



# Professional Skills 3

Personal Professionalization Program

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Academic year 2023-2024

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## Learn Figma: User Interface Design Essentials – UI/UX Design

Arash is the name of the teacher for this course, he is an UI/UX designer. The course start with the Design Basics, after that all about Figma and then start the practice creating a Wireframe, Application, Website, Logo and more.

This course has **10 hours** in total.

The screenshot shows the course page on the Udemy website. At the top, there's a navigation bar with the Udemy logo, categories, a search bar, and user account links. The main title is 'Learn Figma: User Interface Design Essentials – UI/UX Design'. Below it, a brief description states: 'Master Figma app to get a job in UI Design, User Interface, User Experience design, Web Design & UX design.' The course has a rating of 4.4 stars from 1,618 reviews and 5,912 students. It was created by Arash Ahmadzadeh and last updated on 11/2022. The page includes sections for 'Lo que aprenderás' (What you'll learn), a preview video, course inclusion details, and a sidebar with sharing options.

### Section 1: Introduction

#### 1. Introduction to the course

This video is to know better what this course is about and all the information that will be given.

The screenshot shows the course content interface. On the left, there's a wireframe of a mobile application with the text 'Fast and powerful, just like your work'. In the center, there's a preview video frame showing a hand-drawn sketch. On the right, the 'Contenido del curso' (Course Content) sidebar lists the following sections:

- 1. Introduction to the course (2 min)
- 2. Introduction (3 min)
- 3. Structure of the course (1 min)
- 4. Required Tools (1 min)
- 5. Free UI Kits (1 min)
- 6. Get Your Free E-book (1 min)

Below these, there are sections for 'Sección 2: Design Basics', 'Sección 3: Figma Academy', and 'Sección 4: UI Elements'.

#### 2. Introduction

This video is to understand the structure of the course, understand the difference between UX and UI. Also understand what the responsibilities of each part are, being UX the behavior to have a good experience using the interface and the UI the nice-looking part of the interface.

### 3. Structure of the course

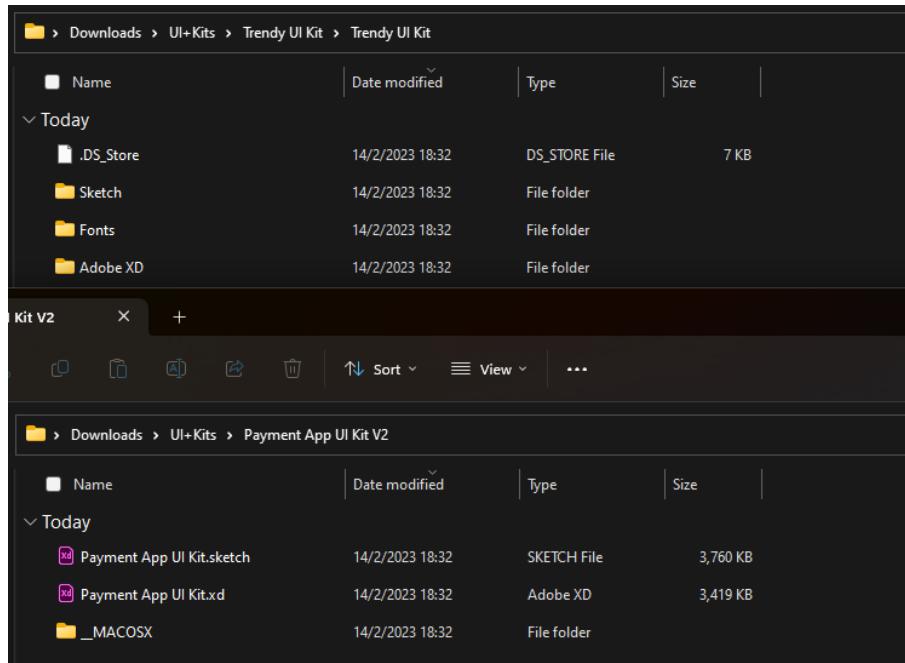
Going into details of the two main parts of the course. The theoretical part and the practical part.

### 4. Required Tools

All the different design tools that will be used in this course.

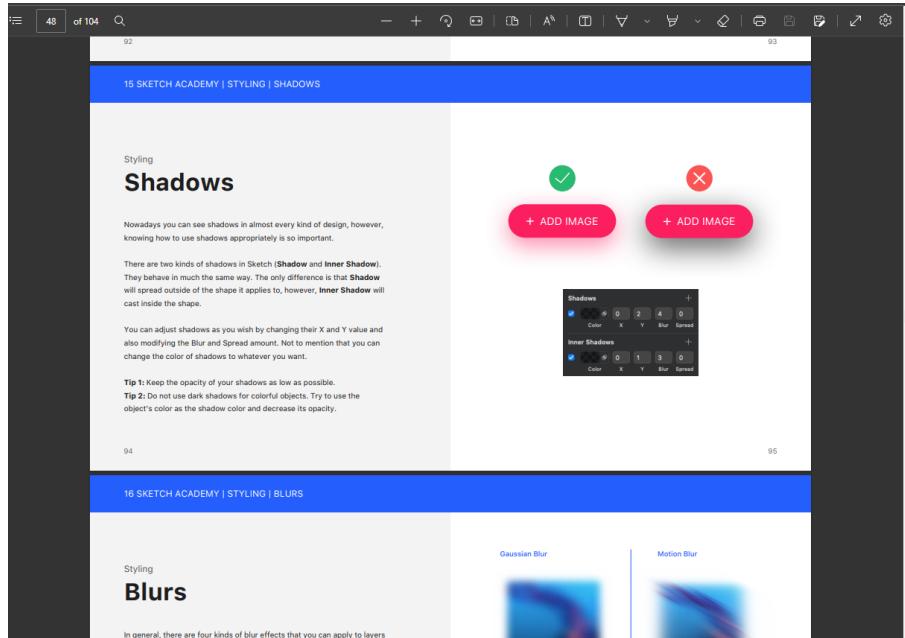
## 5. Free UI Kits

This part gives the link to download a zip file with files to use later.



## 6. Get Your Free E-book

This part is to get the PDF version of the theoretical part that will be given in the next videos, this is also the best-selling book of Arash.



## Section 2: Design Basics

### 7. Intro to Design Basics

Here it is just a brief explanation of all the content that is coming.

The screenshot shows a Udemy course video player. The main content area displays a Figma design for 'Chapter 02 Design Basics'. The title 'Chapter 02 Design Basics' is at the top, followed by the subtitle 'Layout, Iconography, Typography, etc.'. Below the title, there are several floating red and orange icons representing different design concepts like 'Hierarchy', 'Balance', 'Visual noise', 'Iconography', 'Typography', 'Color Contrast', and 'Color Palette'. The sidebar on the right is titled 'Contenido del curso' and lists the following sections:

- 7. Intro to Design Basics (selected)
- 8. Layout
- 9. Visual hierarchy
- 10. Visual noise
- 11. Iconography
- 12. Typography
- 13. Color Contrast
- 14. Color Palette

### 8. Layout

The importance of the way to show the information, being consistent with the information, this is the most important part since there is not a unique way to show the information.

The screenshot shows a Udemy course video player. The main content area displays a Figma design for '01 DESIGN BASICS | LAYOUT'. It features two side-by-side mobile application screens. The left screen shows a login form with fields for 'Email' and 'Password', and a 'Sign In' button. The right screen shows a similar login form with additional fields for 'Name' and 'Phone'. Both screens include social media sharing buttons for Facebook and Google+. The sidebar on the right is titled 'Contenido del curso' and lists the following sections:

- 8. Layout (selected)
- 9. Visual hierarchy
- 10. Visual noise
- 11. Iconography
- 12. Typography
- 13. Color Contrast
- 14. Color Palette
- 15. Spacing
- 16. Composition

### 9. Visual Hierarchy

This is about how we look at designs, the importance to put ourselves in the user shoes and see what they see to give them the information they need and want.

The screenshot shows a Udemy course video player. The main content area displays a Figma design for '02 DESIGN BASICS | VISUAL HIERARCHY | PART 1'. It features a diagram illustrating visual hierarchy with three columns of varying widths. The sidebar on the right is titled 'Contenido del curso' and lists the following sections:

- 9. Visual hierarchy (selected)
- 10. Visual noise
- 11. Iconography
- 12. Typography
- 13. Color Contrast
- 14. Color Palette
- 15. Spacing
- 16. Composition
- 17. Design Guide

## 10. Visual noise

Everything that gives too much and unnecessary information to the user. It is always a good idea to ask to the user if you are not sure about it.

The screenshot shows a Udemy course video player. The title bar says 'Learn Figma: User Interface Design Essentials - UI/UX Design'. The main content area displays a slide with the heading 'Design Basics' and 'Visual Noise'. The slide text explains that visual noise is about screens with too much information. It advises designers to focus on user needs and seek user feedback. To the right, there's a 'Contenido del curso' sidebar listing topics from '10. Visual noise' to '18. Consistent fonts', each with a duration indicator.

## 11. Iconography

It is not necessary to reinvent the wheel, a lot of icons are already design but in case it is necessary because of the unique type, then it is important to keep the harmony and consistency to be sure users can understand them.

This screenshot is identical to the one above, showing the same slide content and course navigation sidebar.

## 12. Typography

Avoid confuse the user by using not more than 3 types of fonts, 2 is the best.

The screenshot shows a Udemy course video player. The title bar says 'Learn Figma: User Interface Design Essentials - UI/UX Design'. The main content area displays a slide with the heading 'Typography Foundation'. It discusses what typography is and how it transforms language into a visual element. It emphasizes the importance of using a limited number of fonts (no more than 3) and provides a comparison between 'DEFAULT SPACING' and 'MODIFIED SPACING' with examples of letter 'A' and 'B'. To the right, there's a 'Contenido del curso' sidebar listing topics from '12. Typography' to '20. Consistent Icons', each with a duration indicator.

## 13. Color Contrast

Important for readability and legibility, do not let the creativity makes difficult to the user to understand the design.

Contenido del curso

- 13. Color Contrast
- 14. Color Palette
- 15. Spacing
- 16. Composition
- 17. Design Guide
- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements

## 14. Color Palette

Again, not more than 3 different colors, and always important to choose them to think in the properties of the color to combine them.

Contenido del curso

- 14. Color Palette
- 15. Spacing
- 16. Composition
- 17. Design Guide
- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements
- 22. Font Resources

## 15. Spacing

Keep the design clear using consistency in the spacing patterns. This part is not always easy to see once you are designing when you are just starting.

Contenido del curso

- 15. Spacing
- 16. Composition
- 17. Design Guide
- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements
- 22. Font Resources
- 23. Color Resources

## 16. Composition

Using the golden ratio to direct the user attention to a specific part of the design and also setting there the most important information.

Contenido del curso

- 16. Composition
- 17. Design Guide
- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements
- 22. Font Resources
- 23. Color Resources
- 24. Icon Resources

## 17. Design Guide

This makes design easier, having a path to follow is useful to avoid creating designs that do not fit with the whole project.

Contenido del curso

- 17. Design Guide
- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements
- 22. Font Resources
- 23. Color Resources
- 24. Icon Resources

## 18. Consistent fonts

Here more about the importance of the type of fonts and some advice to which one use depending on the type of design.

Contenido del curso

- 18. Consistent fonts
- 19. Consistent Colors
- 20. Consistent Icons
- 21. Consistent UI Elements
- 22. Font Resources
- 23. Color Resources
- 24. Icon Resources

## 19. Consistent Colors

Color is the most important part for a good design, always keeping consistency. Using the same color for every element that has the same meaning.

The screenshot shows a slide titled "12 DESIGN BASICS | CONSISTENCY | COLORS". The slide content discusses the importance of consistency in UI design, specifically regarding colors. It includes a section on "Consistency" and "Colors", with a note that applying colors to UI elements is crucial. It also shows two screenshots of a mobile checkout process: one for "Shipping" and one for "Payment", both using a consistent color scheme. The right side of the screen displays the course navigation panel with a list of lessons and their durations.

## 20. Consistent Icons

Important to consider the scalability, sized, consistency and alignment of your icons. They should give the same message, the same meaning, and the same feeling in every interface.

The screenshot shows a slide titled "13 DESIGN BASICS | CONSISTENCY | ICONS". It discusses the importance of consistency in iconography, mentioning test scalability, proper size, internal consistency, and perfect alignment. It compares "Consistent Iconography" (using outline icons) with "Inconsistent Iconography" (using outline and solid icons at the same time). The right side of the screen shows the course navigation panel.

## 21. Consistent UI Elements

It is important to recognize all the different UI Elements to can search information about it or find them easily once we are working with them.

The screenshot shows a slide titled "14 DESIGN BASICS | CONSISTENCY | UI ELEMENTS". It defines what UI elements are and lists them, including Buttons, Cards, Text Fields, Sliders, Dialogs, Charts, Maps, Tables, Selection Controls, Menus, and Snackbars. It also shows a screenshot of a mobile app interface featuring various UI elements like buttons, charts, and maps. The right side of the screen shows the course navigation panel.

## 22. Font Resources

Some websites where it is possible to find and use different kind of fonts for free, one of the most popular and easy to implement is Google Fonts.

The screenshot shows a Udemy course interface. The main content area displays a slide titled "Font Resources". The slide content includes a list of websites for finding fonts (Google Fonts, MyFonts, Adobe Fonts) and tools for pairing fonts (TypeWolf, FontPair). Below the list, there is a note about troubleshooting font pairing. To the right of the slide, there is a preview of a Figma design interface. On the right side of the screen, the "Contenido del curso" (Course Content) sidebar is visible, showing a list of lessons including "22. Font Resources", "23. Color Resources", and "24. Icon Resources". The "Sección 3: Figma Academy" section is expanded, listing lessons such as "25. Introduction to Figma", "26. Figma Requirements", and "27. Figma Environment". A "Recursos" (Resources) button is located at the bottom right of the sidebar.

## 23. Color Resources

Since it is difficult to choose colors once you are starting with designs, these websites can help with information and inspiration to choose the right colors.

The screenshot shows a Udemy course interface. The main content area displays a slide titled "Color Resources". The slide content includes a list of websites for finding colors (Color Hunt, Adobe Color, Colors, WebGradients) and a note about spending time finding the best color palette. To the right of the slide, there is a preview of a Figma design interface. On the right side of the screen, the "Contenido del curso" (Course Content) sidebar is visible, showing a list of lessons including "23. Color Resources" and "24. Icon Resources". The "Sección 3: Figma Academy" section is expanded, listing lessons such as "25. Introduction to Figma", "26. Figma Requirements", and "27. Figma Environment". A "Recursos" (Resources) button is located at the bottom right of the sidebar.

## 24. Icon Resources

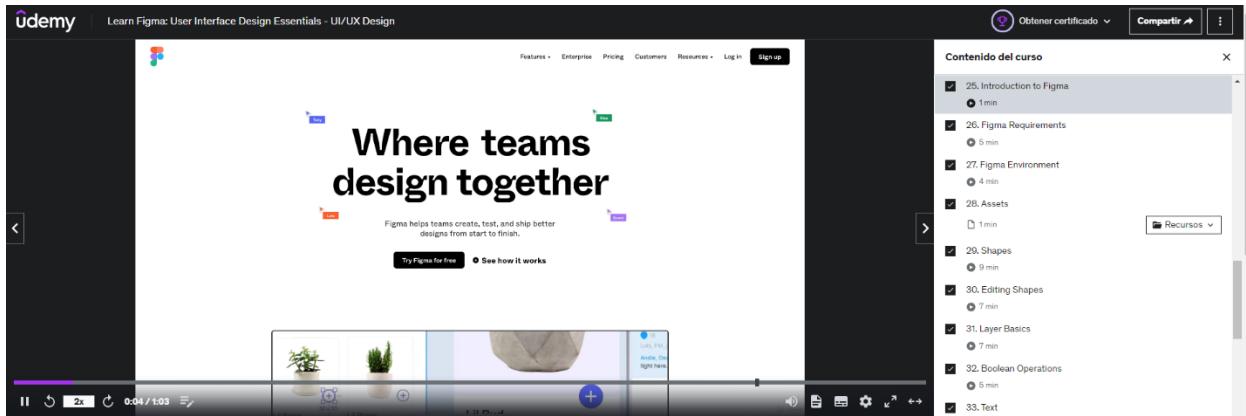
Again, do not reinvent the wheel and use the icons that are already available in some websites completely for free.

The screenshot shows a Udemy course interface. The main content area displays a slide titled "Icon Resources". The slide content includes a list of websites for finding icons (FlatIcon, IconFinder, Nucleo) and a note about using recognizable icons. To the right of the slide, there is a preview of a Figma design interface. On the right side of the screen, the "Contenido del curso" (Course Content) sidebar is visible, showing a list of lessons including "24. Icon Resources". The "Sección 3: Figma Academy" section is expanded, listing lessons such as "25. Introduction to Figma", "26. Figma Requirements", and "27. Figma Environment". A "Recursos" (Resources) button is located at the bottom right of the sidebar.

## Section 3: Figma Academy

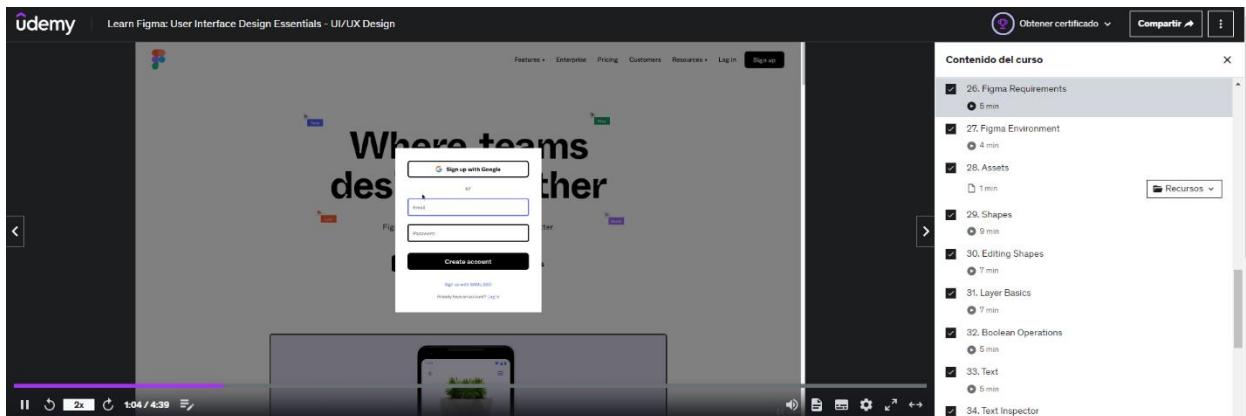
### 25. Introduction to Figma

Brief description of what Figma is and how to use it.



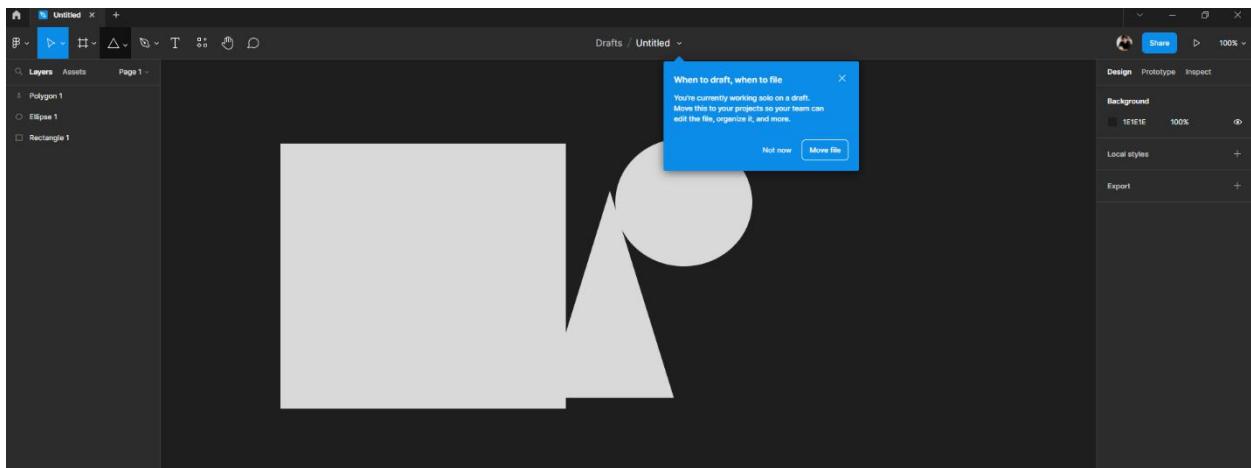
### 26. Figma Requirements

Getting Figma, creating an account working from the web browser or the app, create teams, etc.



