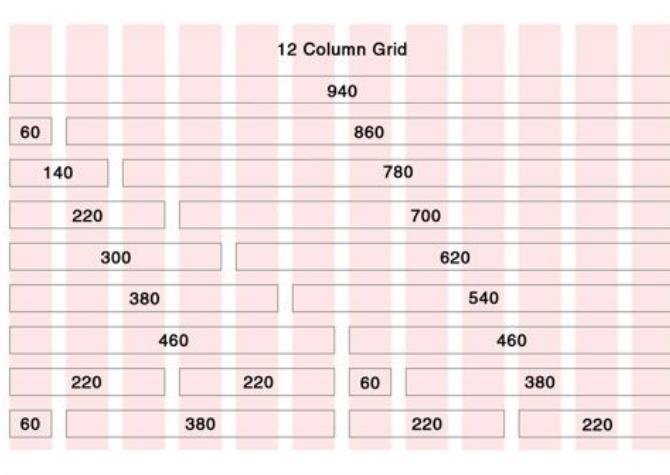


**02**

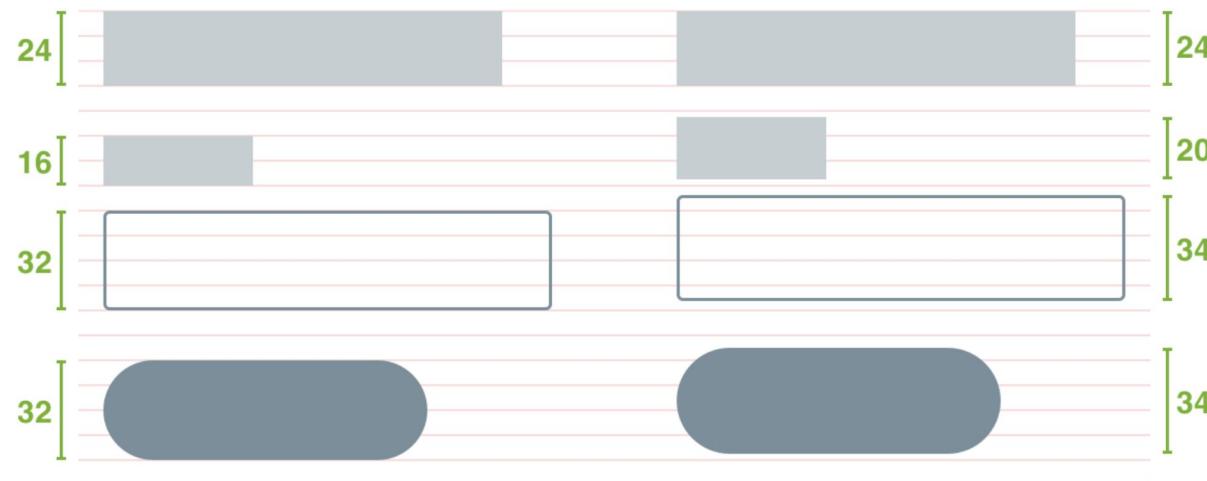
# **GRID SYSTEM**

## GRID SYSTEM

# Why do we use grid system?



# Why do we use grid system?

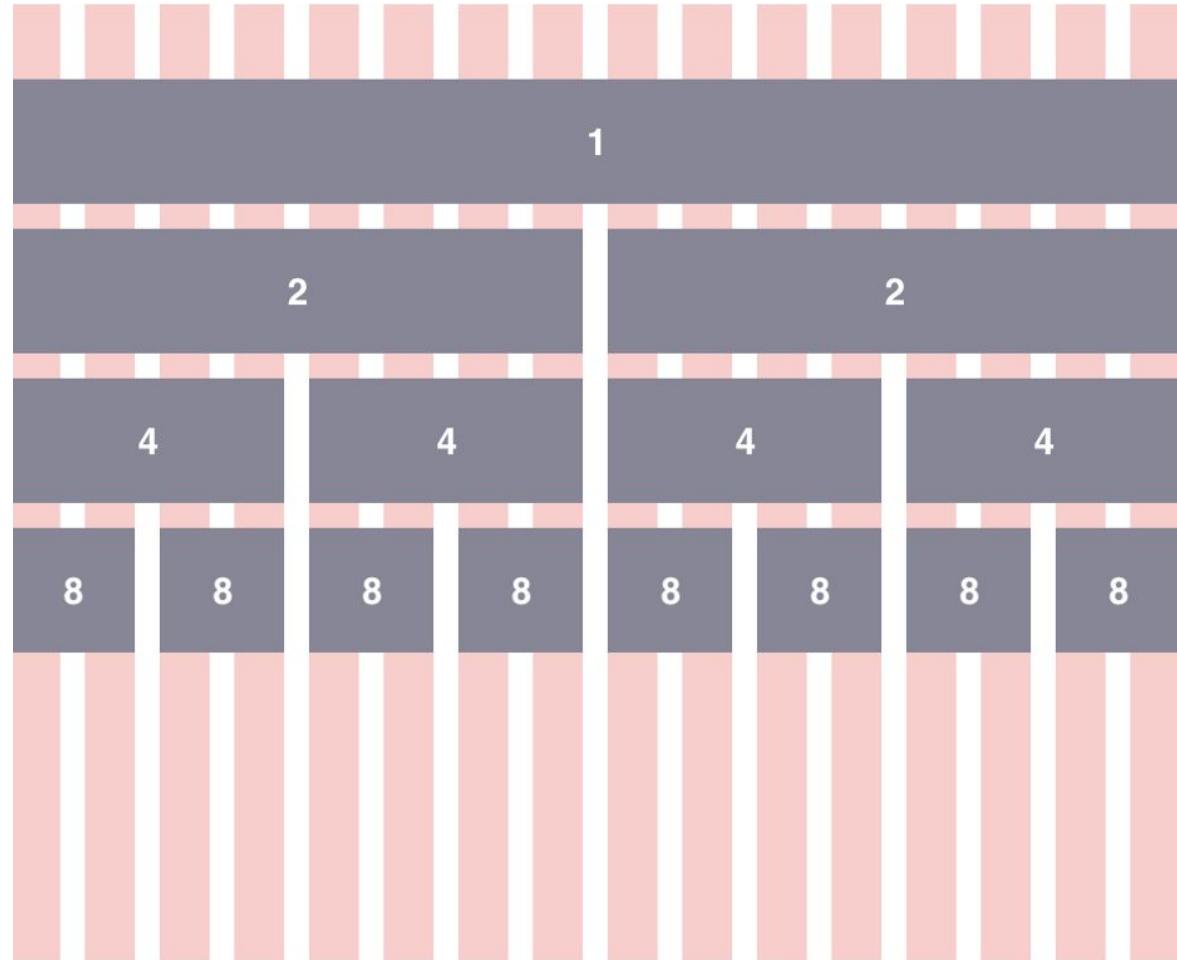


Aligned to an 8px grid

No clear element grid

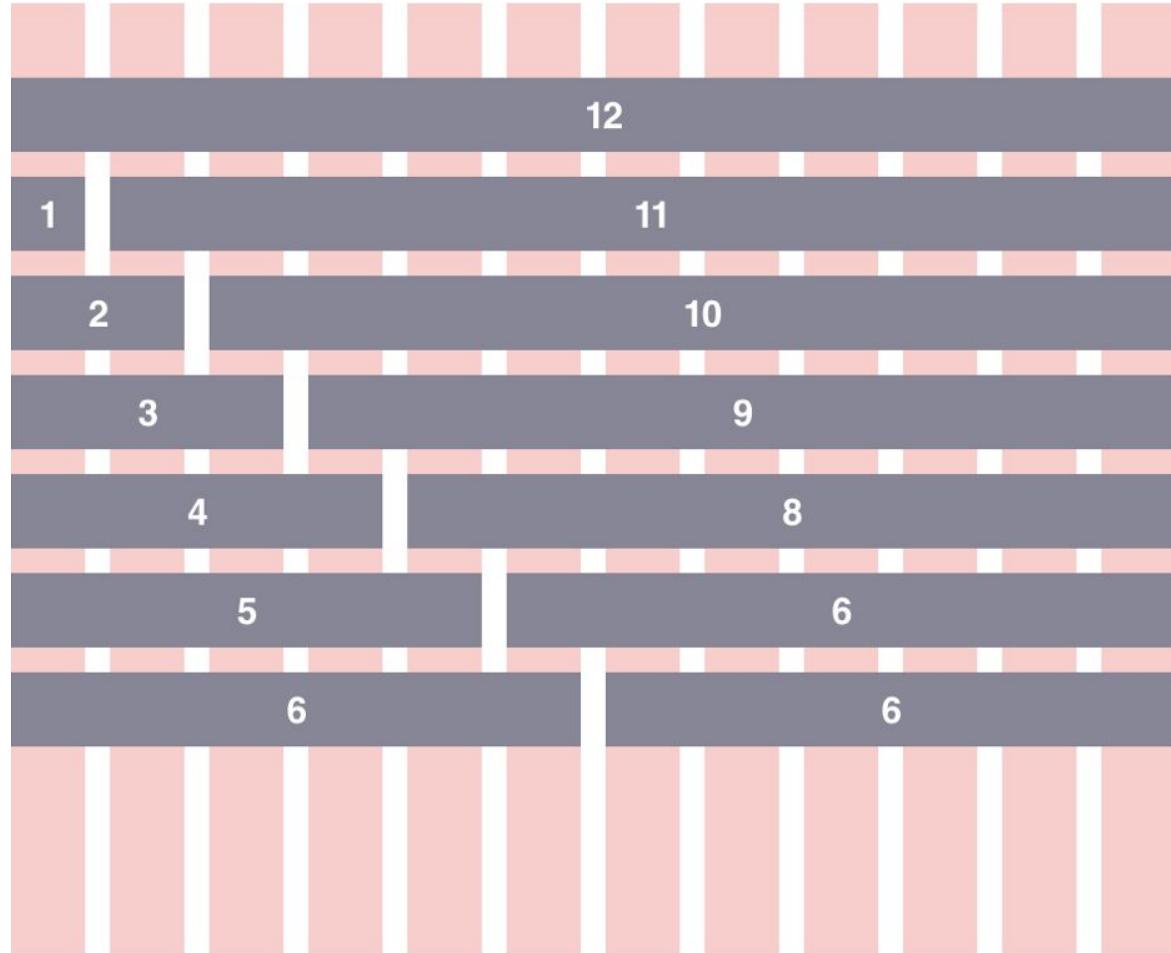