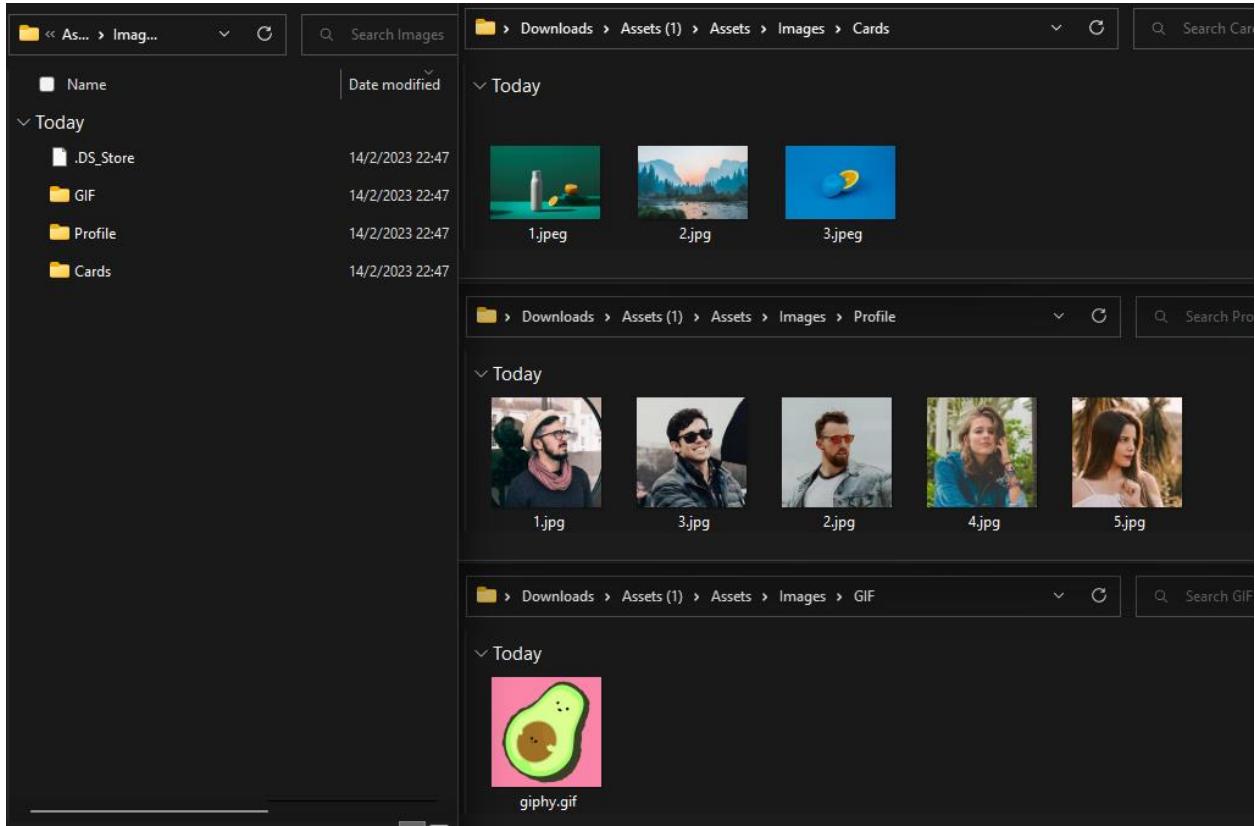
### 27. Figma Environment

First and quick look to all the options that Figma has, here is installed in windows using dark theme.



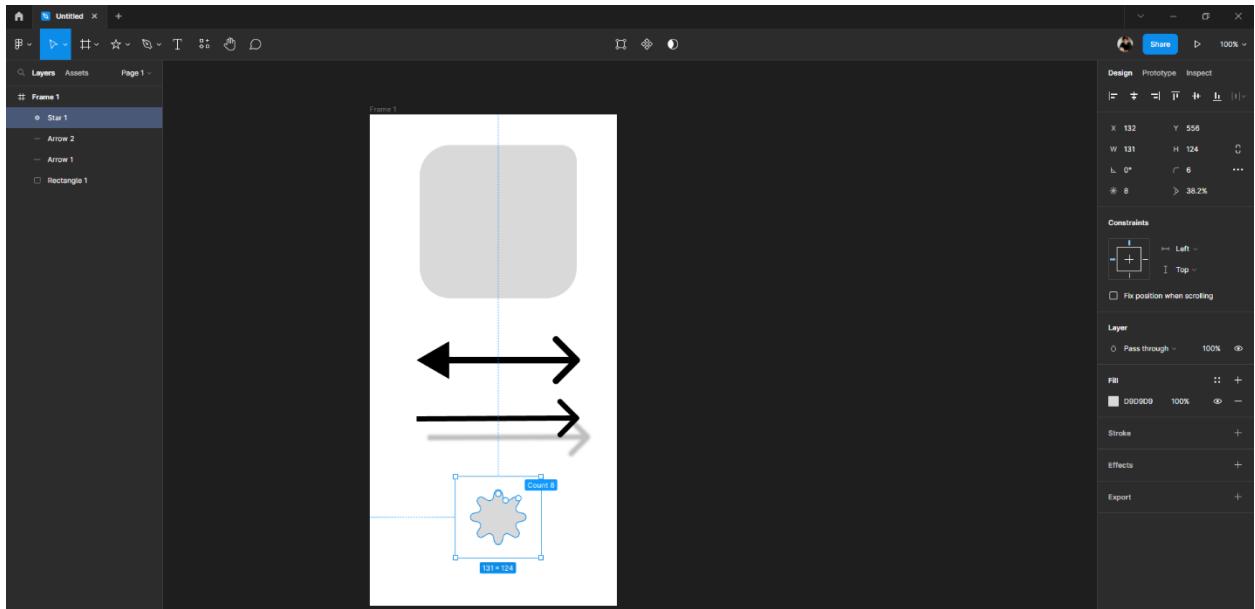
## 28. Assets

Some assets that will be used in the next classes.



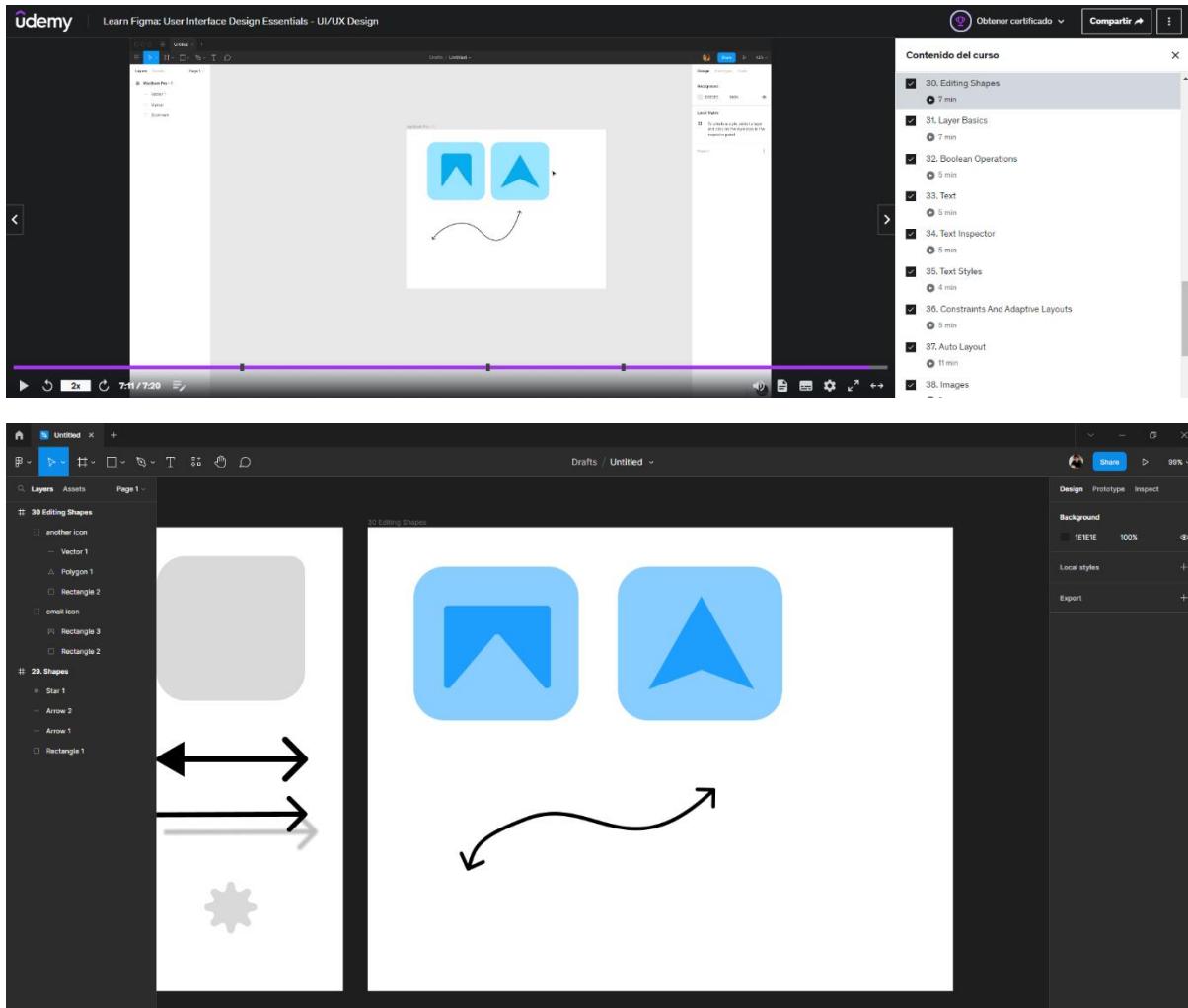
## 29. Shapes

Understanding the shapes and properties, like the sizes, shadows, positions, round borders, etc.



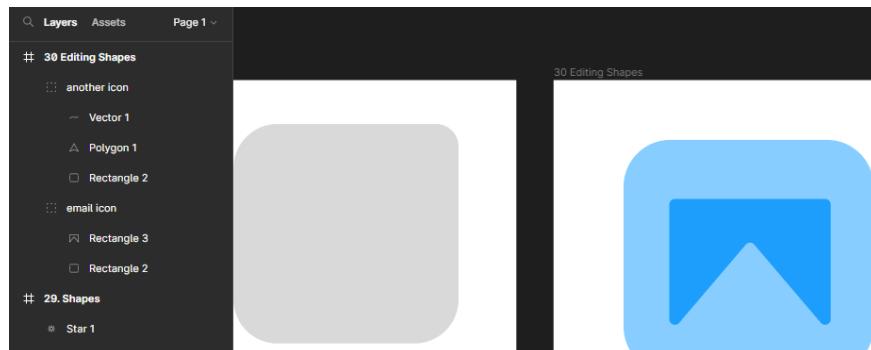
## 30. Editing Shapes

Here just showing how to make more changes in the shapes.



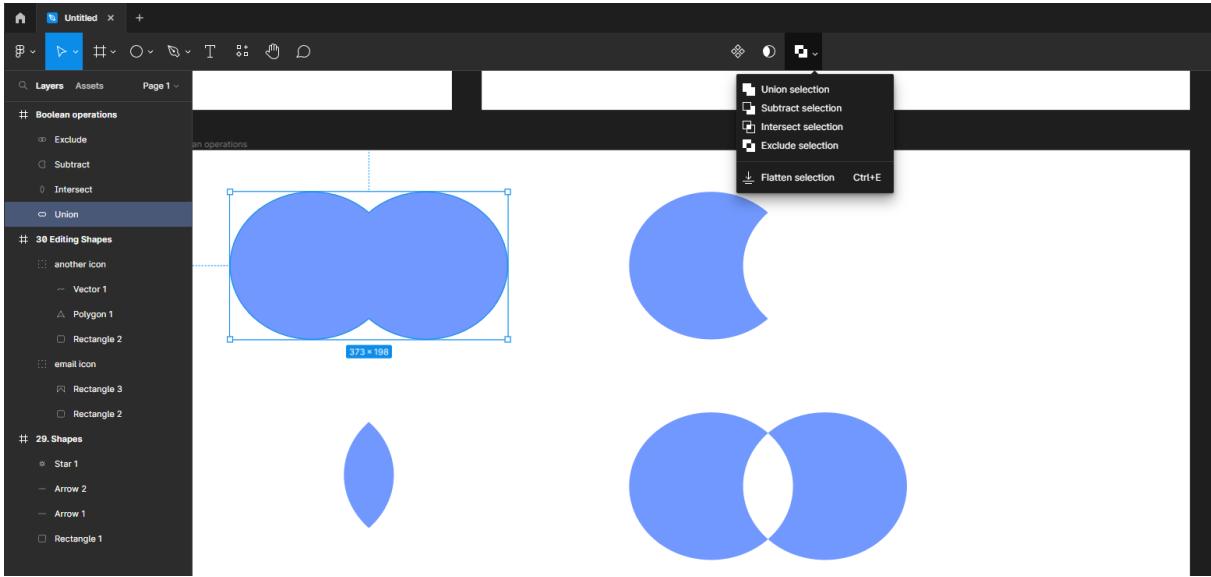
## 31. Layers Basics

Layers are in the left part, and they are useful to group some parts of the content that can be block or hide or just duplicate them to use the same whole element in other part.



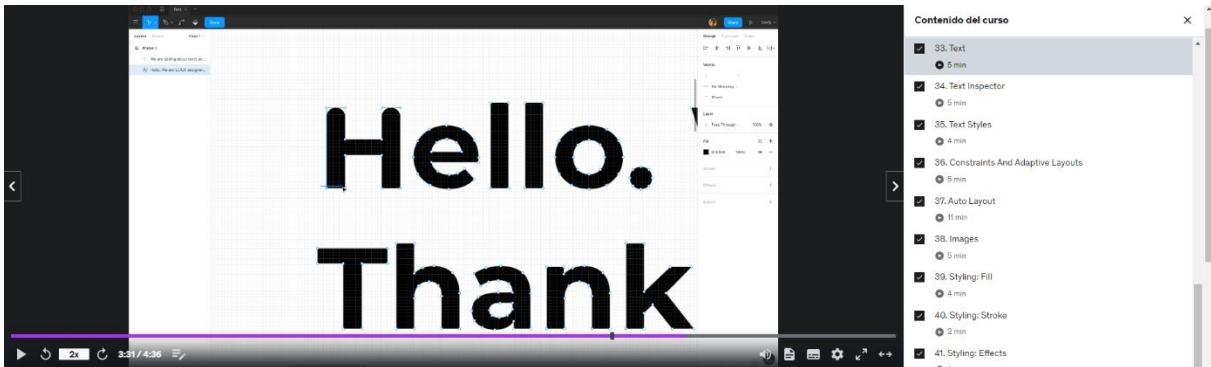
## 32. Boolean Operations

Union, Exclude, Subtract, Intersect.



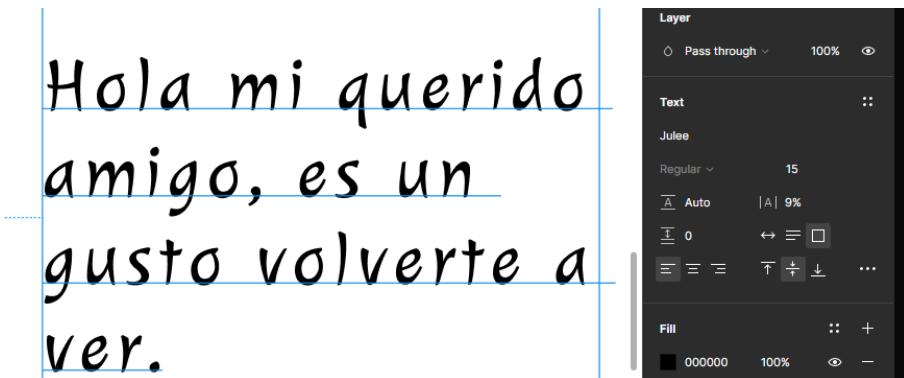
## 33. Text

Insert text is easy as press **ctrl + T** or also using the option from the top menu. The text can be transform to a vector to edit letter by letter if it is necessary.



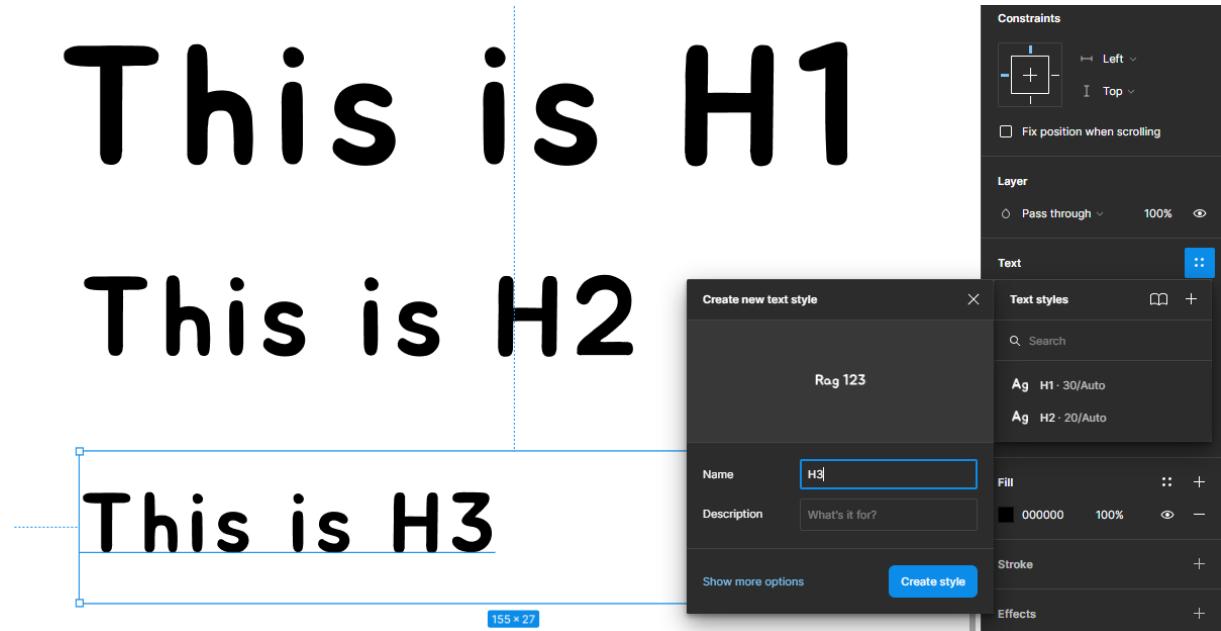
## 34. Text Inspector

This part is used to modify the properties of the text like the size, font, space, etc.



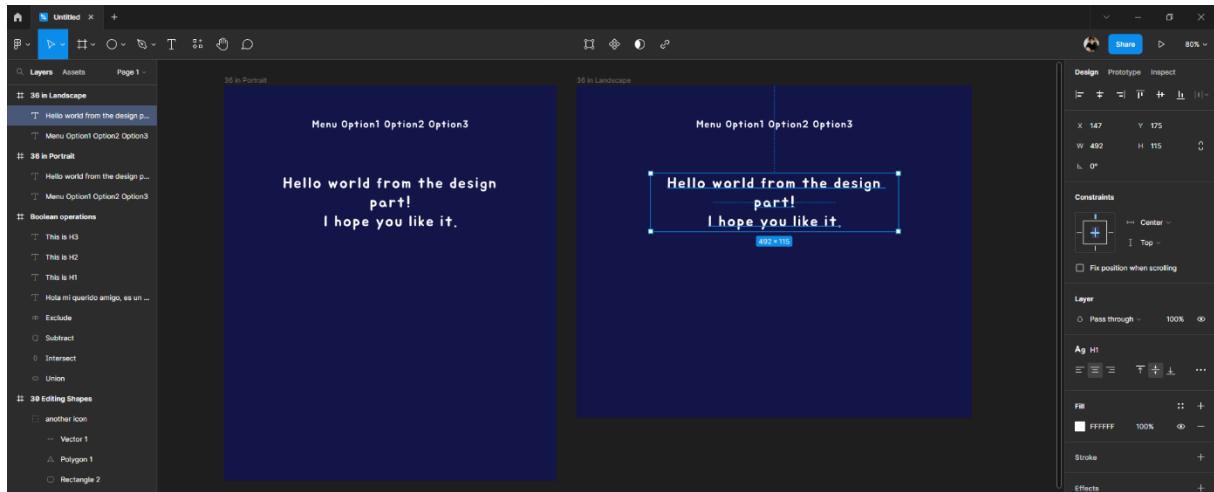
## 35. Text Styles

To normalize the project and use the same type of texts, you can create text styles, using for example the name of the tags in HTML (but for colors we need a color style too).



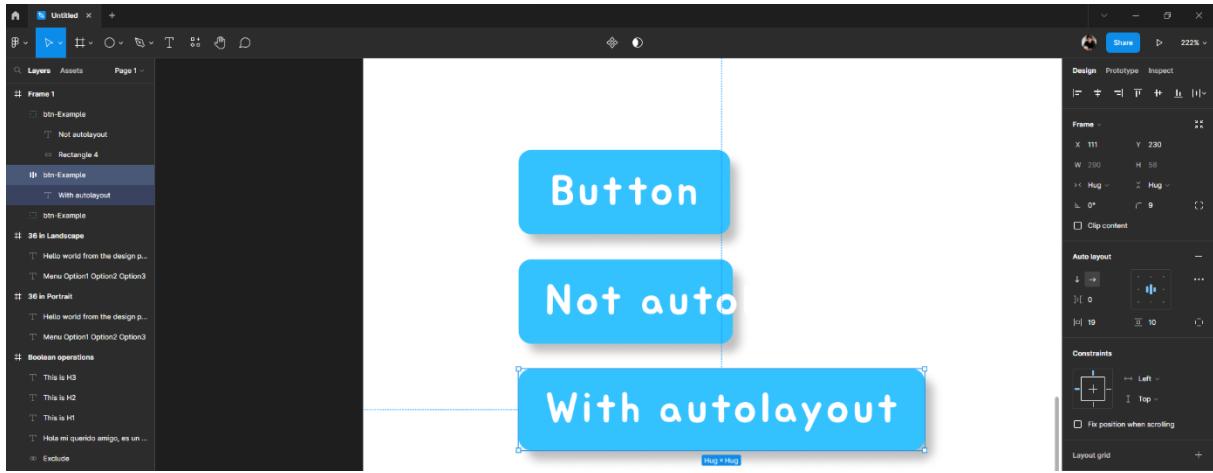
## 36. Constraints And Adaptive Layouts

To be able to create responsive designs that are adapted to the portrait or landscape screens. This option is in the right menu, with the properties of the elements. The element can be centered in horizontal or vertical or even both ways to keep it exactly in the middle.



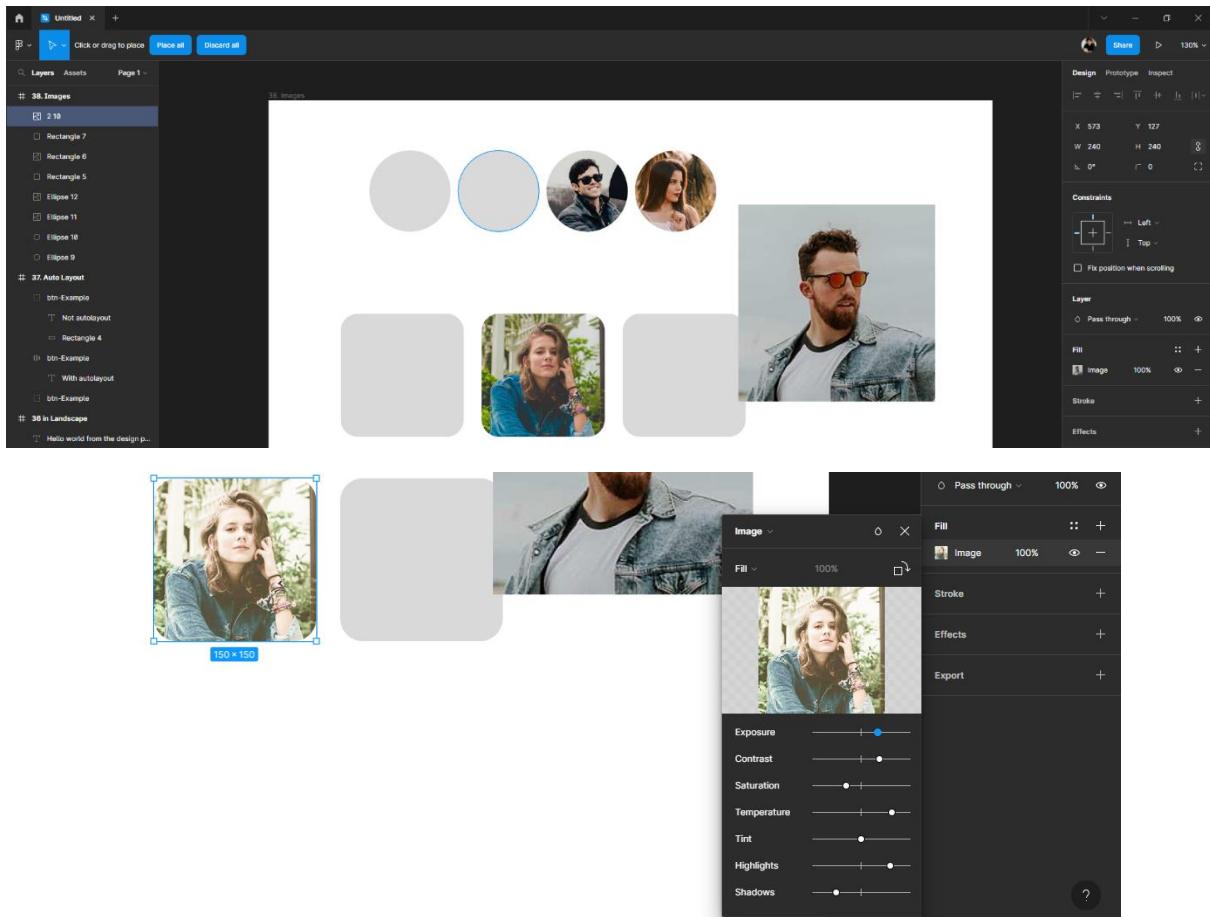
## 37. Auto Layout

To avoid resize elements that are in group, auto layout allows you to change one element and automatically change the size of other element related to that one. For example, with the text inside a button.



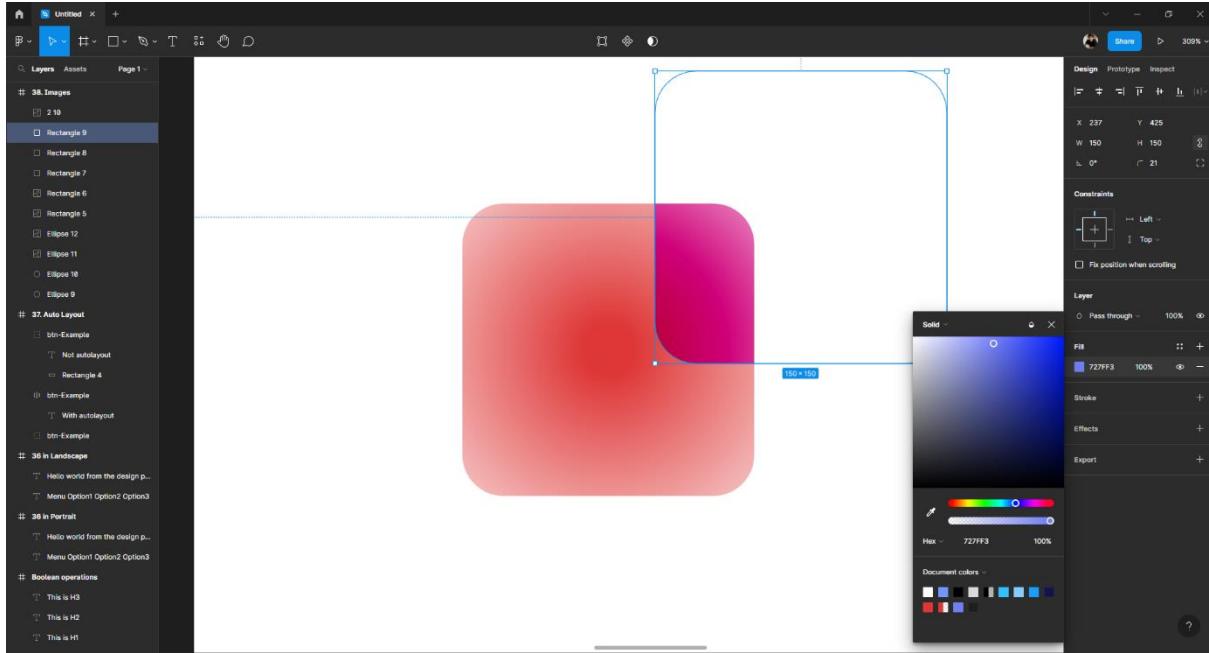
## 38. Images

Insert an image can be as easy as drag and drop an image from your computer but sometimes it is necessary to insert the image with an specific shape. Also, it's possible to change image properties.



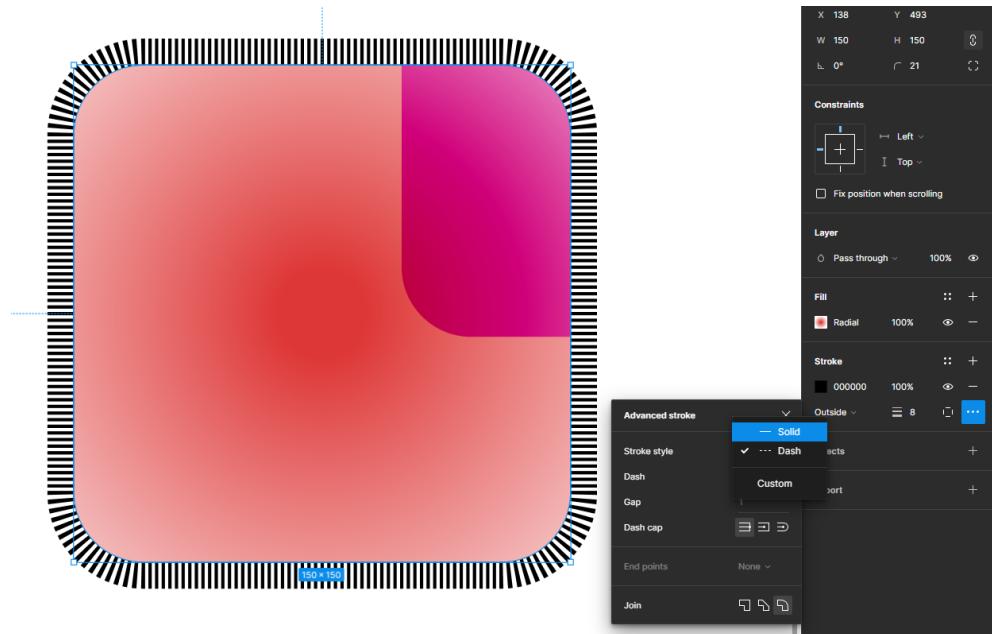
## 39. Styling: Fill

This option gives the possibility to set a color if it is solid, linear, etc. Or if it is a picture or another kind of behaviors.



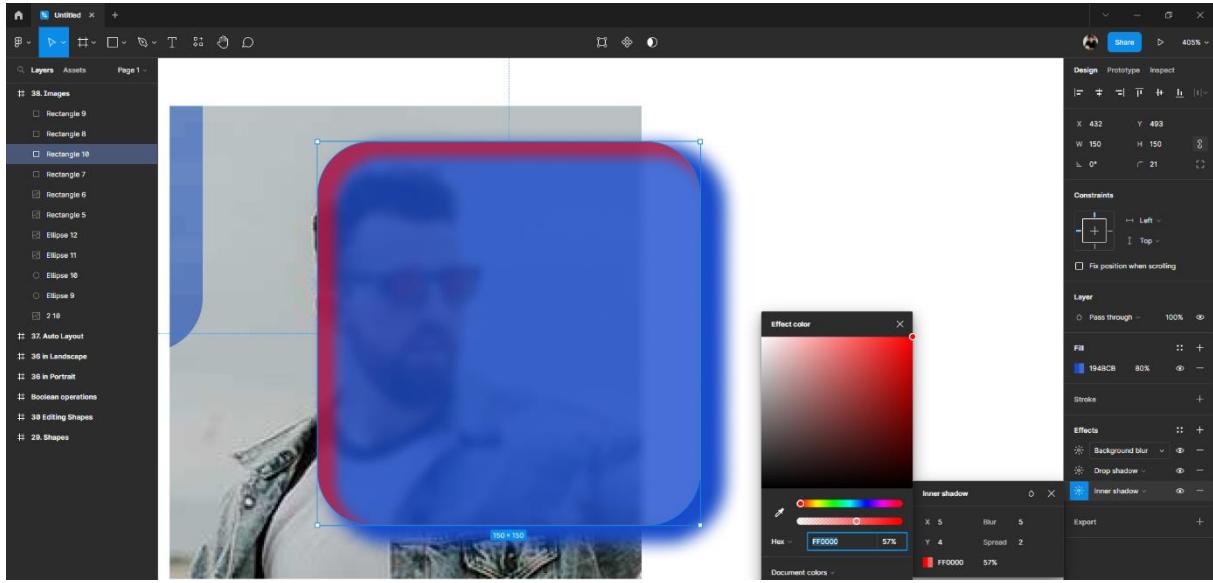
## 40. Styling Stroke

Like the fill option, this also allows multiple properties that can be added or modified.



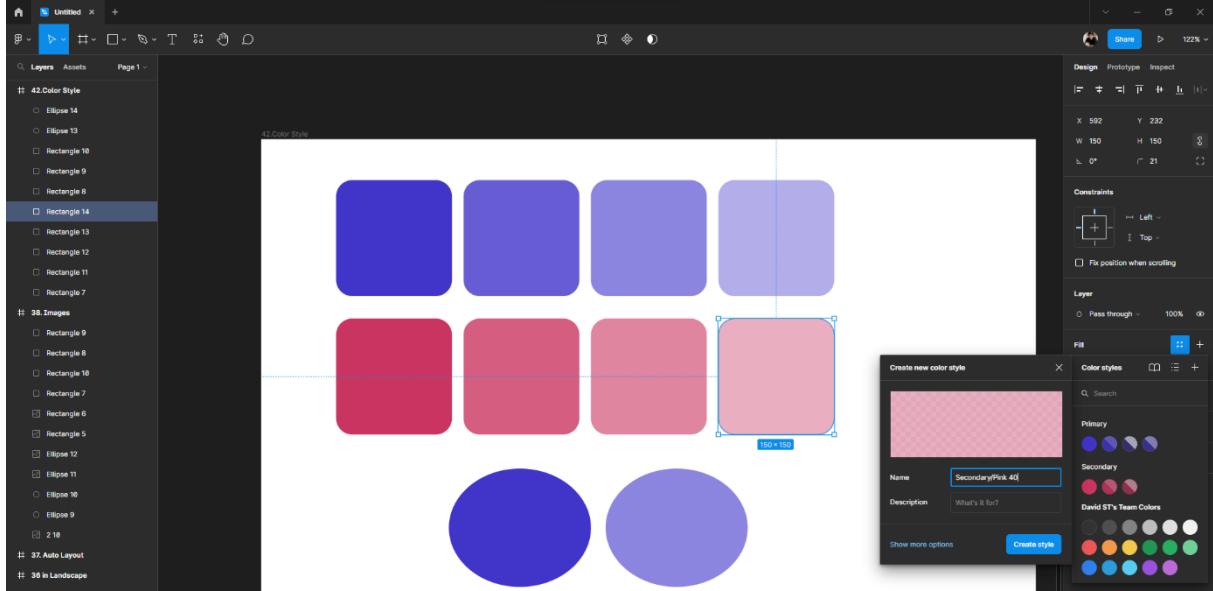
## 41. Styling: Effects

It is possible to add some effects like shadows and also background blur, this can be set in front of an image or set the image as a background and then make it blurry.



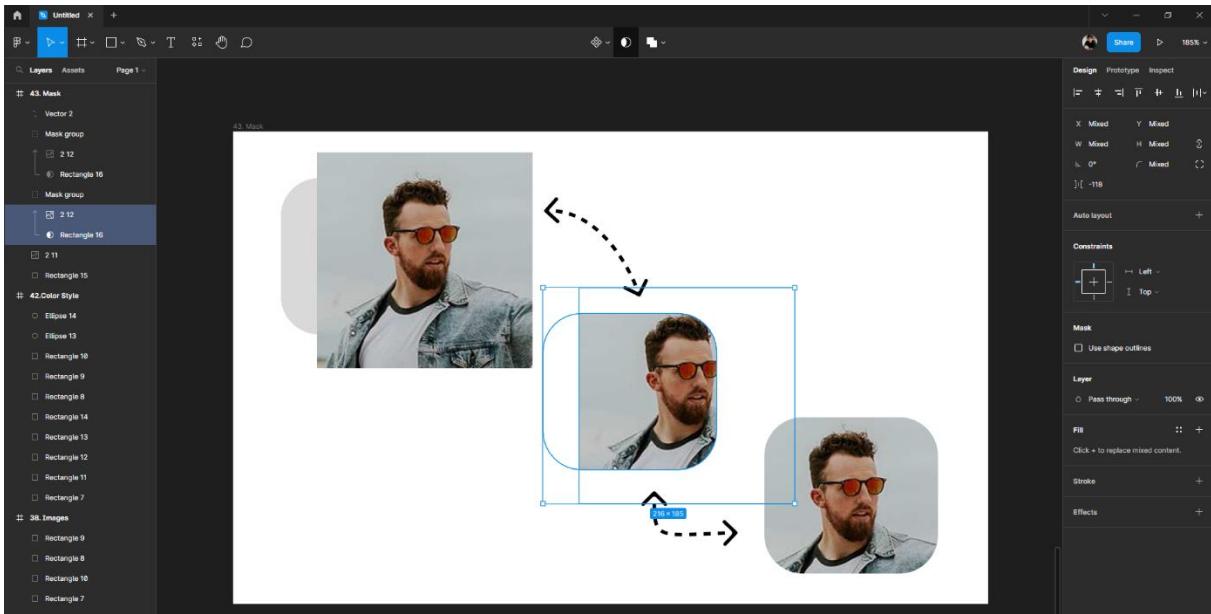
## 42. Color Style

This part is important to create an style that can be use in different elements, so it is easy just to set the specific style and if a change is need, then it is not necessary to go element by element changing that color because all will be change just in the style itself.



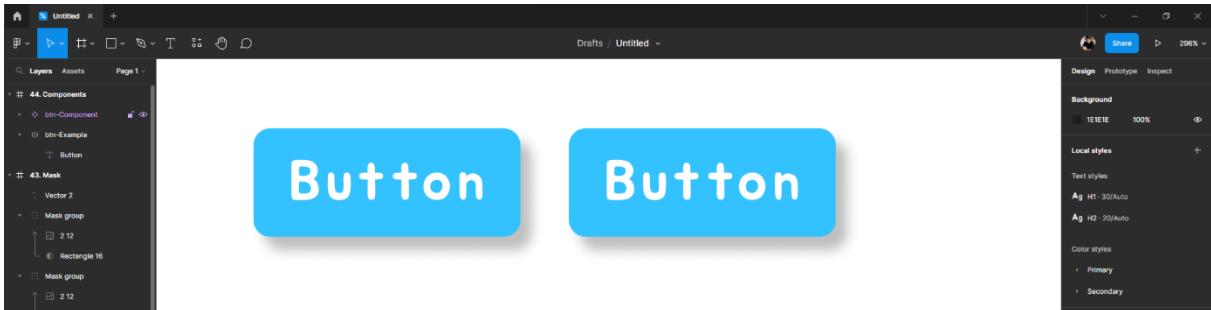
## 43. Masking

Used to make images or even other elements in a specific shape.

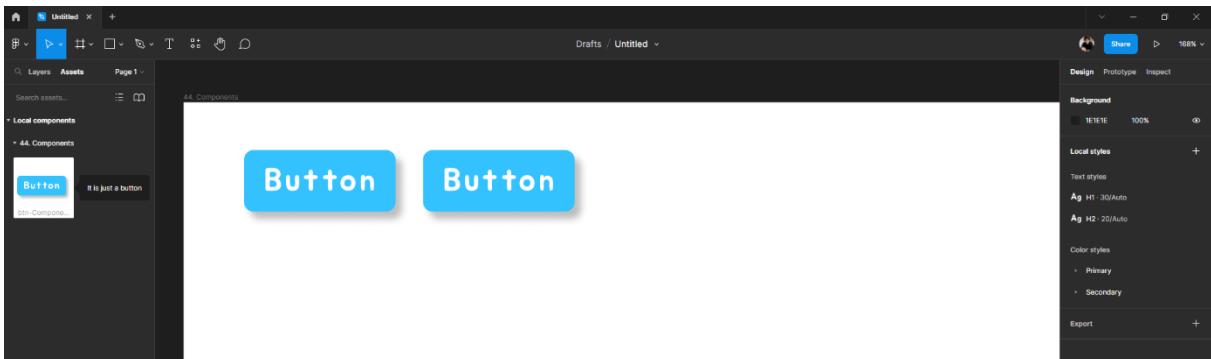


## 44. Components

The main point is created once and use in multiple part, like the styles but now with a group of elements that can be sections, buttons, menus, etc.