# GRID SYSTEM

# 12 Column Grid System



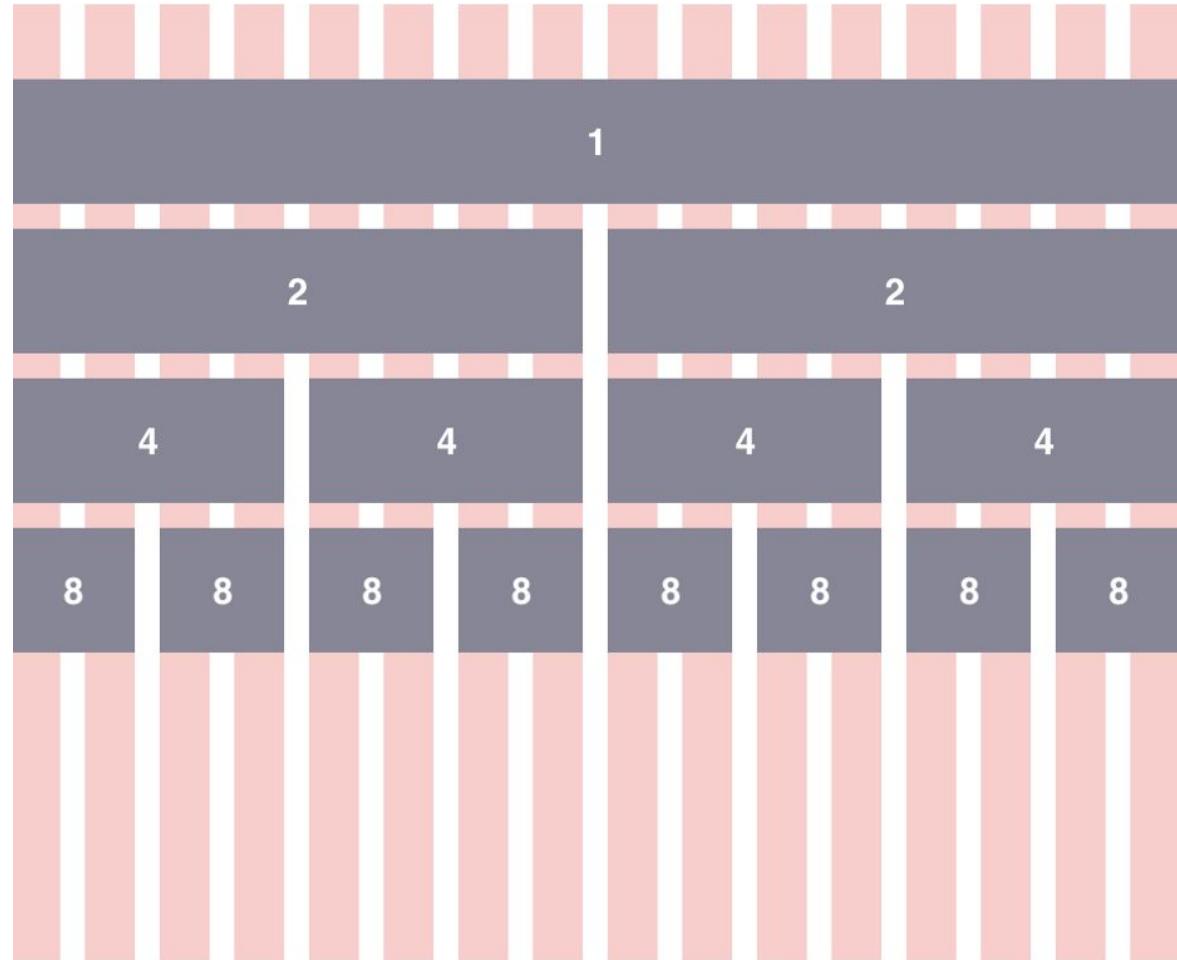
# GRID SYSTEM

# 12 Column Grid System



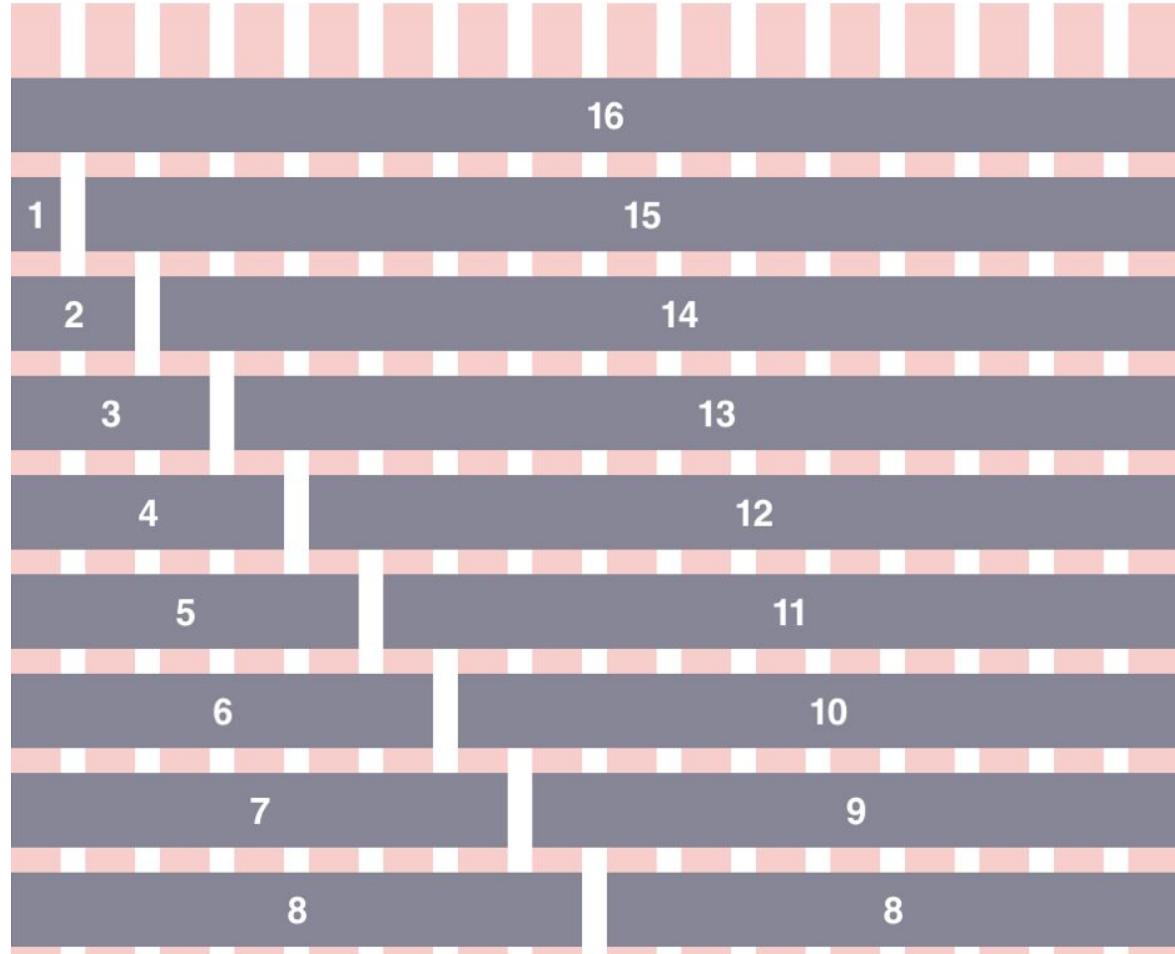
## GRID SYSTEM

# 16 Column Grid System



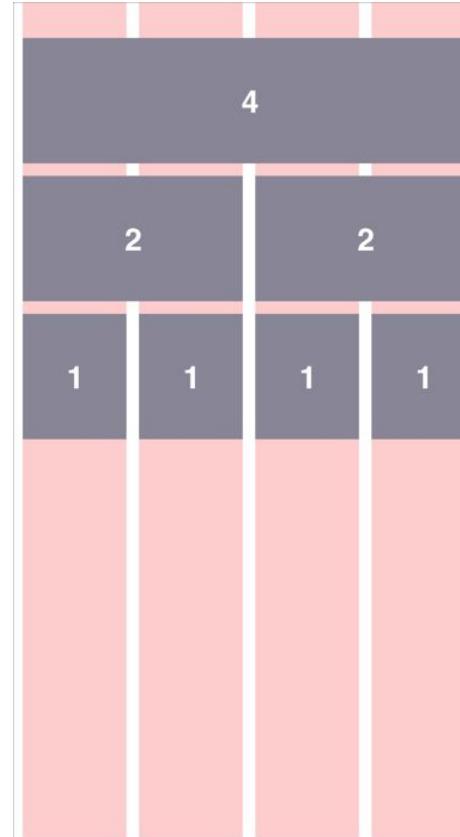
GRID SYSTEM

# 16 Column Grid System



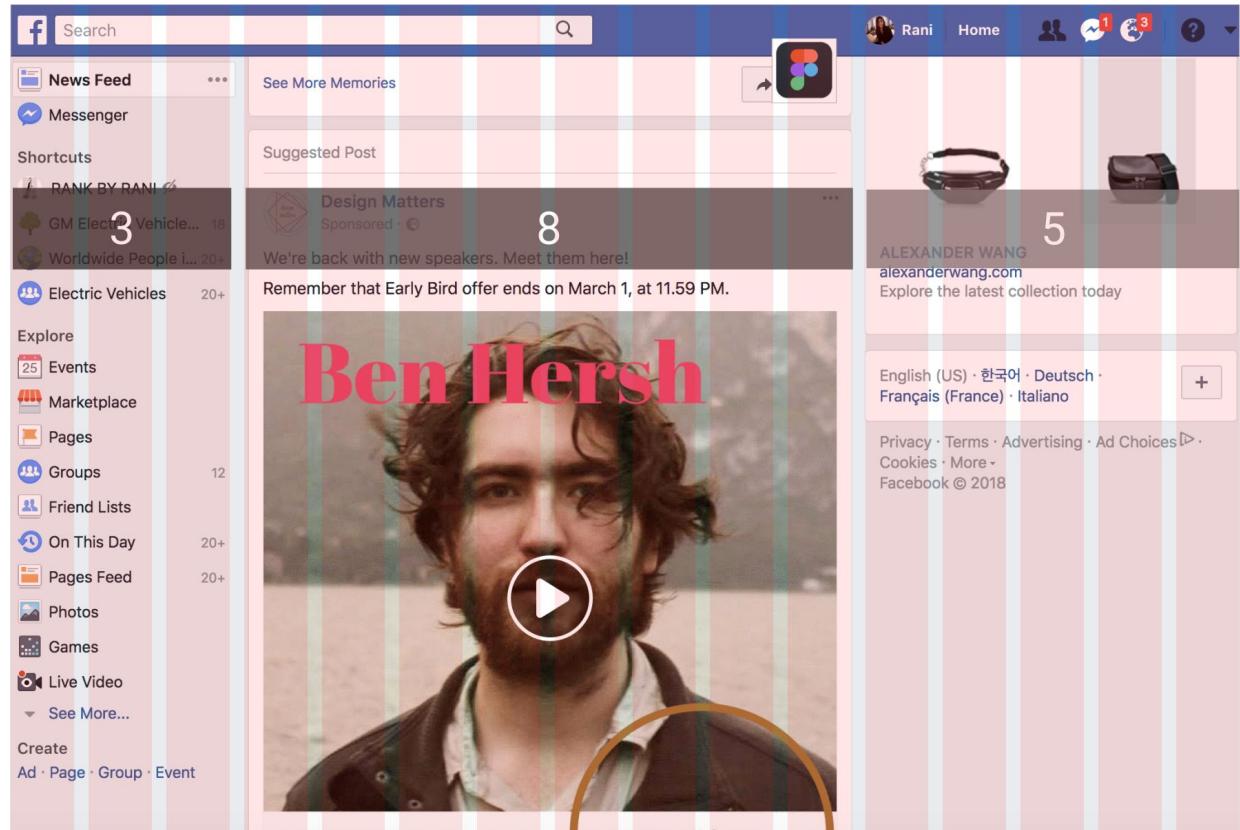