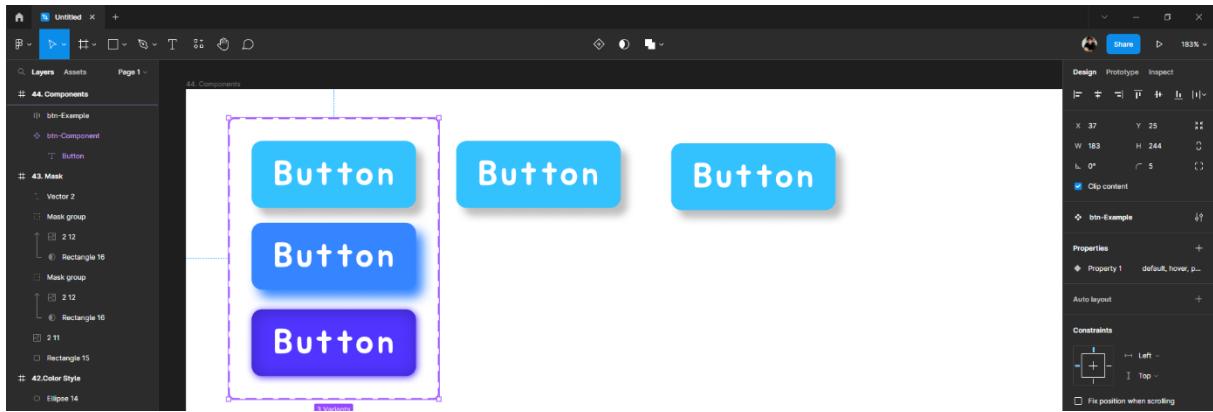


These components can have a description and even a link for the documentation. And to use them is just go to the Assets in the top of the left menu and then you can drag and drop.

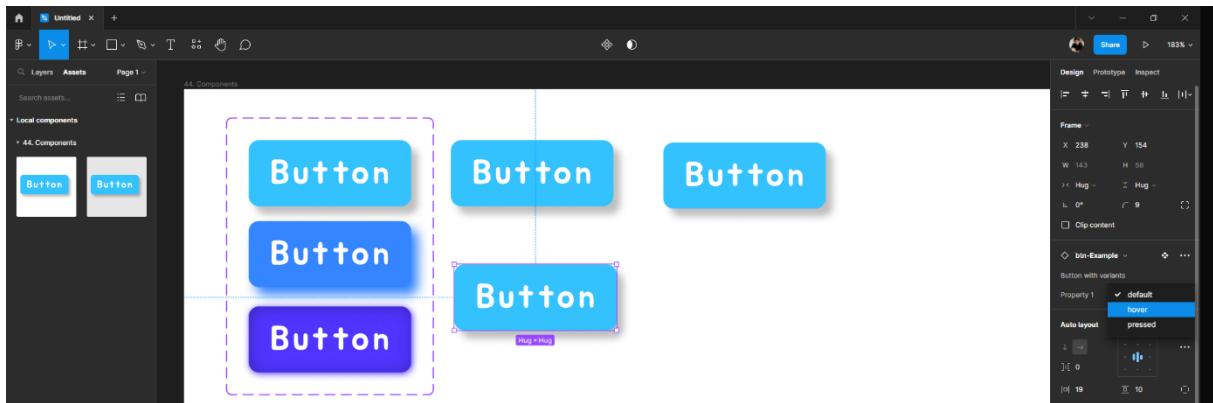


## 45. Variants

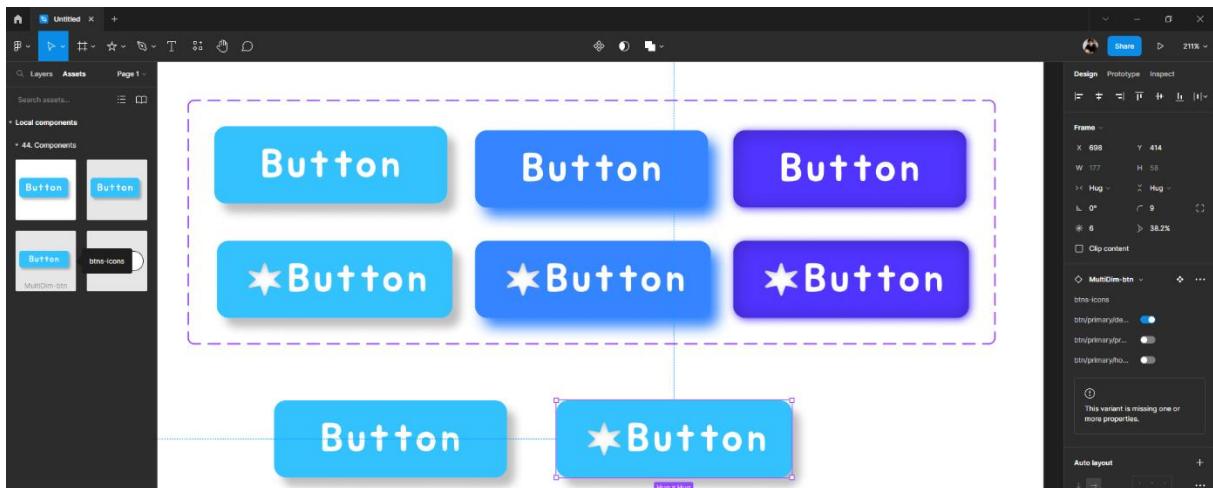
A good example is what if we want to have a button that has different states like when it is pressed or hover, then is when we can use the variants.



And now we still have one component which is the button but in the properties we can change the variant.

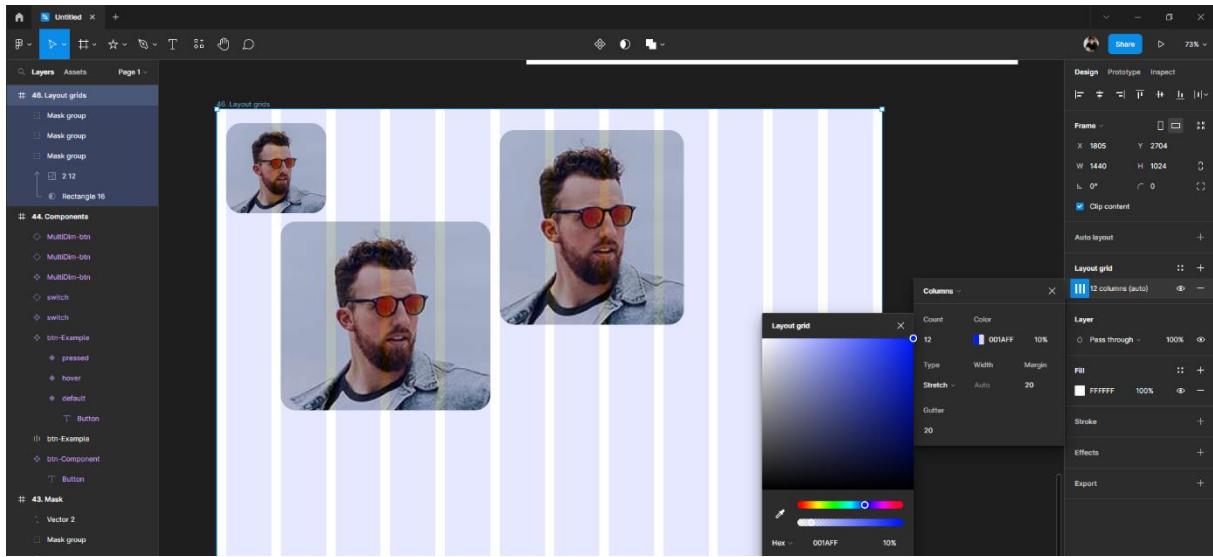


There are one-dimension variant and multi-dimension variant. This can be in the case that something is added to the normal one-dimension variant. And using “on” or “off” in the name allows us to use a switch in the properties to add or remove that variant.



## 46. Layout Grids

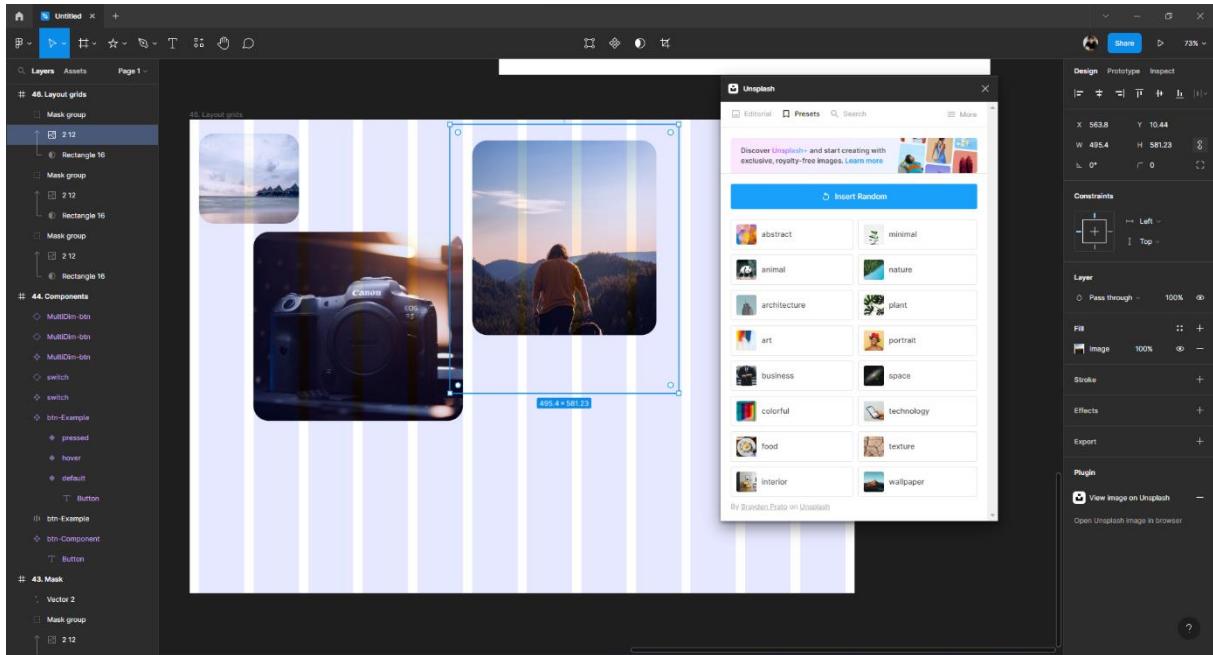
This is very useful to set the elements in a good position following a pre-defined structure, one of the examples can be using bootstrap when the width of the row is split in 12 columns.



## 47. Plugins

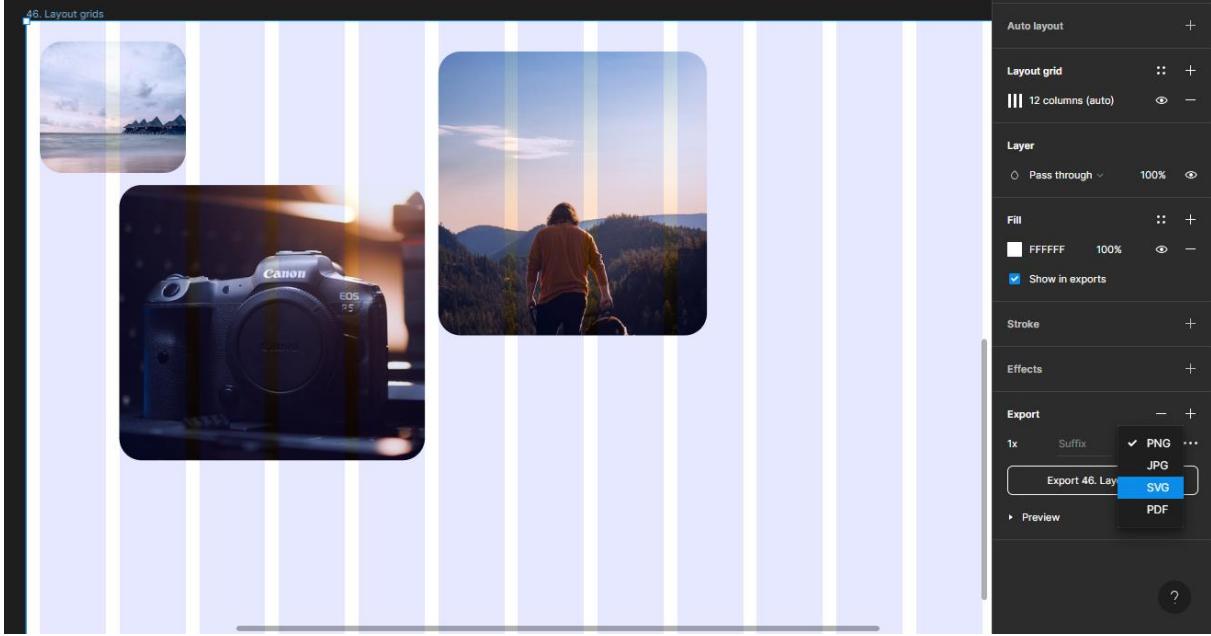
Figma has a section with all the different plugins that are so easy to install and with good documentation to use. In this example we use Unsplash, a plugin to insert pictures.

There are a lot of different kind of plugins to different uses that can help you to save time. It is always important to remember in not reinvented the wheel. Plus, you can always create your own plugin and even share it with the community of Figma.

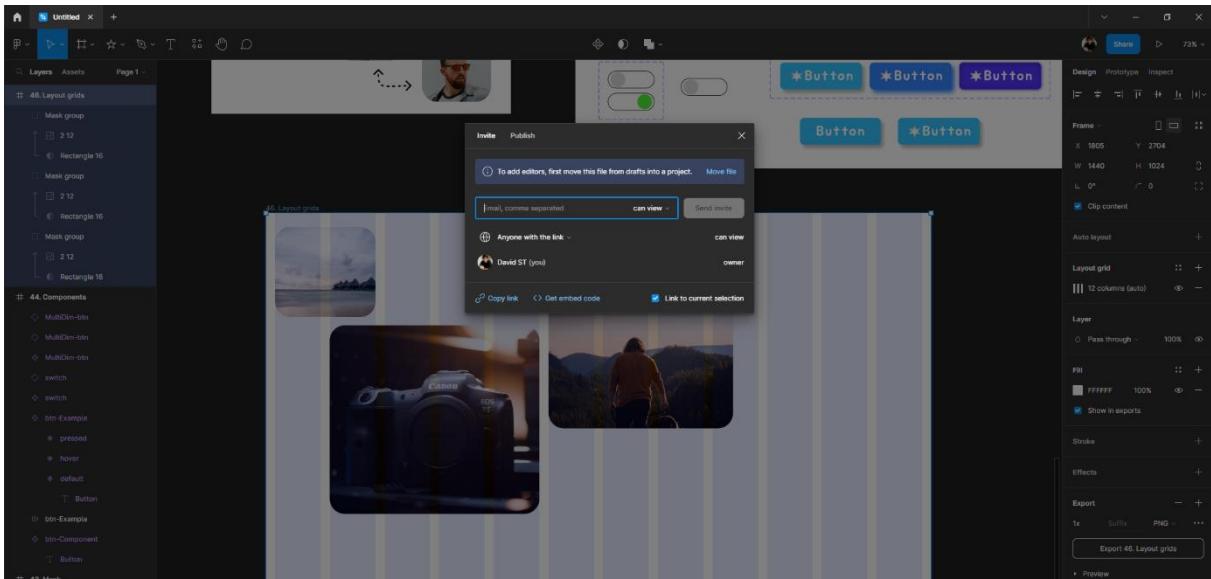


## 48. Exporting

For exporting it is just select the element or group of elements, can be even a frame and then go to the right menu, in the bottom, the last option is Export and allows you to export in different formats, size and a suffix for the name.

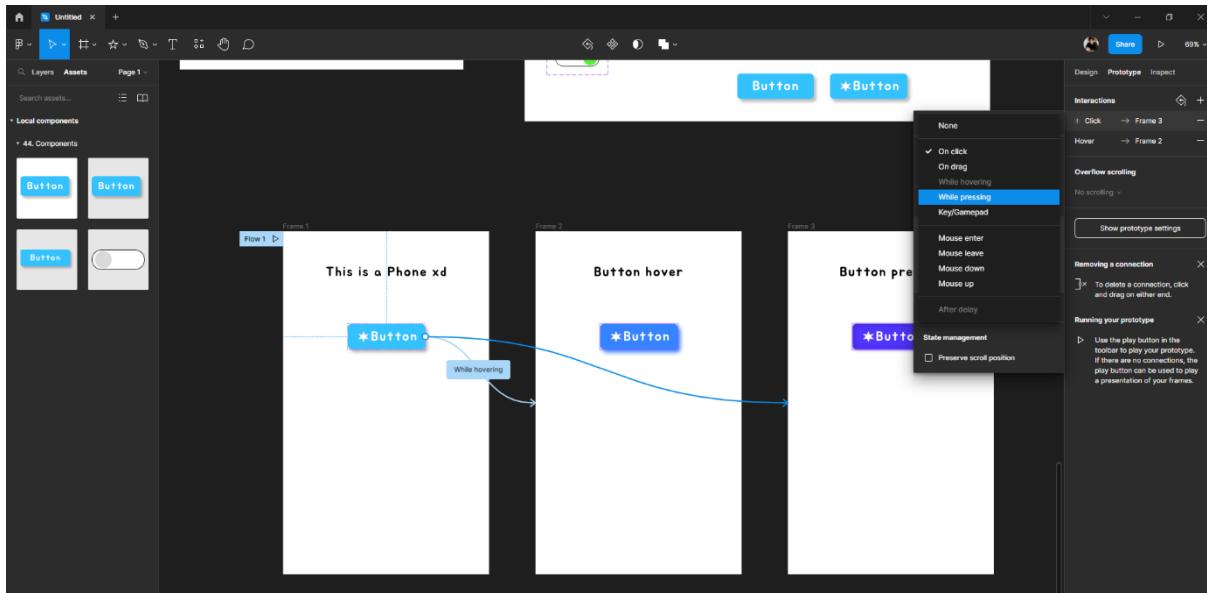


But in the top right corner you can found the option to share, this can be for only view or edit if you want to share your designs with more people. For the edition Figma only allows a limited number of users that can work on it if you have a free account. But there is not limit for the views, the link can be copied and shared without problems.

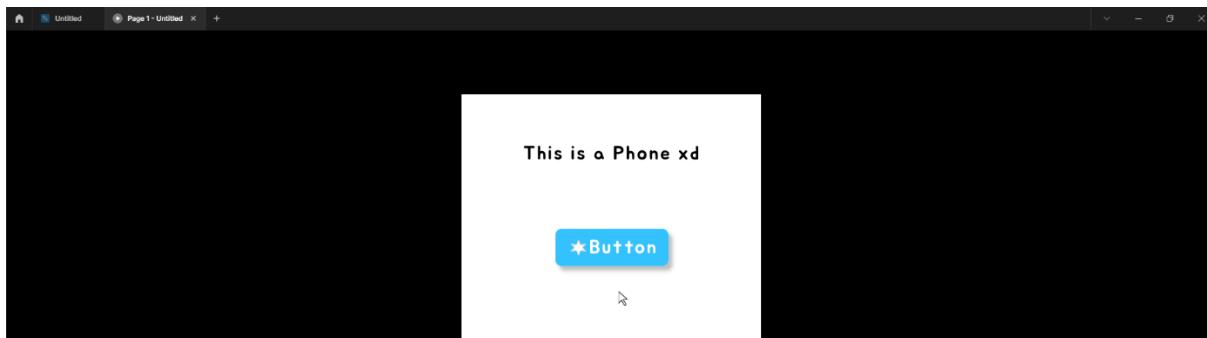


## 49. Prototyping

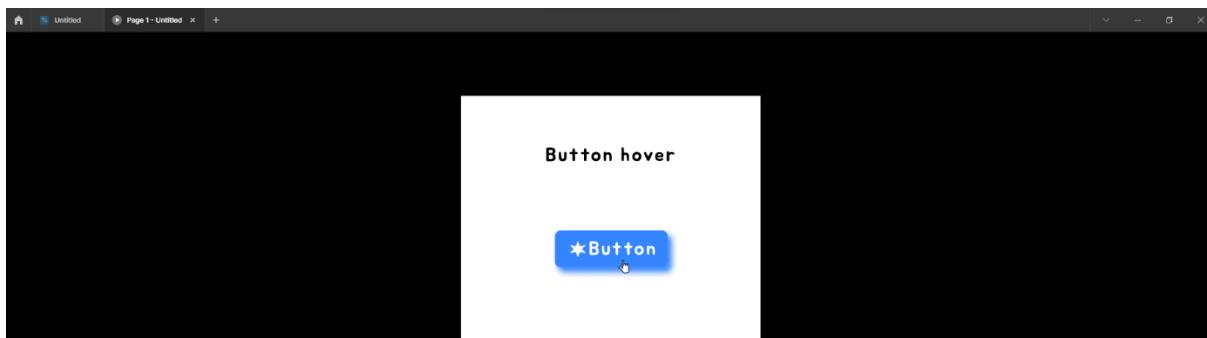
This helps us to see or to show how the design should work, it has different options to go from one frame to another or we can also say to go from one screen to another.



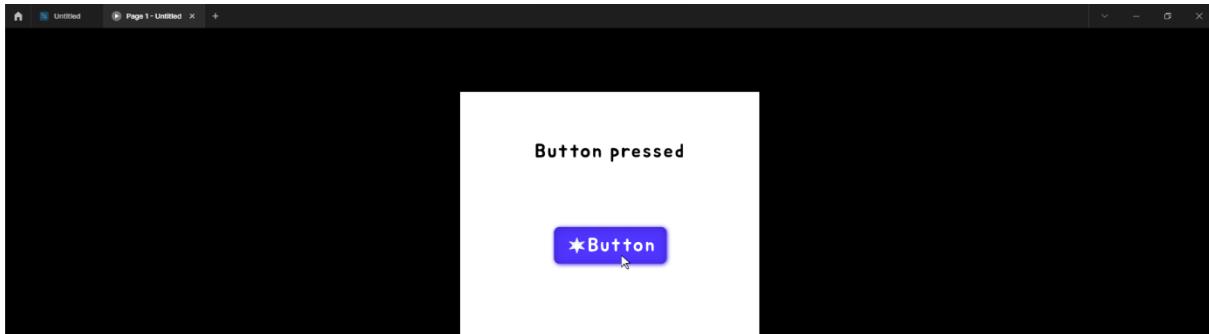
Once the prototype is done, choosing the right interactions, in the right top corner there is the option to run the prototype. There you will see the screens you set with prototyping.



And once we test the screens should change in the way it was set in the prototype.

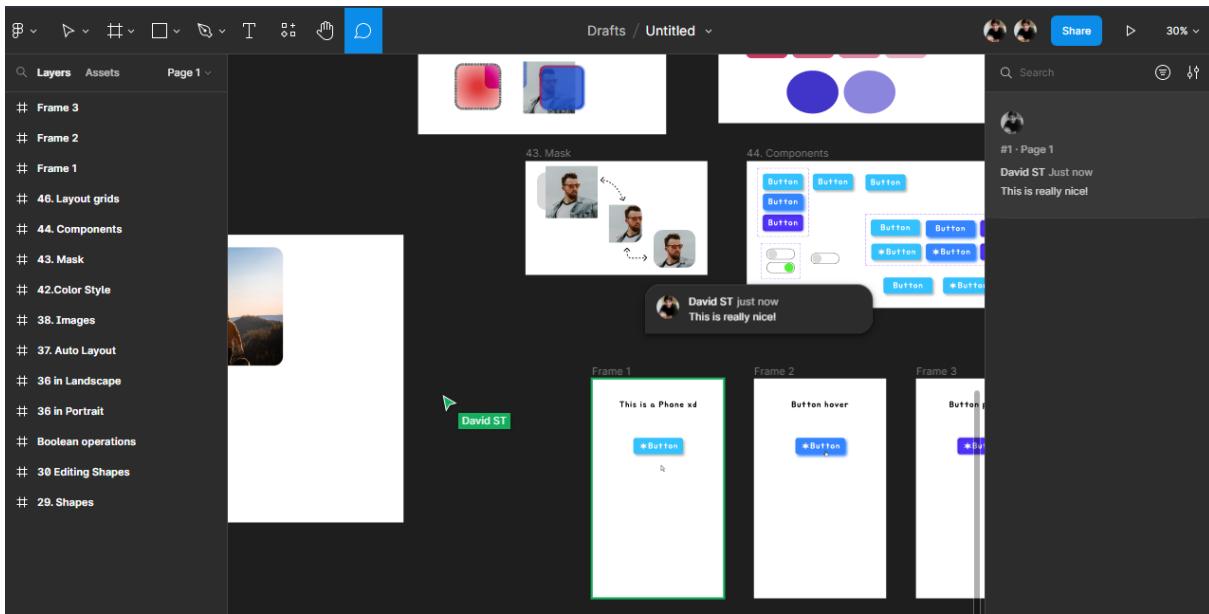


Here I had to create a mouse icon and a hand icon because it was not possible to see them with the screenshots. But it is working how it should.

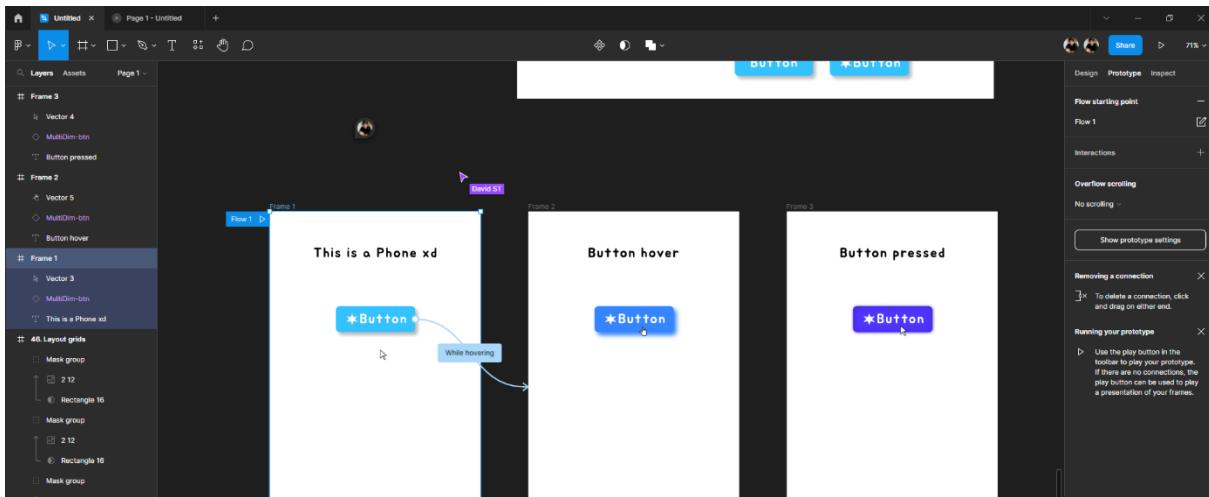


## 50. Multiplayer & Commenting

You can always set a comment in every part of the design, so another collaborator or viewer can see it. Also, you can always see where a collaborator is working now if she/he is in the current project.

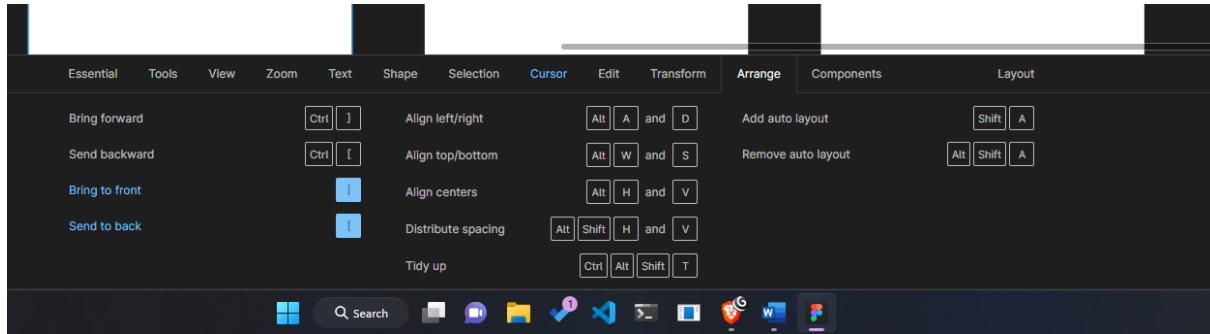


The previous screenshot was from the browser and the next one is a screenshot from the Figma App.



## 51. Keyboard Shortcuts

Shortcuts have some difference between macOS and Windows. To see all those shortcuts, it is just to go to the right bottom part of the program and click on the interrogation icon.



## 52. Final Projects

Here we can find a zip file with different elements that the teacher did during the classes.

This is just the summary of all the tools and components created in this section of the course.

Name	Type	Compressed size	Password ...	Size	Ratio
_MACOSX	File folder				
Auto Layout.fig	FIG File	19 KB	No	19 KB	4%
Boolean Operations.fig	FIG File	16 KB	No	16 KB	5%
Components.fig	FIG File	14 KB	No	14 KB	5%
Constraints and Responsive Lay...	FIG File	17 KB	No	18 KB	6%
Editing Shapes.fig	FIG File	13 KB	No	14 KB	5%
Effects.fig	FIG File	178 KB	No	179 KB	1%
Images.fig	FIG File	10,714 KB	No	10,712 KB	0%
Plugins.fig	FIG File	541 KB	No	541 KB	1%
Prototyping.fig	FIG File	10,368 KB	No	10,365 KB	0%
Stroke.fig	FIG File	184 KB	No	185 KB	1%
Text Styles.fig	FIG File	16 KB	No	17 KB	7%
Text.fig	FIG File	44 KB	No	45 KB	4%

## Section 4: UI Elements

### Intro to the UI Elements

Brief explanation of what we are going to see in the next classes, to understand better all the UI Elements. More theory coming.

The screenshot shows a Udemy course page for 'Learn Figma: User Interface Design Essentials - UI/UX Design'. The main content area displays 'Chapter 04 UI Elements' with a preview image of a Figma interface featuring contact cards and a line chart. The sidebar on the right lists the course content under 'Contenido del curso' for 'Sección 4: UI Elements', containing 16 items, each with a duration of 1 minute.

The UI Elements in this section

This are all the elements that see in the next classes.

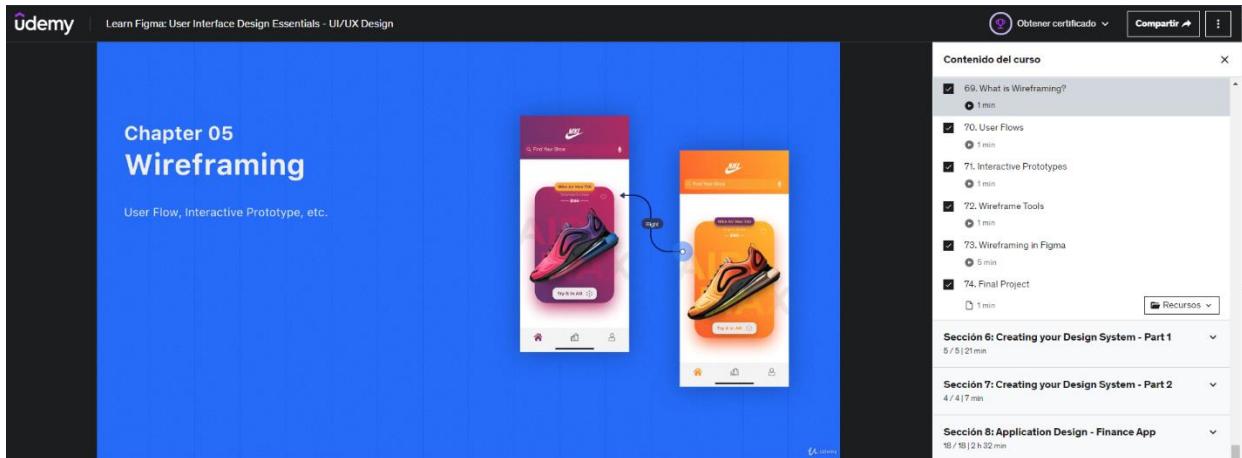
The screenshot shows the 'Contenido del curso' (Course Content) sidebar, listing 16 UI elements, each with a checkmark and a 1-minute duration. The list includes:

- 54. Text Fields
- 55. Buttons
- 56. Sliders
- 57. Tooltip
- 58. Selection Control
- 59. Chips
- 60. Cards
- 61. Dialogs
- 62. Lists
- 63. Tables
- 64. Navigation
- 65. Menu
- 66. Charts
- 67. Steppers
- 68. Snackbar
- 69. Wireframing

## Section 5: Wireframing

### Introduction to the Wireframing

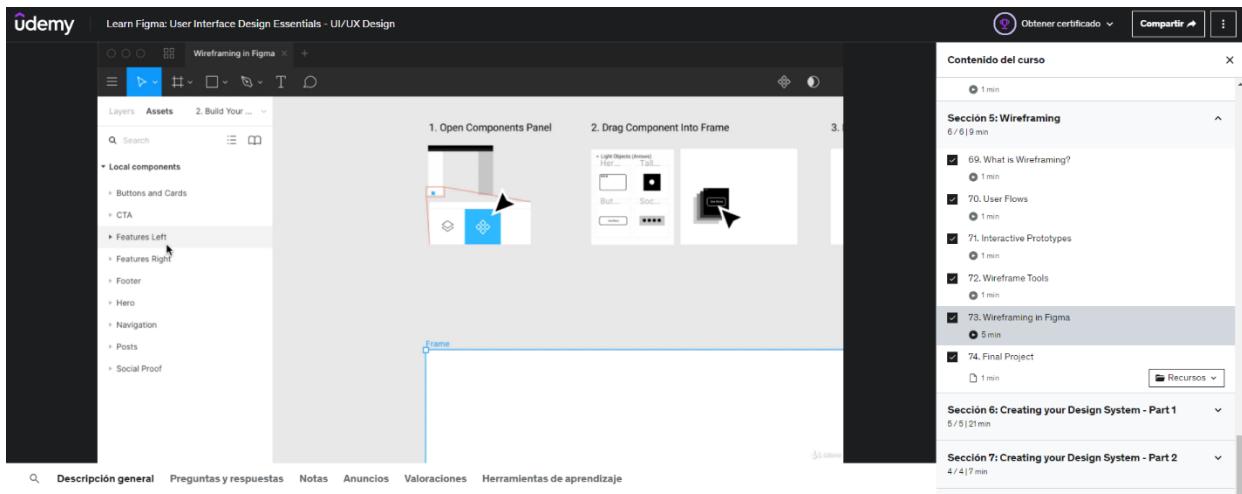
The Wireframe is like a blueprint of a machine, we can see all the details of the project and the initial state. And even when Wireframe is confused with Prototyping like a same thing, the truth is that Wireframe has low-fidelity design and Prototype has High-fidelity design, dynamic and interactive, even almost like the final product.



### More information about Wireframe and Prototype

Next classes are more about Theory in the wireframe and prototype itself. In the previous classes we already use the prototype to see how interact with a button when it is hover or pressed.

In one part it is mentioned that Figma also have the option to create a wireframe, and this is show with a project that Figma gives to try out using pre-made components and a pre-made design.

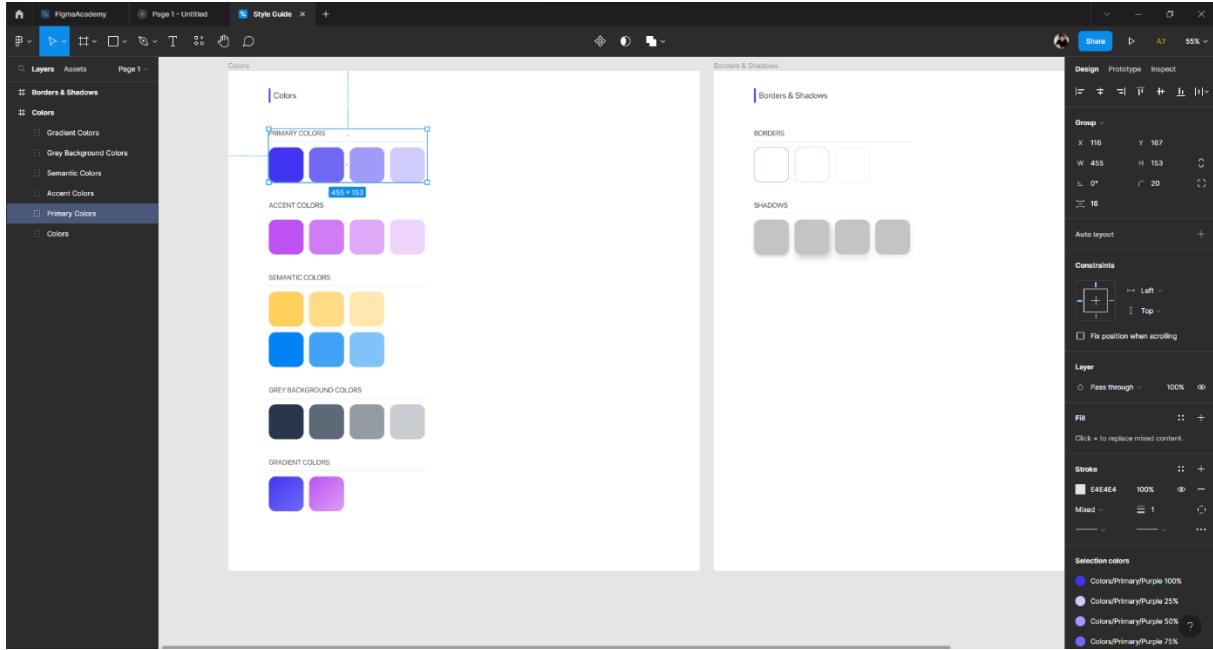


## Section 6: Creating your Design System – Part 1

### Introduction Color Style

This part is to understand the importance of the colors in the designs and most important how to create styles in Figma, so it is easier to make changes to a group of different elements without going to each element and make the change there.

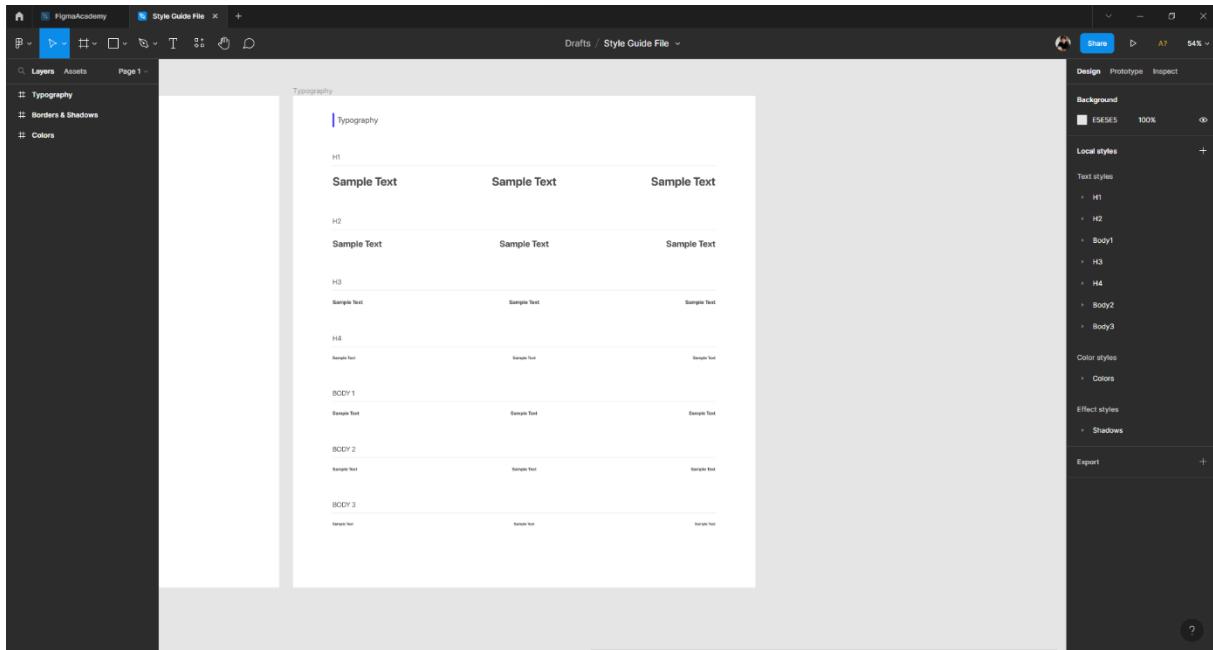
The most important color is the primary, secondary, accent, semantic, grey backgrounds, gradients. In the previous classes we already use some of these options to create styles. Also, the borders and shadows can make a big impact in some elements.



## Section 7: Creating your Design System – Part 2

### Introduction to typography

It is important to define the fonts, maximum 2 types but also defining the size, the weight or also how bold it looks and the most important which is a guide of where every text is going to be used. Like H1, H2, H3, body, and others that are necessary for the project.



## Section 8: Application Design – Finance App

### Designing a Modern App

First, we have a quick look of what are we going to create in the next classes, screen by screen using all the knowledge from the previous classes. But for this project it is necessary to download the files or assets that the teacher gives.

The screenshot shows the 'Contenido del curso' (Course Content) section of the Udemy course 'Learn Figma: User Interface Design Essentials - UI/UX Design'. The section is titled 'Sección 8: Application Design - Finance App' and contains 18 lessons. Lesson 84, '84. Designing a Modern Finance App', is checked and highlighted. Other lessons include '85. Assets', '86. Launch Screen', '87. Sign-in & Welcome Page', '88. Sign-up Page', '89. OTP Verification Screens', '90. Profile Screens', and '91. Homepage'. The course has a completion rate of 90%.