GRID SYSTEM

# Mobile Grid System



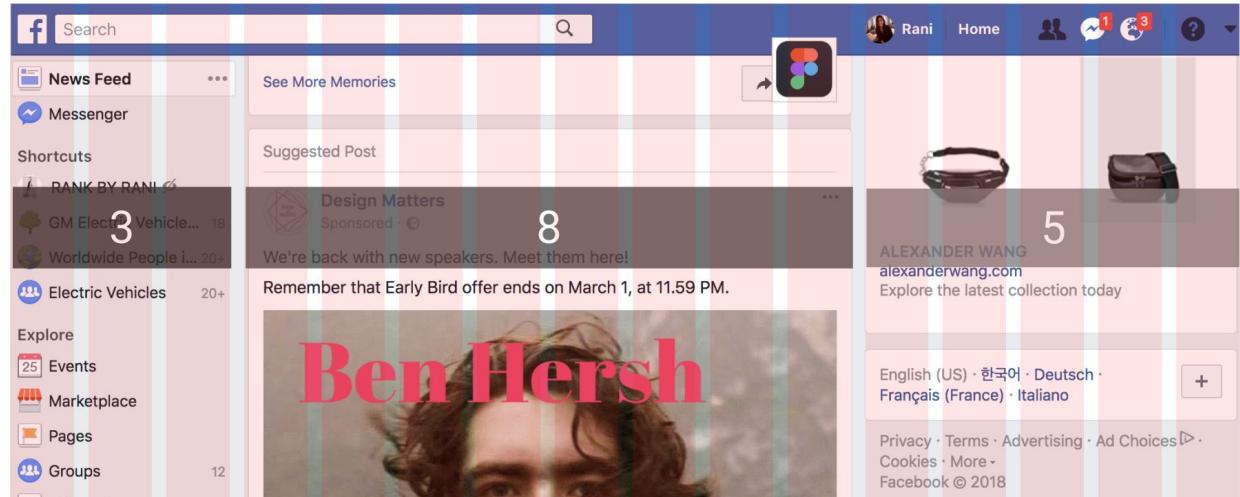
GRID SYSTEM

# Facebook Grid System



GRID SYSTEM

# Facebook Golden Ratio Layout



$$3 : 5 = 1 : 1.6$$

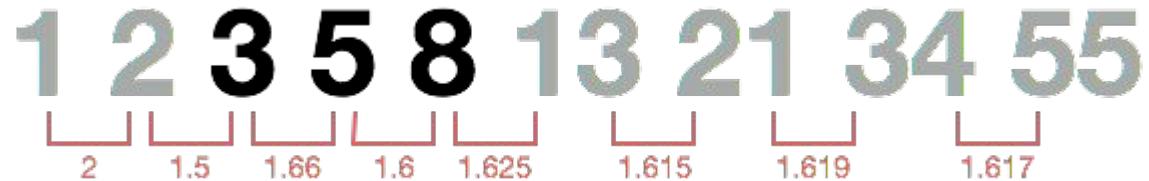
$$5 : 8 = 1 : 1.6$$

**03**

# **SIZE**

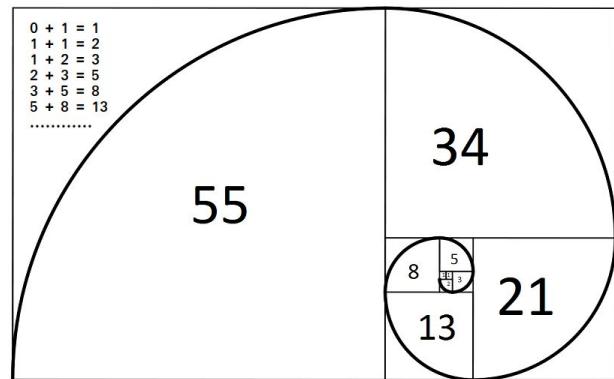
SIZE

## Fibonacci Sequence



## Golden Ratio Layout

1 : 1.618



SIZE

# Image Size Ratio

1:1

4:3

3:2

16:9

2:1

21:9

1:1.6

SIZE

# Airbnb



The screenshot shows the "Featured destinations" section with three cards:

- Los Angeles**: 3:2 aspect ratio.
- Miami**: 3:2 aspect ratio.
- Tokyo**: 3:2 aspect ratio.

Below this, the "Experiences in New York" section is shown with two cards:

- NIGHTLIFE**: 3:2 aspect ratio.
- HAT WORKSHOP**: 3:2 aspect ratio.

At the bottom are navigation icons: EXPLORE, SAVED, TRIPS, INBOX, and PROFILE.

The screenshot shows a listing detail page for a "Tram Balcony Apartment in Baixa" in Lisbon, Portugal, listed by Margarida & João.

**Check In:** 3:00 PM Sat, Nov 4  
**Check Out:** 11:00 AM Sun, Nov 12

**Who's coming:** [Profile picture]

**Map:** Shows the location in Baixa, Lisbon, with nearby landmarks like Igreja da Madalena, Núcleo Arqueológico da Rua dos Correeiros, Fado Living Statue, MUDE - Museu Do Design E Da Moda, and Igreja da Conceição Velha.

**04**

# **LAYOUT**

## LAYOUT

# Aspect Ratio

16:9

3:2

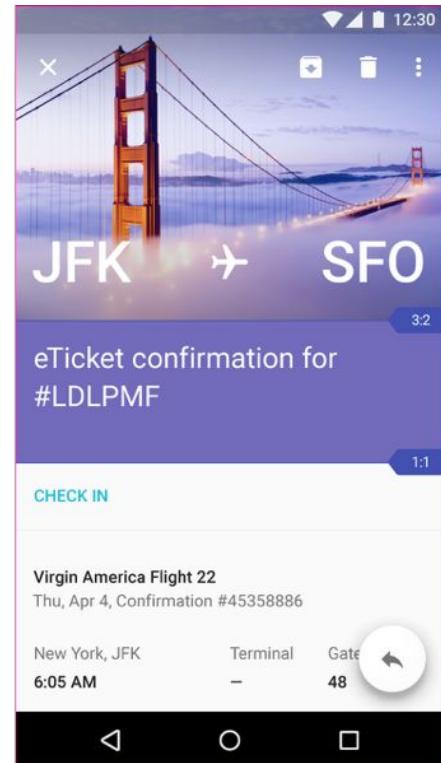
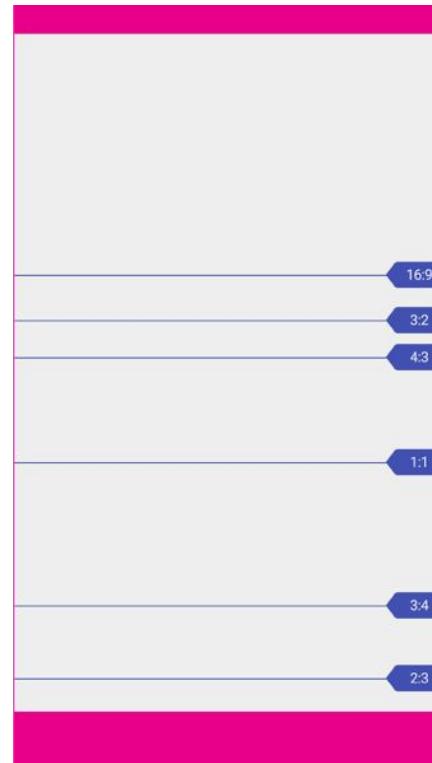
4:3

1:1

3:4

2:3

Golden Ratio



## LAYOUT (SCREEN RESOLUTION & ASSETS)

# Display Definition

EXPORT

- +

4x	@4x	PNG
3x	@3x	PNG
2x	@2x	PNG
1.5x	@1.5x	PNG
1x	@1x	PNG

Work with 1x and export for:

iOS export 1x, 2x, 3x

Android export 1x, 1.5x, 2x, 3x, 4x

BASE 1X <b>MDPI</b>	1.5X <b>HDPI</b>	2x <b>XHDPI</b>	3X <b>XXDPI</b>	4x <b>XXXHDPI</b>
iPhone 8 (375x667)	iPhone S1 (480x800)	iPhone 5 (640x1136)	iPhone 6,7,8 plus (1080x1920)	Galaxy Note4 (1440x2560)
	Galaxy S2 (480x800)	iPhone 6,7,8 (750x1334)	Galaxy S5 (1080x1920)	
		Galaxy S3 (720x1280)		

## LAYOUT

# Margin

4px increments

Android!

( $1.5 \times 4\text{px} = 6\text{px}$ )

( $1.5 \times 5\text{px} = 7.5\text{px}$ )