Result of the designed app

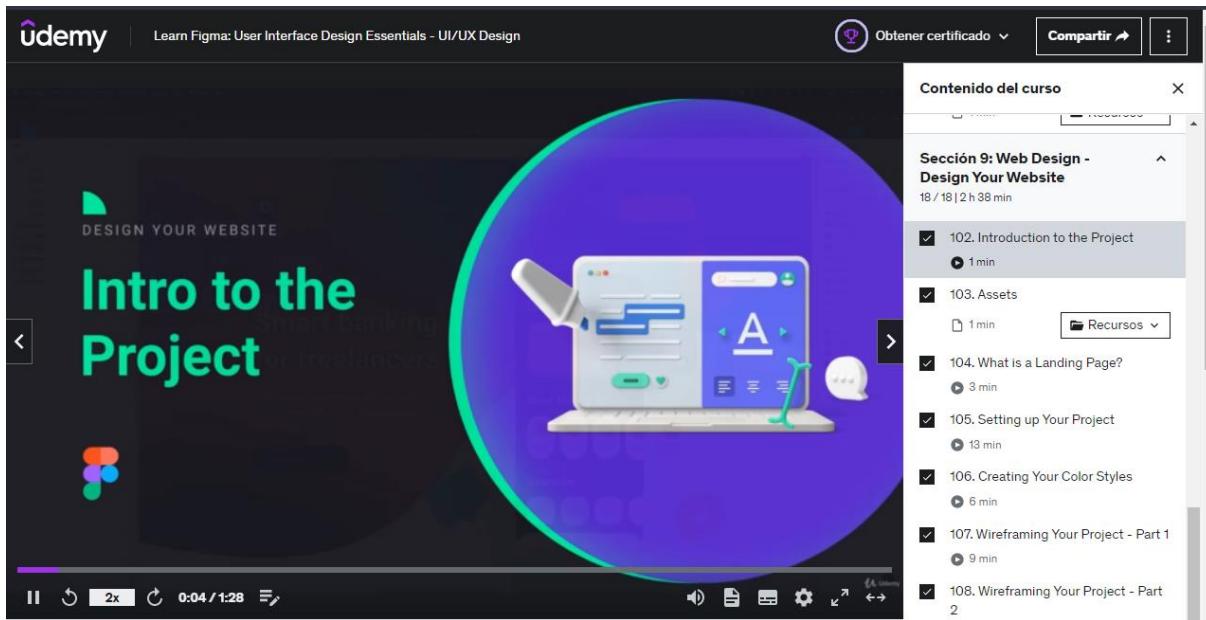
The only thing this design needs is the prototyping can see how it will work.

The screenshot shows the Figma interface with a row of mobile screens for a finance app. The screens include the launch screen, welcome screen, sign-in screen, sign-up process (multiple steps), and profile screen. The Figma interface shows the layers panel on the left and various components on the right.

## Section 9: Web Design – Design Your Website

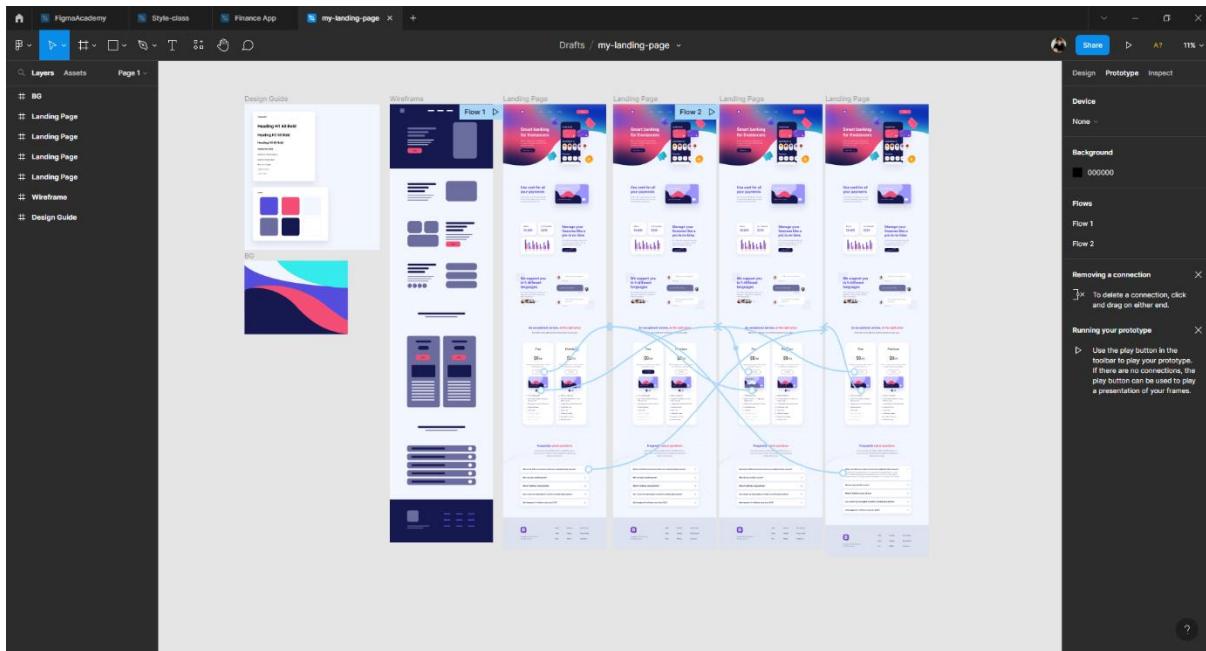
### Introduction to the Project

First, like with the other project, just a quick view of how it will look the final project and mention some new topics, specific from web designs that will be cover in the next classes. Again, the assets are available to download.



### Result of the designed website

First some styles like text and color style and a wireframe to have an overview of the web page. This design has prototype to show how it works when some parts are clicked.



## Section 10: Logo Design

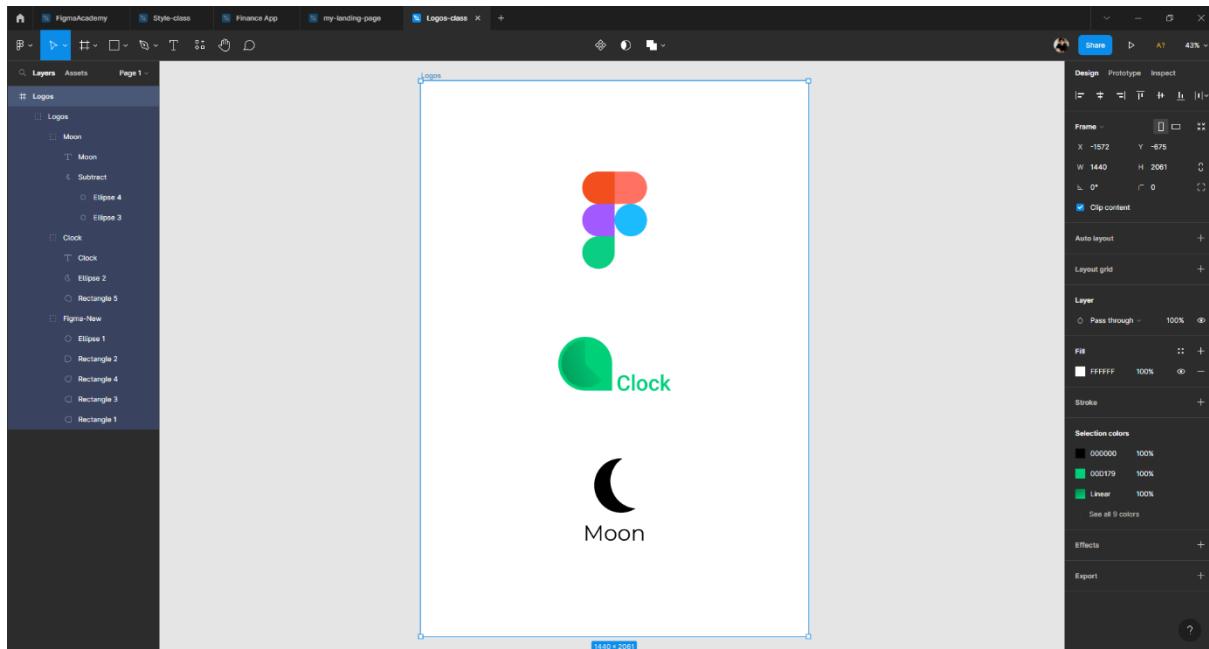
### Introduction

First a class to talk about all the different kind of logos, like Monogram, Wordmarks, Abstracts, Pictorial Marks, Mascots, Combination Marks, and Emblems.

The screenshot shows a video player interface. At the top, it says '01 LOGO DESIGN | LOGO TYPES'. On the right, there's a sidebar titled 'Contenido del curso' (Course Content) which lists 'Sección 9: Web Design - Design Your Website' and 'Sección 10: Logo Design'. Under 'Sección 10: Logo Design', there are five items: 120. Logo Types (selected), 121. Required files, 122. Designing Our First Logo, 123. Designing Our Second Logo, 124. Designing Our Third Logo, and 125. Final Project. Each item has a play button and a duration (e.g., 2 min, 1 min, 3 min). Below the sidebar, there are three logo examples: Starbucks Coffee (green circular logo), Warner Bros. Pictures (black shield logo), and Harley-Davidson Cycles (orange shield logo). At the bottom, there's a control bar with icons for volume, file, settings, and navigation.

### Result of the Logos

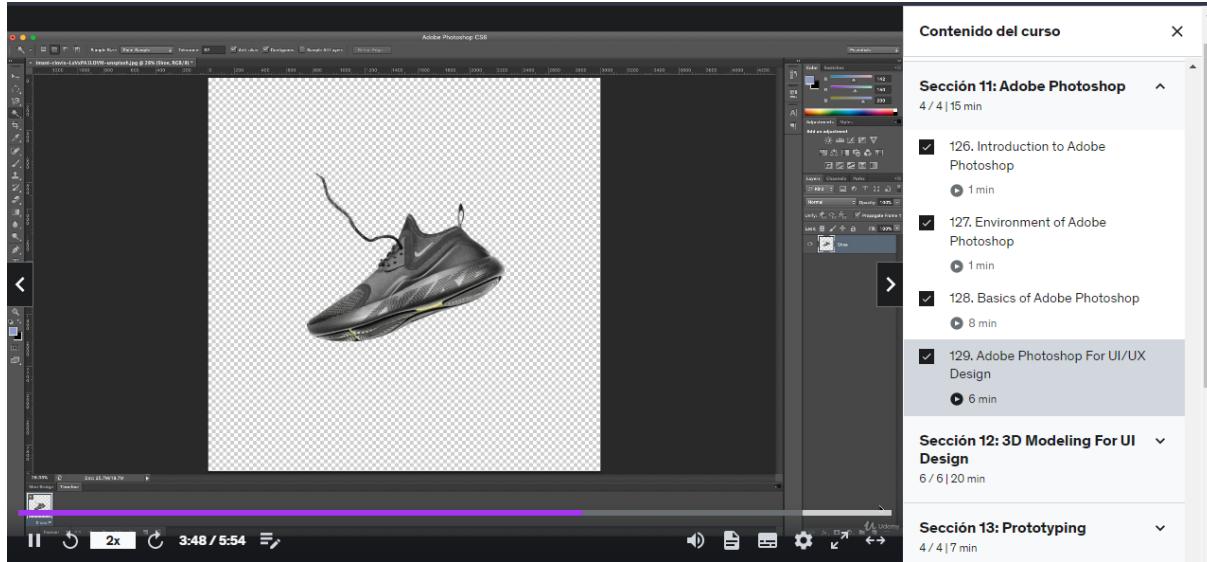
The first one is the logo from Figma itself and the others 2 are invented logos to use once more all the tools Figma has.



## Section 11: Adobe Photoshop

### Information about this section

This section is to show in a quick way how to use some tools of Adobe Photoshop that Figma still doesn't have, so to complement Figma. This section is to understand Adobe Photoshop interface and try some new basic things with it.

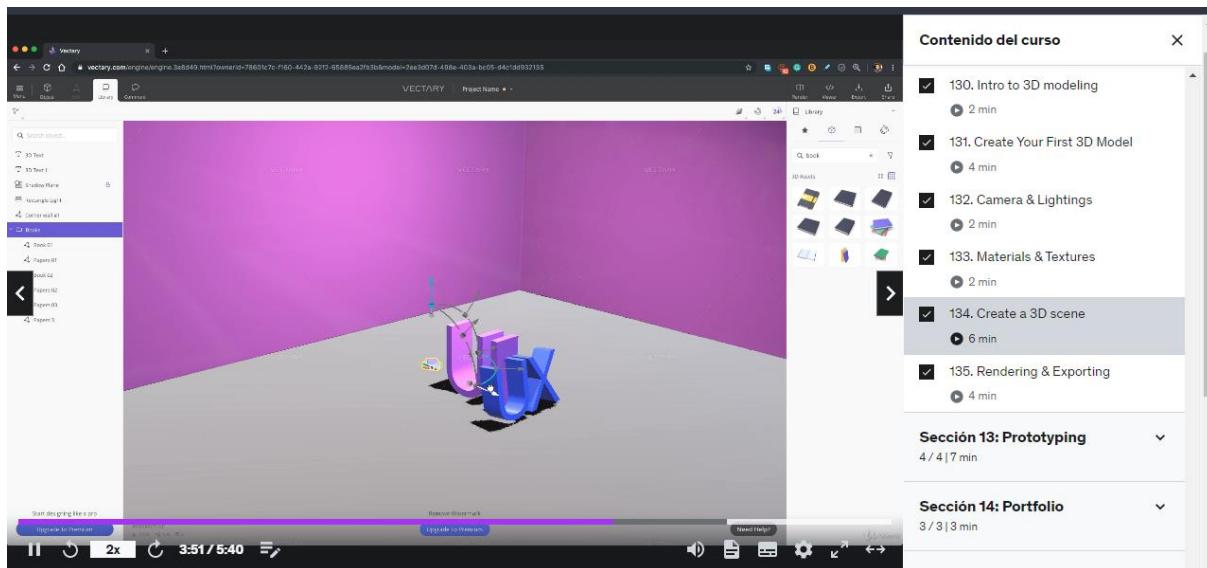


## Section 12: 3D Modeling for UI Design

### Information about this section

Have knowledge about 3D modelling is very useful to create amazing designs, and even show you own designs in mockups, for example even giving a better idea of how it will look from different point of views if it was in a phone.

For this section VECTARY is used, not need to be download since it is possible to use from the browser.



## Section 13: Prototyping

### Information about this section

Figma is not the only program to create prototypes, for other kind of prototypes, we can say “fancy” prototypes, we can use ProtoPie, Zeplin, Invision Studio, Marvel, etc. But this apps are not free, so Figma is still the best option. In the next classes is add more prototype to the app created before and create a mockup for one screen.

01 PROTOTYPING | TOOLS

Contenido del curso

- 135. Rendering & Exporting
- 136. Tools
- 137. Prototyping in Figma
- 138. Mocking up an app in Figma
- 139. Final Project

Sección 13: Prototyping

136. Tools

Sección 14: Portfolio

Sección 15: Business Ideas

## Section 14: Portfolio

### Information about this section

Getting information about places where you can share your designs to show them to the world and have a prove that you know how to make designs. For a portfolio it is possible to use websites for designers if you have not knowledge about web developing to create your own page.

01 PORTFOLIO | ONLINE PORTFOLIO

Contenido del curso

- 137. Prototyping in Figma
- 138. Mocking up an app in Figma
- 139. Final Project

Sección 14: Portfolio

140. How to Create Your Own Online Portfolio?

141. How to Use Dribbble?

142. How to Use Behance?

Sección 15: Business Ideas

## Section 15: Business Ideas

### Information about this section

How to get your first clients, necessary your portfolio and how do you like to work: for a company or as freelance. Remember managing your business can take a lot of time at the beginning more because all the regulations that you must learn at the beginning and recognize where your public is located to sell your designs. Communication is always the key with clients.

02 BUSINESS IDEAS | HOW TO START YOUR OWN BUSINESS?

Starting Business

Contenido del curso

- Portfolio? 1 min
- 141. How to Use Dribbble? 1 min
- 142. How to Use Behance? 1 min

Sección 15: Business Ideas 5 / 5 | 6 min

- 143. How to Get Your First Client? 1 min
- 144. How to Start Your Own Business? 2 min
- 145. How to Scale Your Business? 1 min
- 146. Communicating With Your Clients 1 min

147. Contracts

## Section 16: Inspiration & Resources

### Information about this section

Remember always ask for permission if you want to use content that is created from someone else, there are a lot of websites with free content but some of them ask to mention the creator. You can also always buy content that you like, and you think is useful.

üdemey Learn Figma: User Interface Design Essentials - UI/UX Design

Chapter 15

## Inspiration & Resources

World-class Design Inspiration & Resources

dribbble www.dribbble.com

Behance www.behance.com

awwwards. www.awwards.com

uplabs www.ulabs.com

Contenido del curso

- 143. How to Get Your First Client? 1 min
- 144. How to Start Your Own Business? 2 min
- 145. How to Scale Your Business? 1 min
- 146. Communicating With Your Clients 1 min
- 147. Contracts 1 min

Sección 16: Inspiration & Resources 2 / 2 | 2 min

- 148. Where to Find World-Class Design Inspiration? 1 min
- 149. Image Resources

## Section 17: What do Next

### Information about this section

Practice is the key to become better in what you are doing, that is why it is so important to do something you like to do it a lot and do not get tired of it. But also remember, your designs should not be perfect so even is good to challenge yourself, try to not spend too much time in things that won't take you further.

The screenshot shows a Udemy course page for 'Learn Figma: User Interface Design Essentials - UI/UX Design'. The main content area displays a blue header bar with the text '01 WHAT TO DO NEXT? | THE NEXT STEP'. Below this is a large yellow circular graphic featuring two stylized figures (one in a white shirt and one in a suit) jumping around a golden trophy. At the bottom of the main content area is a control bar with icons for volume, file, settings, and navigation. To the right of the main content is a sidebar titled 'Contenido del curso' which lists several video lessons with checkmarks and duration indicators. Below this is a section titled 'Sección 16: Inspiration & Resources' which also contains a list of video lessons. The top right corner of the page has options for 'Obtener certificado' and 'Compartir'.

Lesson	Title	Duration
143.	HOW to Get Your First Client?	1 min
144.	How to Start Your Own Business?	2 min
145.	How to Scale Your Business?	1 min
146.	Communicating With Your Clients	1 min
147.	Contracts	1 min

**Sección 16: Inspiration & Resources**

Lesson	Title	Duration
148.	Where to Find World-Class Design Inspiration?	1 min
149.	Image Resources	

## Section 18: Bonus Lecture

### Information about this section

Well, this is more just the goodbye and a discount for another course from the teacher.

The screenshot shows a bonus lecture page for the 'Learn Figma: User Interface Design Essentials - UI/UX Design' course. The title of the section is 'Bonus Lecture'. The main content area contains a message from the teacher: 'Hi. I hope you enjoyed the course and developed so many skills. If you would like to learn about Sketch. I have a complete bootcamp on this subject and you can get it with a 90% discount from the link below:'. Below this message is another line: 'You can also apply the code manually:'. A large, semi-transparent watermark or callout box is overlaid on the page, containing the text ' Nope! you are not having it my amigo design-bootcamp-sketch-futura? haha xddddd.com' and 'Using my design skills ;)'.

## Certificate from Learn Figma Course.

Links to the projects:

All the projects are in Figma and with these links is possible to see them:

- **Figma Academy classes:** [https://www.figma.com/file/8EFYaR4TRJYDCVnbS2qbzW/FigmaAcademy?node\\_id=0%3A1&t=wR5KIPx2faO0JBlr-1](https://www.figma.com/file/8EFYaR4TRJYDCVnbS2qbzW/FigmaAcademy?node_id=0%3A1&t=wR5KIPx2faO0JBlr-1)
- **Style classes:** [https://www.figma.com/file/1yT95AApaOsOXhhjBPlp00/Style-class?node\\_id=0%3A1&t=m1fTFUudwForyWIP-1](https://www.figma.com/file/1yT95AApaOsOXhhjBPlp00/Style-class?node_id=0%3A1&t=m1fTFUudwForyWIP-1)
- **Finance App Design:** [https://www.figma.com/file/Jphesth6Npav9gPhDjJoTF/Finance-App?node\\_id=0%3A1&t=0m1zRgXAPYz6T3Qp-1](https://www.figma.com/file/Jphesth6Npav9gPhDjJoTF/Finance-App?node_id=0%3A1&t=0m1zRgXAPYz6T3Qp-1)
- **My landing page:** [https://www.figma.com/file/W105h5Ve08YbgHrSEHKMZE/my-landing-page?node\\_id=0%3A1&t=4HTvQmdjuN524XID-1](https://www.figma.com/file/W105h5Ve08YbgHrSEHKMZE/my-landing-page?node_id=0%3A1&t=4HTvQmdjuN524XID-1)
- **Logo classes:** [https://www.figma.com/file/IE2Aqyj8cxpJcJNMFOJGOE/Logos-class?node\\_id=0%3A1&t=1rgG77gks6Nex66j-1](https://www.figma.com/file/IE2Aqyj8cxpJcJNMFOJGOE/Logos-class?node_id=0%3A1&t=1rgG77gks6Nex66j-1)

Screenshot from the Udemy website

The screenshot shows a certificate page from Udemy. At the top, there's a navigation bar with the Udemy logo, categories, a search bar, and user account options. The main content area features the Udemy logo and the title 'CERTIFICADO DE FINALIZACIÓN' (Completion Certificate). Below the title is the course name: 'Learn Figma: User Interface Design Essentials - UI/UX Design'. It's taught by 'Arash Ahadzadeh'. The certificate is issued to 'David Silva Troya' (Mechatronic Engineer || Applied Computer Science Student). A photo of David Silva Troya is shown next to the course logo. The course has a rating of 4.4 stars (1,618 reviews), 10 hours total, and was priced at 11,99 € (now 64,99 €). Buttons for 'Descarga' (Download) and 'Compartir' (Share) are present. A note at the bottom encourages updating the certificate with the student's name and preferred language. The footer contains a statement about the guarantee of completion.

Número de certificado: UC-e39fcdda-0cb4-43cf-b8e5-8a065a82eb92  
Url del certificado ude.my/UC-e39fcdda-0cb4-43cf-b8e5-8a065a82eb92  
Número de referencia: 0004

**Destinatario del certificado:**  
 **David Silva Troya**  
Mechatronic Engineer || Applied Computer Science Student

**Acerca del curso:**  
  
**Learn Figma: User Interface Design Essentials - UI/UX Design**  
Arash Ahadzadeh  
**4,4 ★★★★☆ (1,618)**  
10 horas en total · 151 clases  
**11,99 € 64,99 €**

**Actualiza tu certificado** con tu nombre correcto o idioma preferido

El anterior certificado garantiza que **David Silva Troya** ha completado con éxito el curso **Learn Figma: User Interface Design Essentials - UI/UX Design** a fecha de 13/02/2023, habiendo sido impartido por **Arash Ahadzadeh** en Udemy. El certificado indica que se ha completado la totalidad del curso, según lo validado por el estudiante. La duración del curso representa el total de horas de video del curso en el momento de finalización más reciente.

Link to see the certificate:

<http://ude.my/UC-e39fcdda-0cb4-43cf-b8e5-8a065a82eb92>

## Flutter Artificial Intelligence Course – Build 15+ AI Apps

Flutter is a framework that uses Dart as program language, this was created by Google and allows us to create apps for Android and iOS, it is faster than React-Native since it transforms the Dart code into the main code of the Operational System. Plus, Flutter can also be used to create websites. Using Artificial Intelligence in apps is the main topic now days.

This course has **9.5 hours** in total.

The screenshot shows the course page on the Udemy website. At the top, there's a navigation bar with categories, a search bar, and user account links. The main title is "Flutter Artificial Intelligence Course - Build 15+ AI Apps". Below the title, a brief description reads: "Learn Flutter 2.0 Android & iOS Machine Learning & Deep Learning with TensorFlow Lite & Make 15+ Apps - Complete Guide". It shows a rating of 3.5 stars from 98 reviews and 1,611 students. The course was created by Coding Cafe, last updated on 12/2021, and is in English with automatic subtitles. A large video thumbnail on the right features a smartphone displaying a neural network interface. Below the video, a message says "Has comprado este curso el Oct. 26, 2022". A prominent "Ir al curso" button is at the bottom of this section. To the left, a box titled "Lo que aprenderás" lists learning objectives, including Flutter Deep Learning, Machine Learning, Artificial Intelligence, and various neural network implementations like NLP and CNN. To the right, there are sections for "Compartir", "Regalar este curso", and "Aplicar cupón". A sidebar on the right side offers a 30-day refund guarantee and lifetime access. It also asks if the course is for 5 or more people and offers a "Prueba Udemy Business" button.

### Section 1: Introduction

Welcome to the course

Explanation of the frameworks to be used like Flutter and TensorFlow. Showing all the projects that we are going to create and giving a brief explanation from them.

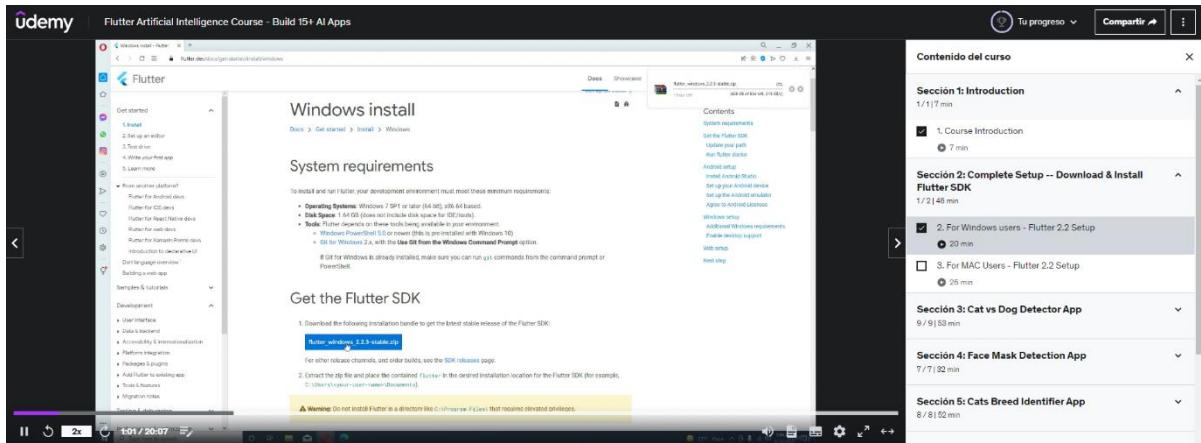
The screenshot shows a video player window for the first section of the course. The video frame displays a futuristic robot hand interacting with a smartphone screen that shows a neural network diagram. The video player interface includes controls for play, volume, and progress. To the right of the video, a sidebar titled "Contenido del curso" lists the following sections:

- Sección 1: Course Introduction (1 video, 0:56 min)
- Sección 2: Complete Setup -- Download & Install Flutter SDK (1 video, 1:46 min)
- Sección 3: Cat vs Dog Detector App (9 videos, 0:53 min)
- Sección 4: Face Mask Detection App (7 videos, 1:32 min)
- Sección 5: Cats Breed Identifier App (8 videos, 0:52 min)
- Sección 6: Flower Types Identifier App (4 videos, 0:51 min)
- Sección 7: Avengers Characters Recogniser App (6 videos, 1:20 min)
- Sección 8: Image Captions Generator App - (NLP) Natural Language Processing Algorithm (12 videos, 11:41 min)

## Section 2: Complete Setup – Download & Install Flutter SDK

### Flutter for Windows

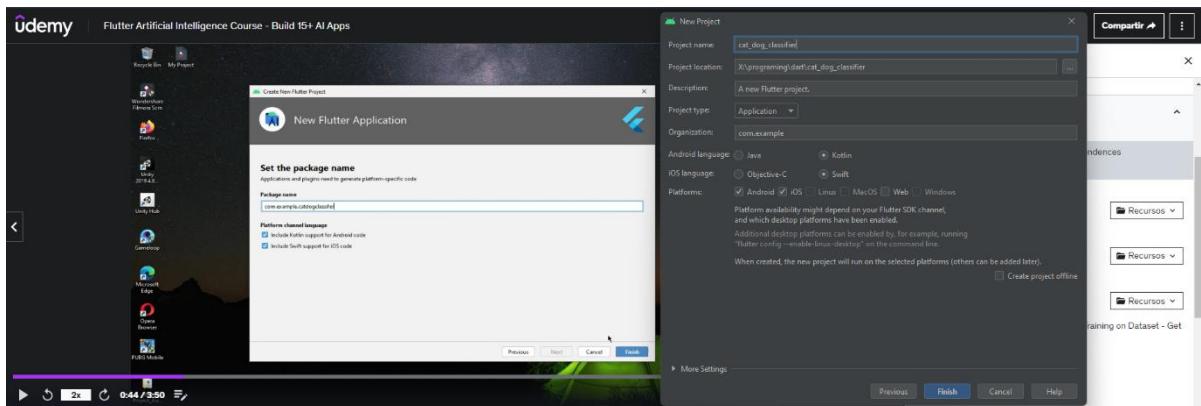
Installing all the necessary programs, frameworks, and plugins. I only saw the windows part since I have no MAC.



## Section 3: Cat vs Dog Detector App

### Creating Project and Installing Dependencies

First, we open **Android Studio** to create the Flutter Project. Actually this can be done also from Visual Studio Code and I decided to work there after create the Project.



The main part now is to edit everything inside the folder "lib". We start with the **main.dart** file.

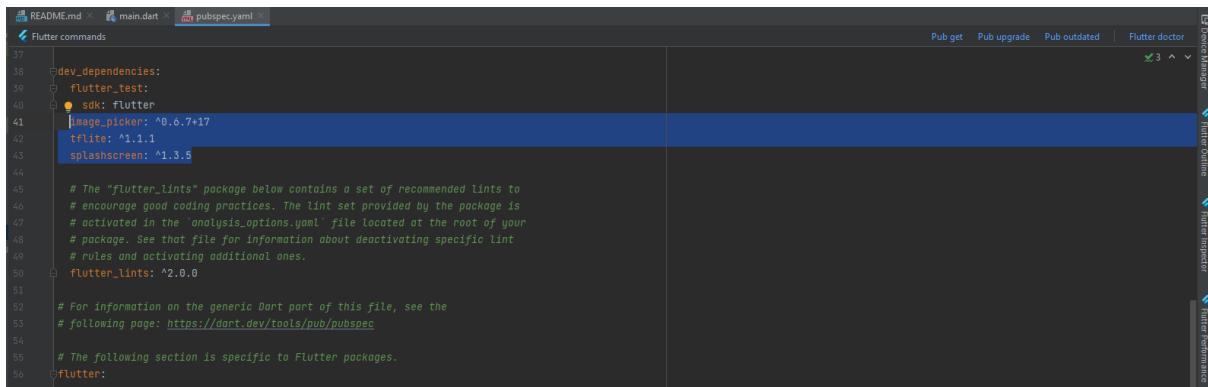
```
import 'package:flutter/material.dart';

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({Key? key}) : super(key: key);

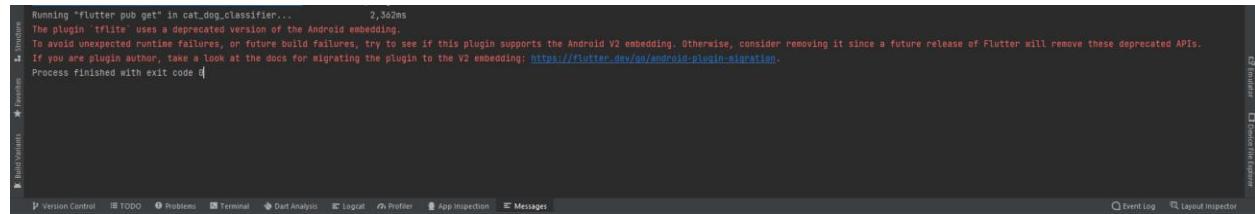
  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        // This is the theme of your application.
      ),
    );
}
```

For the dependencies we must edit the **pubsec.yaml** file, like in the next screenshot.



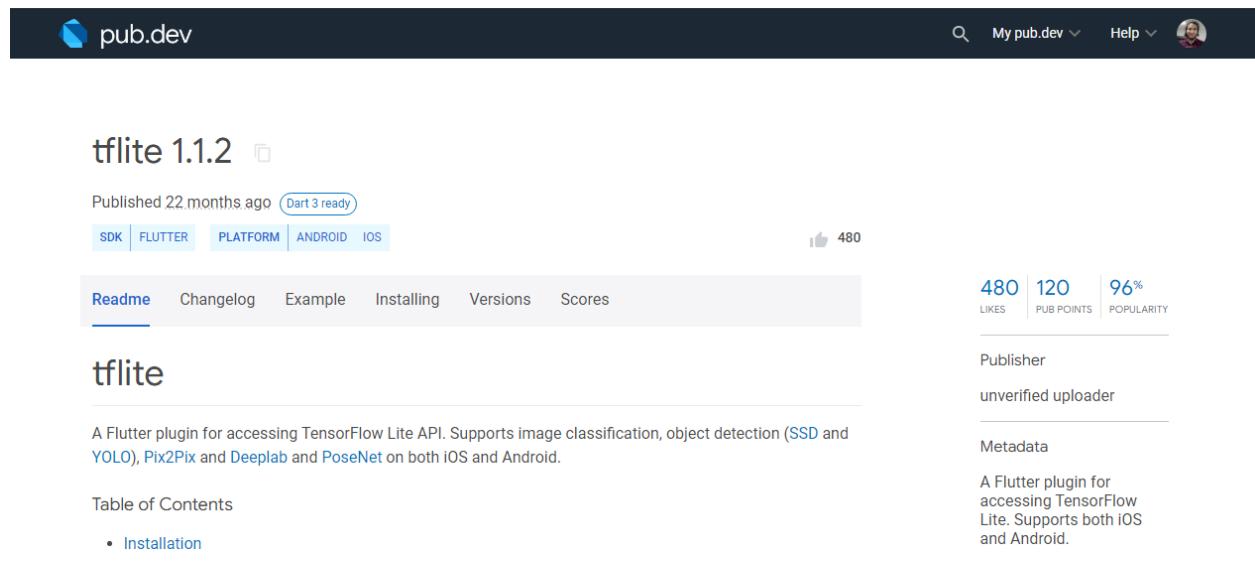
```
37
38 dev_dependencies:
39   flutter_test:
40     sdk: flutter
41   image_picker: ^0.6.7+17
42   tflite: '~1.1.1'
43   splashscreen: '^1.3.5'
44
45   # The "flutter_lints" package below contains a set of recommended lints to
46   # encourage good coding practices. The lint set provided by the package is
47   # activated in the "analysis_options.yaml" file located at the root of your
48   # package. See that file for information about deactivating specific lint
49   # rules and activating additional ones.
50   flutter_lints: '^2.0.0'
51
52   # For information on the generic Dart part of this file, see the
53   # following page: https://dart.dev/tools/pub/pubspec
54
55   # The following section is specific to Flutter packages.
56
57 flutter:
```

And like every time programing, we get an error. The error is related to the library tflite that hasn't been update with the last dart version.



```
Running "flutter pub get" in cat_dog_classifier...          2,362ms
The plugin tflite uses a deprecated version of the Android embedding.
To avoid unexpected runtime failures, or future build failures, try to see if this plugin supports the Android V2 embedding. Otherwise, consider removing it since a future release of Flutter will remove these deprecated APIs.
If you are plugin author, take a look at the docs for migrating the plugin to the V2 embedding: https://flutter.dev/go/android-plugin-migration.
Process finished with exit code 8
```

We can see in the libraries from the community that flutter has, the tflite library hasn't been updated in the last 22 months.



tflite 1.1.2

Published 22 months ago [Dart 3 ready](#)

SDK FLUTTER PLATFORM ANDROID IOS

480

480 | 120 | 96%

LIKES PUB POINTS POPULARITY

Publisher  
unverified uploader

Metadata  
A Flutter plugin for accessing TensorFlow Lite. Supports both iOS and Android.

Readme Changelog Example Installing Versions Scores

**tflite**

A Flutter plugin for accessing TensorFlow Lite API. Supports image classification, object detection (SSD and YOLO), Pix2Pix and DeepLab and PoseNet on both iOS and Android.

Table of Contents

- Installation

The solution is then looking for a new library that the community has to replace that forgotten one, the problem is that Flutter never delete the libraries created by someone that were verified in that moment, to can be sure every app that is using it does not crash. But the problem is when the creator does not give maintenance to the library like in this moment.

Luckily the community is big and there are already some options to replace the tflite library, we can just hope the functions does not change as much as the name of the library does.

**tensorflutt**                                                                

Now we can try latter on which one is the best option to use. And with no surprises we get a new error now with the other dependency.

Once again, this is solve using another library that works in the same way. It is the second option we get if we search for splashscreen. And we can see the difference in the last time that each of them were update.

<h2>splashscreen</h2> <p>A splashscreen package created as intro for any flutter application easily with a lot of customization</p> <p>v 1.3.5 (2 years ago)  <a href="#">dplv.dev</a>  MIT</p> <p><a href="#">SDK</a> <a href="#">FLUTTER</a> <a href="#">PLATFORM</a> <a href="#">ANDROID</a> <a href="#">IOS</a> <a href="#">LINUX</a> <a href="#">MACOS</a> <a href="#">WEB</a> <a href="#">WINDOWS</a></p> <p>API results: ► <a href="#">splashscreen/splashscreen-library.html</a></p>	<p>508 LIKES   110 PUB POINTS   98% POPULARITY</p>
<h2>easy_splash_screen</h2> <p>Easy Splash Screen plugin for your flutter app. You can easily implement this plugin to show splash screen and save time.</p> <p>v 1.0.4 (6 months ago)  <a href="#">sujangainju.com.np</a>  MIT <a href="#">Dart 3 ready</a></p> <p><a href="#">SDK</a> <a href="#">FLUTTER</a> <a href="#">PLATFORM</a> <a href="#">ANDROID</a> <a href="#">IOS</a> <a href="#">LINUX</a> <a href="#">MACOS</a> <a href="#">WEB</a> <a href="#">WINDOWS</a></p>	<p>37 LIKES   140 PUB POINTS   95% POPULARITY</p>

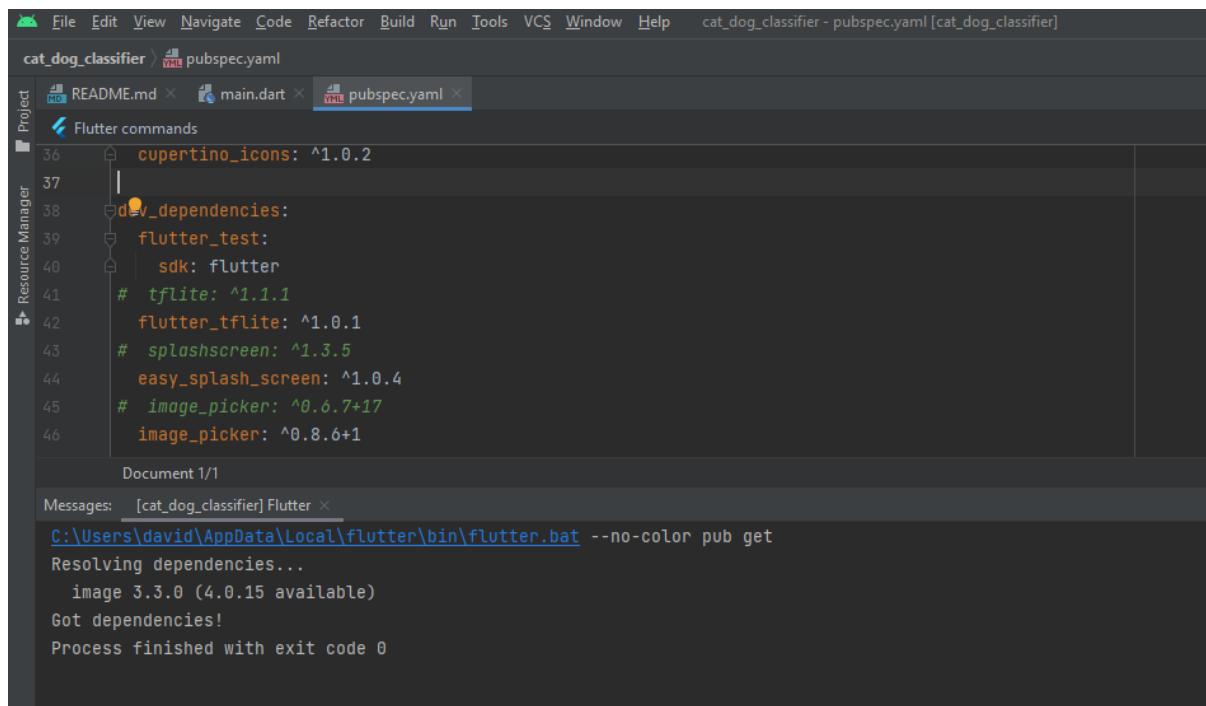
And now the last error, this library actually got maintenance, so we only need to write the new version.

```
C:\Users\david\AppData\Local\flutter\bin\flutter.bat --no-color pub get
Resolving dependencies...
The current Dart SDK version is 3.0.0-244.0.dev.

Because cat_dog_classifier depends on image_picker >=0.0.2 <0.7.0-nullsafety which doesn't support null safety, version solving failed.

The lower bound of "sdk: '>=1.8.0 <2.0.0 or >=2.0.0-dev.28.0 <3.0.0'" must be 2.12.0 or higher to enable null safety.
For details, see https://dart.dev/null-safety
Process finished with exit code 1
```

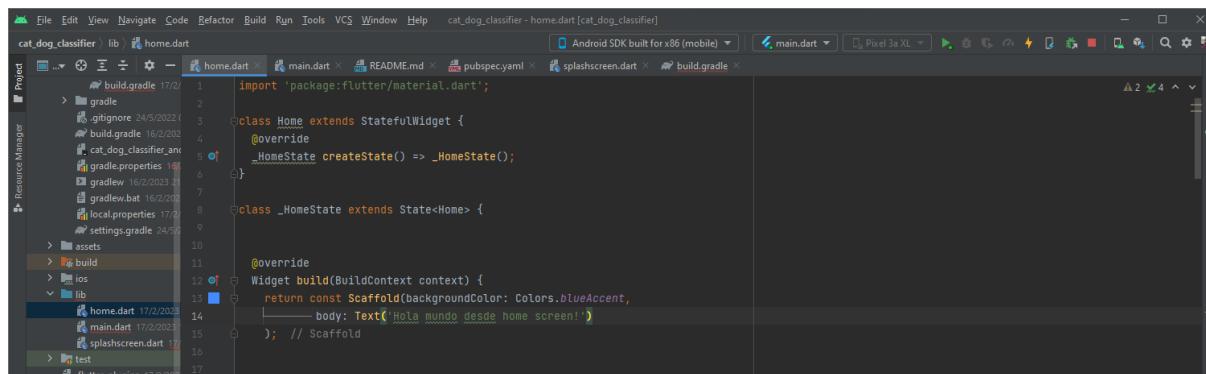
At the end all the dependencies are not giving error anymore and they should work as the previous one were working, the documentation was similar and for tflite even the same but now fixing the problem that the other had.