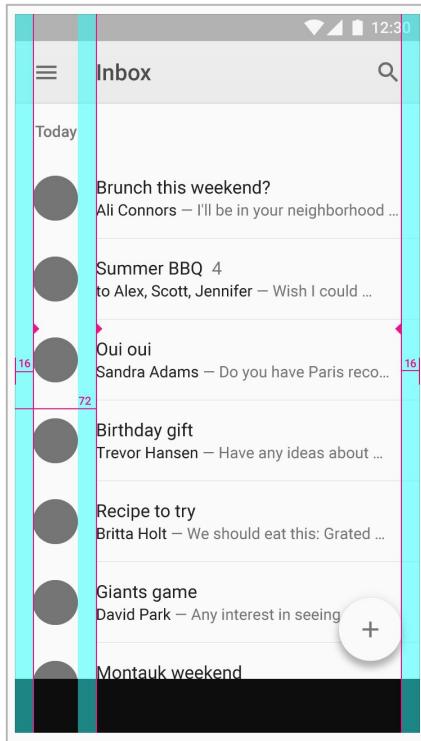
5px

7.5px

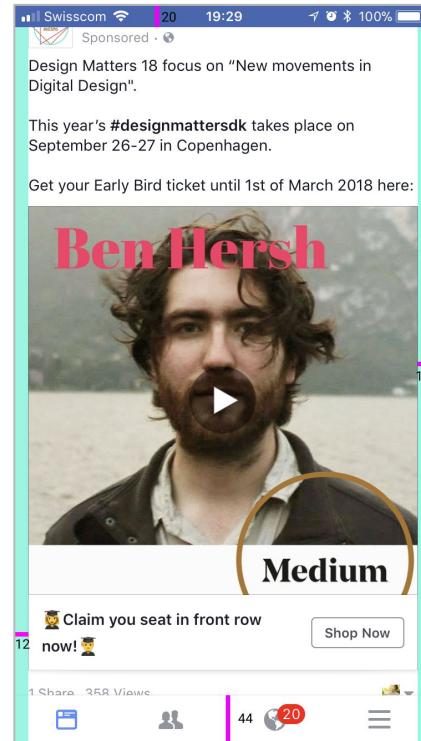
1x Export

1.5x Export

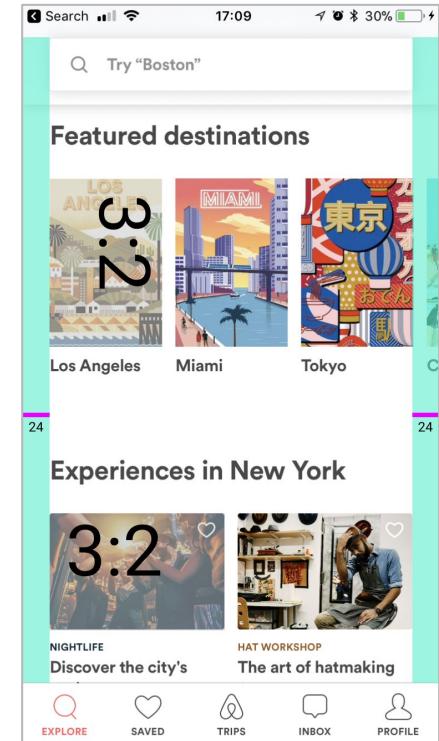
Google  
16px



Facebook  
12px



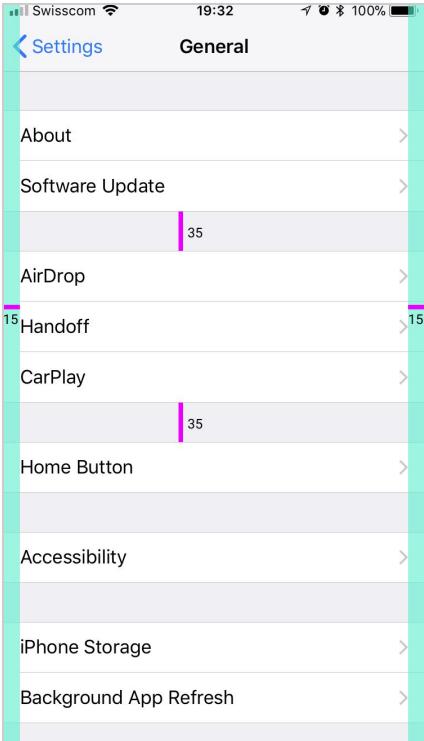
Airbnb  
24px



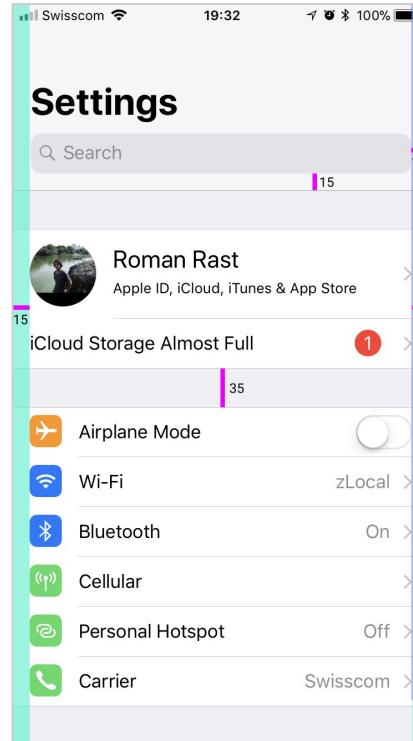
LAYOUT

# Apple

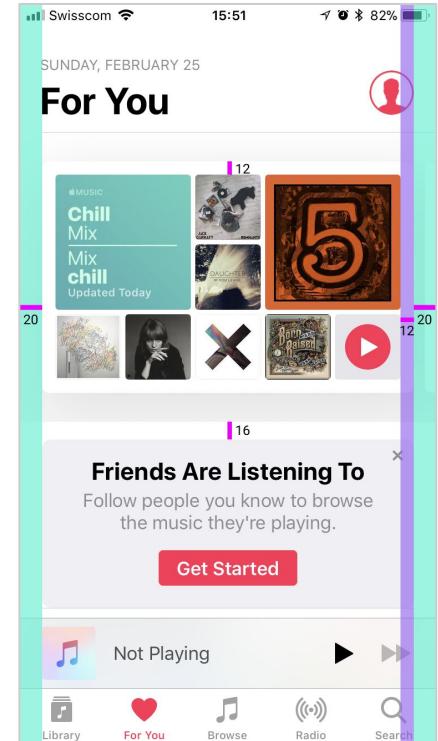
iOS  
5px increments



iOS  
5px & 4px  
increments



Apple Music  
4px increments



**05**

# **FONT**

FONT

# Font Size

iOS:  
17px & 14px

Android:  
16px & 14px

Very minimum: 12px

Fibonacci

Font Size

2

8

3

12

5

20

8

X4

32

13

52

21

84

34

136

10

16

26

42

68

110

FONT

## Font Typo

SF

San Francisco

iOS

Roboto

Christian Robertson (12 styles)

All their equipment  
and instruments are  
alive.

Android

06

# Figma



iOS 11 GUI - iPhone 8 by Great Si... MovieTheaterApp FHNW Sample File Google Material Design +

Page 1

Components

- New page
- Image result for golden ratio

iPhone 8 3

- Ellipse
- Clouds
- T 2°
- Zurich
- Rectangle 2
- Rectangle
- Blood

iPhone 8 2.1

iPhone 8 2

Photos

Phone Button

Ticket

Home

- Timeslots
- burger

movie

- Details
- Rectangle
- Watch Trailer
- Rectangle

Frame X: 22 Y: 311 W: 339 H: 138 Rotation: 0° Transform: Mixed

BACKGROUND

- #FFFFFF 100%
- Show in exports
- Clip Content

INSTANCE

- movie
- Go to Master Component

CONSTRAINTS

- Left Top

LAYOUT GRID

LAYER

- Pass Through 100%

FILL

Share

Design Prototype Code

Home

Now playing  
**Blade Runner 2049**  
2h 44min Action, Sci-Fi

TODAY, 12.02.2049 Hide times

Blade Runner 2049 2h 44min Action, Sci-Fi Age rating: 12

Watch Trailer Details

Abaton A E 339 x 138

20:00 21:00 22:00 23:00 24

Black Panther

2h 14min Action, Sci-Fi Age rating: 12

Watch Trailer Details

Abaton A D

20:00 21:00 22:00 23:00 24

Abaton B E

20:00 21:00 22:00 23:00 24

Detail

Blade Runner 2049 2h 44min Action, Sci-Fi Age rating: 12

A young blade runner's discovery of a long-buried secret leads him to track down former blade runner Rick Deckard, who's been missing for thirty years.

Today, 12.02.2049

Abaton A D

20:00 21:00 22:00 23:00 24

Abaton B E

20:00 21:00 22:00 23:00 24

Ticket

Blade Runner 2049

Hours Nov 17, 2049 at 21:00 - 23:44 Theater Abaton a

ROW SEAT

26 15

Add to Wallet

Share

Photos on TripAdvisor

## ELEMENTS

# Shapes & Groups

- ✓  Group
- Ellipse 2
- Ellipse
- ♡  Vector
- Rectangle



Ellipse = **O**  
Rectangle = **R**  
Vector = **P**  
Group = **G**  
Rename = **R**  
Text = **T**

≡ ⌂ ⌂ ⌂ ⌂ ⌂

ELEMENTS

-300  
-200  
-100  
0  
100  
200  
300  
400  
500  
600  
700  
800

# Components

Publish file to library

Publishing allows other team members to use these components

Component →

Component

movie

- Details
- Rectangle
- Watch Trailer
- Rectangle
- Age rating: 12
- Action, Sci-Fi
- 2h 44min
- Blade Runner 2049
- bladerunner\_poster

Timeslots

503 525 550 575 600 625 650

Blade Runner 2049

2h 44min Action, Sci-Fi Age rating: 12

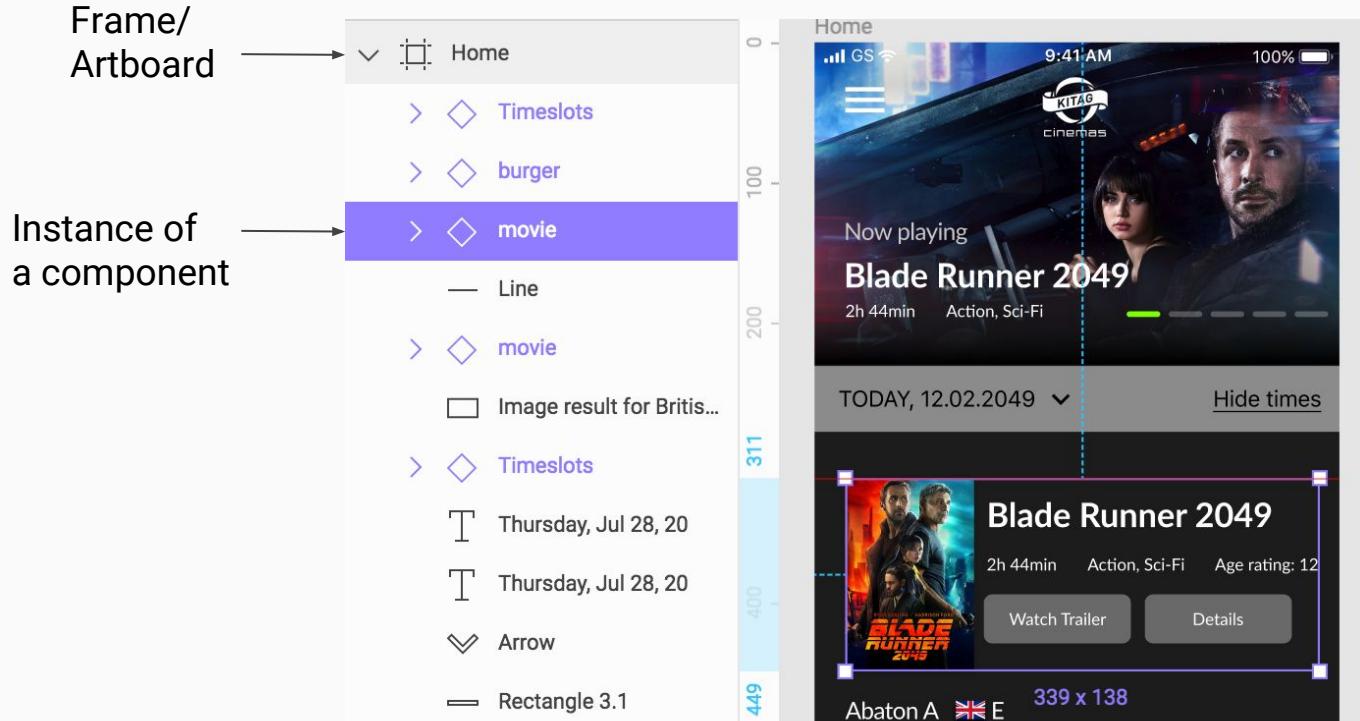
Watch Trailer Details

339 x 138

The image shows a design tool's interface with various components listed in a sidebar and a preview area. The sidebar contains a list of components under the 'movie' category, including 'Details', 'Rectangle', 'Watch Trailer', 'Age rating: 12', 'Action, Sci-Fi', '2h 44min', 'Blade Runner 2049', and 'bladerunner\_poster'. Below this is a 'Timeslots' section. To the right, a preview of a movie card for 'Blade Runner 2049' is displayed, featuring the movie's title, runtime, genre, age rating, a poster image, and two buttons for 'Watch Trailer' and 'Details'. The preview also includes dimensions (339 x 138) and coordinate values (503, 525, 550, 575, 600, 625, 650).

## ELEMENTS

# Frames & Instance



ELEMENTS

# Frames

New Frame = F or A

DESIGN PROTOTYPE CODE

Phone

iPhone X 375 x 812

iPhone 8 Plus 414 x 736

iPhone 8 375 x 667

iPhone SE 320 x 568

Galaxy S8 360 x 740

Google Pixel 411 x 731

LG G3 480 x 853

Tablet

Desktop

Watch

?

## GRID SYSTEM

# Grid System

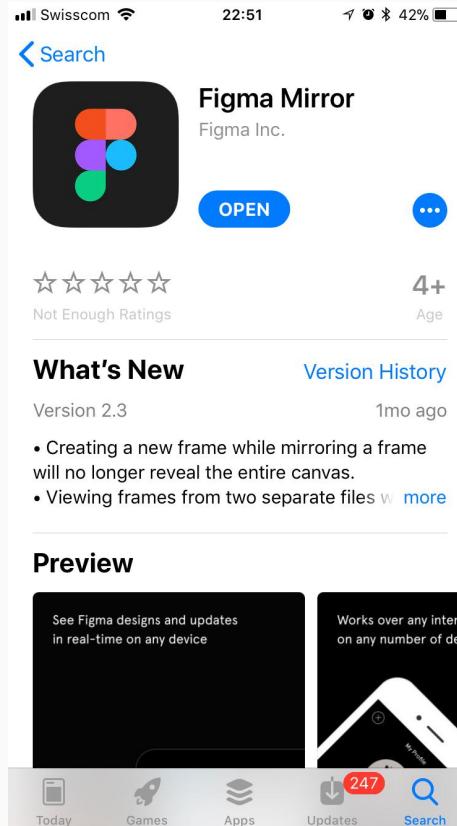
The screenshot displays the Airbnb mobile application's search screen on an iPhone 8. The interface features a top navigation bar with a search field containing the placeholder "Try 'Boston'". Below this is a section titled "Featured destinations" with cards for Los Angeles, Miami, and Tokyo. The main content area is titled "Experiences in New York" and includes cards for "NIGHTLIFE" and "HAT WORKSHOP". At the bottom, there are five navigation icons labeled "EXPLORE", "SAVED", "TRIPS", "INBOX", and "PROFILE". A detailed analysis of the layout is overlaid on the right side, specifically focusing on the "Layout Grid" feature. This tool identifies a 12-column grid structure. Key settings shown include:

- BACKGROUND:** White (#FFFFFF) with 100% opacity.
- LAYER:** Pass Through with 100% opacity.
- FILL:** Image with 100% opacity.
- STROKE:** Red (#FF0000) with 10% opacity.
- EFFECTS:** None.
- EXPORT:** Options for saving or sharing the design.

The overall layout is 375x667 pixels.

# Figma Mirror App

1. Connect to the same WiFi on your computer and mobile
2. Klick on a Frame/Artboard in Figma
3. See changes live on your mobile device

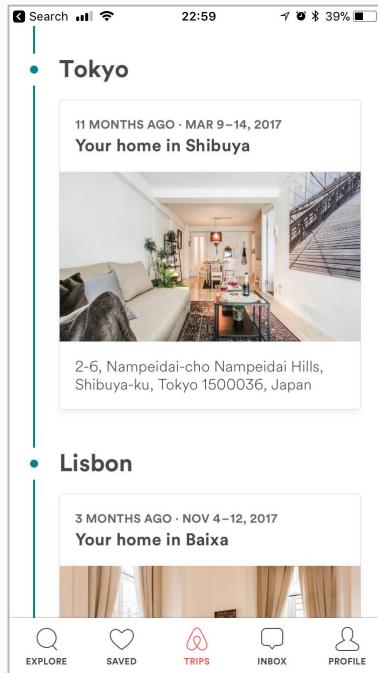
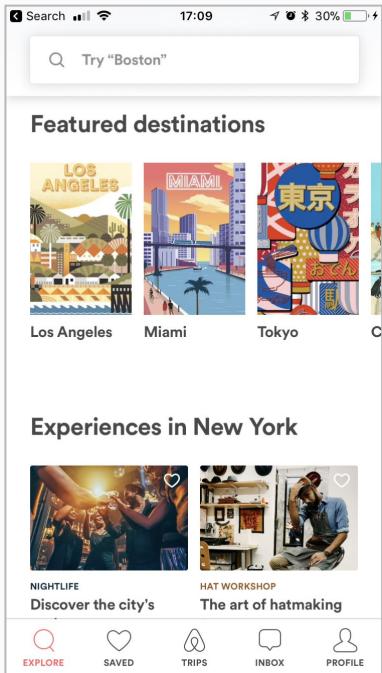


**Figma**

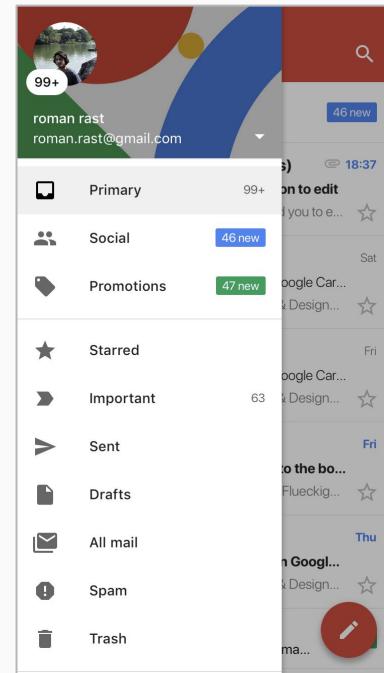
# **EXERCISE**

## EXERCISE

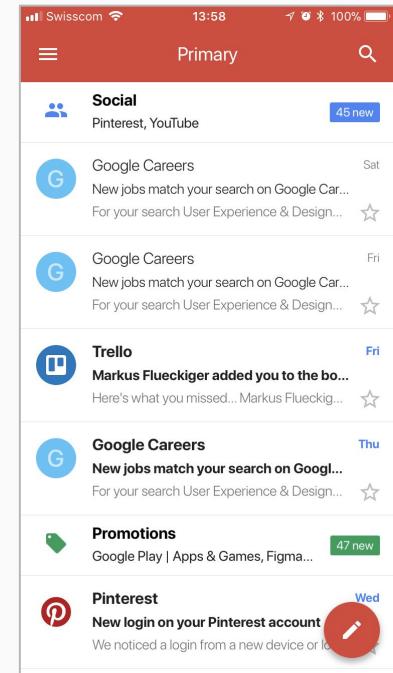
# Copy designs in Figma (components, using right ratio, shadows, etc)



Airbnb



Gmail



**HOMEWORK**

# **WEATHER APP**

## EXERCISE

# Weather App

Design your app with the following elements

- Temperature today
- Weather condition today (Sunny...)
- City Name
- Forecast 7 days with day (Monday, Tuesday...)
- High and low temperature of each day
- Sunrise & sunset time