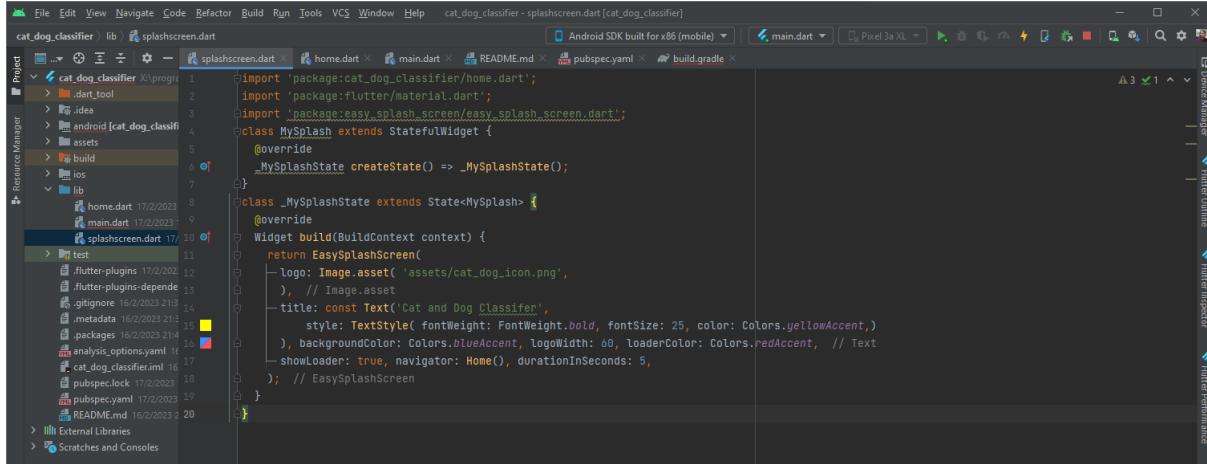
I have to say, this was not cover in the classes. I had to search for these new libraries.

## Adding Splash Screen

We will need to create 2 new files, for the home screen and the splash screen. First the home screen.



And the splash screen, this code looks like this just to save space in this screenshot. Normally you can have a lot more space and separations.

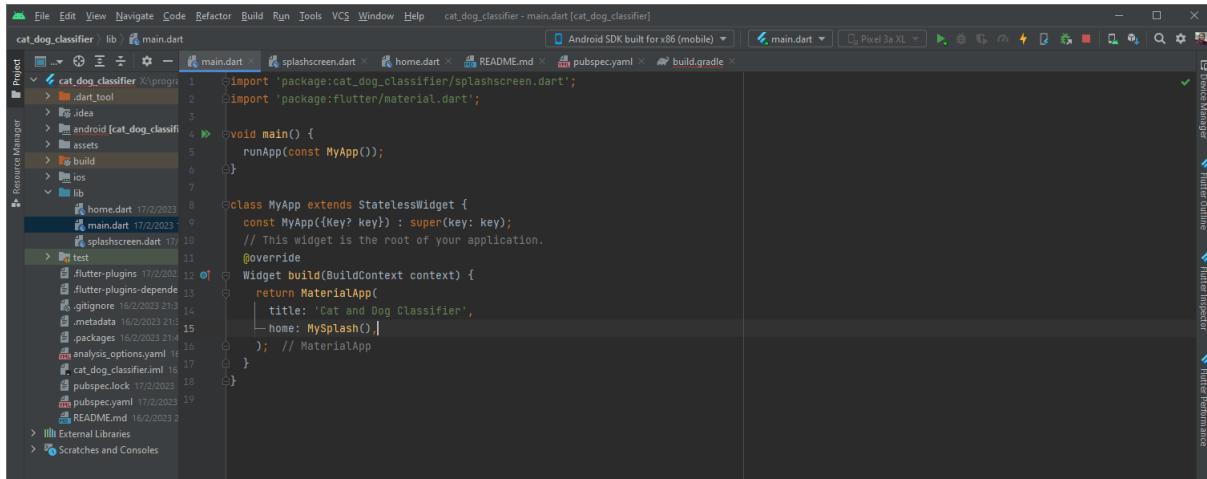


```

import 'package:cat_dog_classifier/home.dart';
import 'package:flutter/material.dart';
import 'package:easy_splash_screen/easy_splash_screen.dart';
class MySplash extends StatefulWidget {
  @override
  _MySplashState createState() => _MySplashState();
}
class _MySplashState extends State<MySplash> {
  @override
  Widget build(BuildContext context) {
    return EasySplashScreen(
      logo: Image.asset('assets/cat_dog_icon.png'),
      title: const Text('Cat and Dog Classifier',
        style: TextStyle(fontWeight: FontWeight.bold, fontSize: 25, color: Colors.yellowAccent),
        backgroundColor: Colors.blueAccent, logoWidth: 80, loaderColor: Colors.redAccent, // Text
        showLoader: true, navigator: Home(), durationInSeconds: 5,
      );
    }
}

```

To be able to use the code we just created we need to change the **main.dart** file.

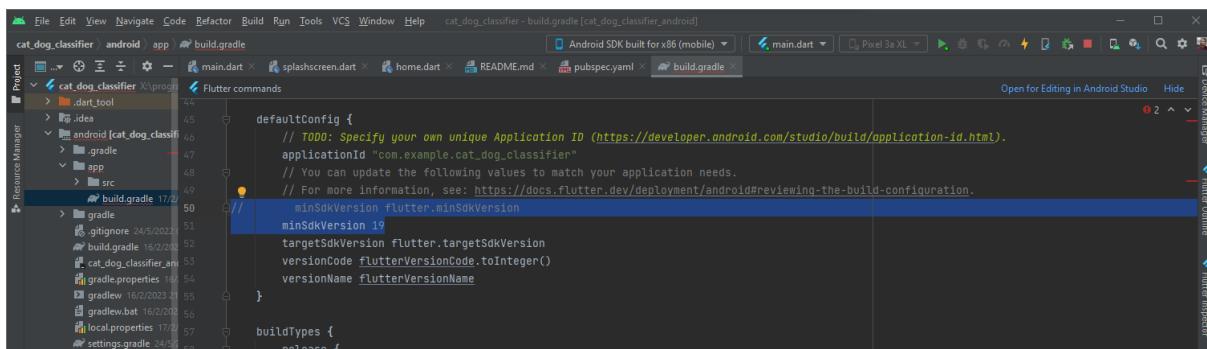


```

import 'package:cat_dog_classifier/splashscreen.dart';
import 'package:flutter/material.dart';
void main() {
  runApp(const MyApp());
}
class MyApp extends StatelessWidget {
  const MyApp({Key? key}) : super(key: key);
  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Cat and Dog Classifier',
      home: MySplash(),
    );
  }
}

```

And last detail before to run the code is edit the **build.gradle** file from Android.

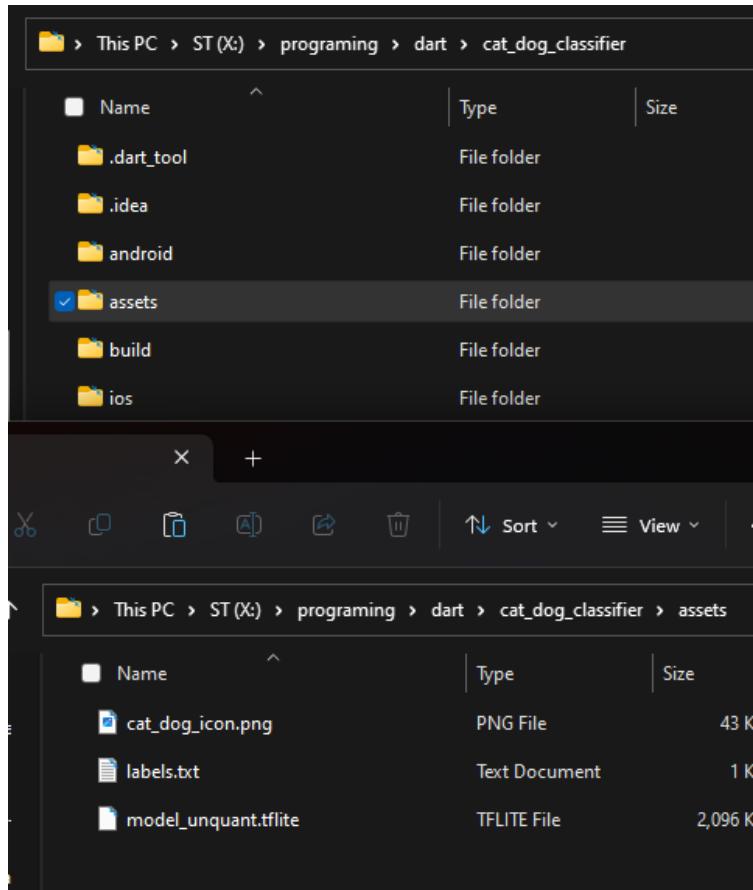


```

defaultConfig {
  // TODO: Specify your own unique Application ID (https://developer.android.com/studio/build/application-id.html).
  applicationId "com.example.cat_dog_Classifier"
  // You can update the following values to match your application needs.
  // For more information, see: https://docs.flutter.dev/deployment/android#reviewing-the-build-configuration.
  minSdkVersion flutter.minSdkVersion
  targetSdkVersion flutter.targetSdkVersion
  versionCode flutterVersionCode.toInt()
  versionName flutterVersionName
}
buildTypes {
  release {

```

But we are making use from some assets and for that we need make some other modifications. For this we must create a new folder called **assets** and there put there all the images and other files we want to use. In this case I also added the labels and the model.



And now that it is created, we specify in the ***pubspec.yaml*** that we are going to use all inside the folder assets.

```

cat_dog_classifier: pubspec.yaml [cat_dog_classifier]
  File Edit View Navigate Code Refactor Build Run Tools VCS Window Help cat_dog_classifier - pubspec.yaml [cat_dog_classifier]
  └── app
    ├── src
    │   └── build.gradle
    ├── gradle
    ├── cat_dog_classifier_android
    ├── gradle.properties
    ├── gradlew
    ├── gradlew.bat
    └── local.properties
    └── settings.gradle
  └── assets
  └── build
  └── lib
    ├── home.dart
    ├── main.dart
    └── splashscreen.dart
  └── test
    ├── flutter-plugins
    ├── flutter-plugins-dependencies
    ├── ignore
    ├── metadata
    ├── packages
    └── analysis_options.yaml
  └── pubspec.lock
  └── pubspec.yaml
  └── README.md
  └── External Libraries
  └── Scratches and Consoles
  Document 1/1 - flutter - assets

flutter_tflite: ^1.0.1
easy_splash_screen: ^1.0.4
image_picker: ^0.8.6+1

# The "flutter_lints" package below contains a set of recommended lints to
# encourage good coding practices. The Lint set provided by the package is
# activated in the 'analysis_options.yaml' file located at the root of your
# package. See that file for information about deactivating specific lint
# rules and activating additional ones.
flutter_lints: "2.0.0"

# For information on the generic Dart part of this file, see the
# following page: https://dart.dev/tools/pub/pubspec

# The following section is specific to Flutter packages.

flutter:
  uses-material-design: true

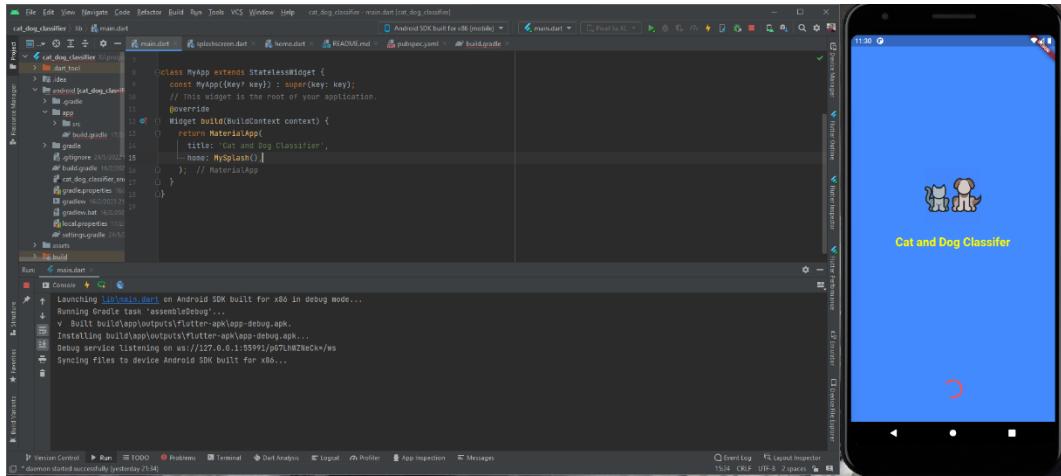
  # The following line ensures that the Material Icons font is
  # included with your application, so that you can use the icons in
  # the material Icons class.
  uses-material-design: true

  # To add assets to your application, add an assets section, like this:
  assets:
    assets/
      # - images/a_dot_burr.jpeg
      # - images/a_dot_ham.jpeg

analysis_options.yaml
pubspec.lock
pubspec.yaml
README.md
External Libraries
Scratches and Consoles
Document 1/1 - flutter - assets

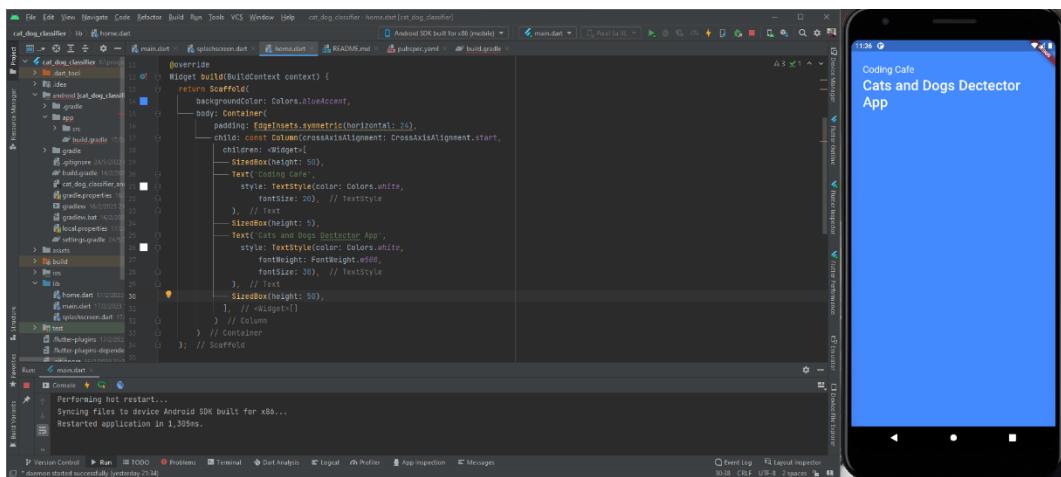
```

And finally, we can start our android device to then run the program.



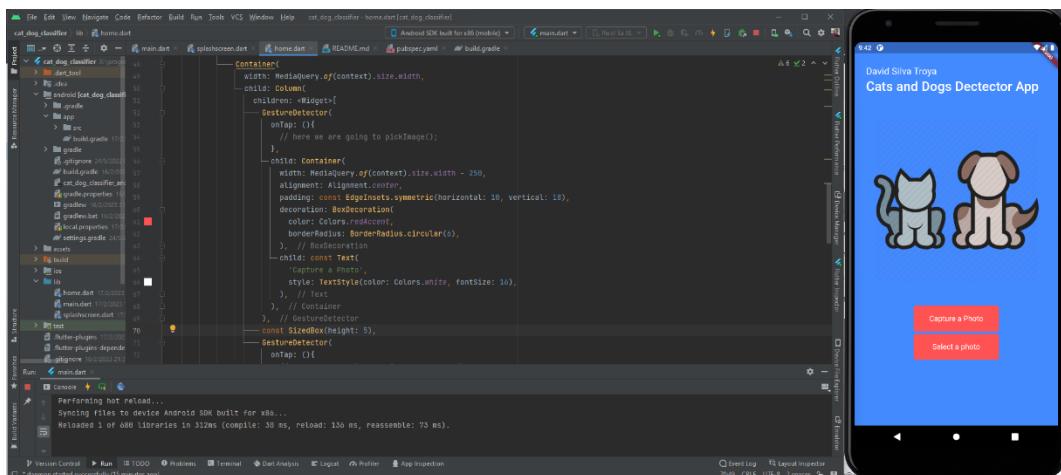
## Creating Home Page

In this part we just edit the **home.dart** file that we created before.



## Home Page Design – Complete

Now we must add the buttons for capturing a photo and also another to select a picture from the gallery of the phone.

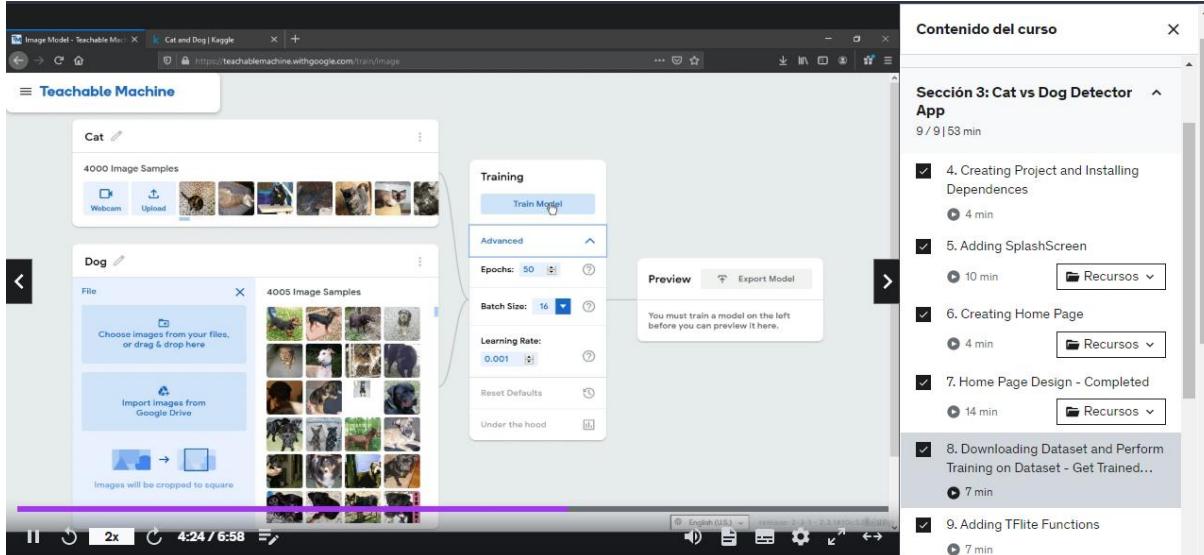


## Downloading Dataset and Perform Training on Dataset – Get Trained Model

This part is downloading the dataset from Kaggle and then training with Google teachable machine.

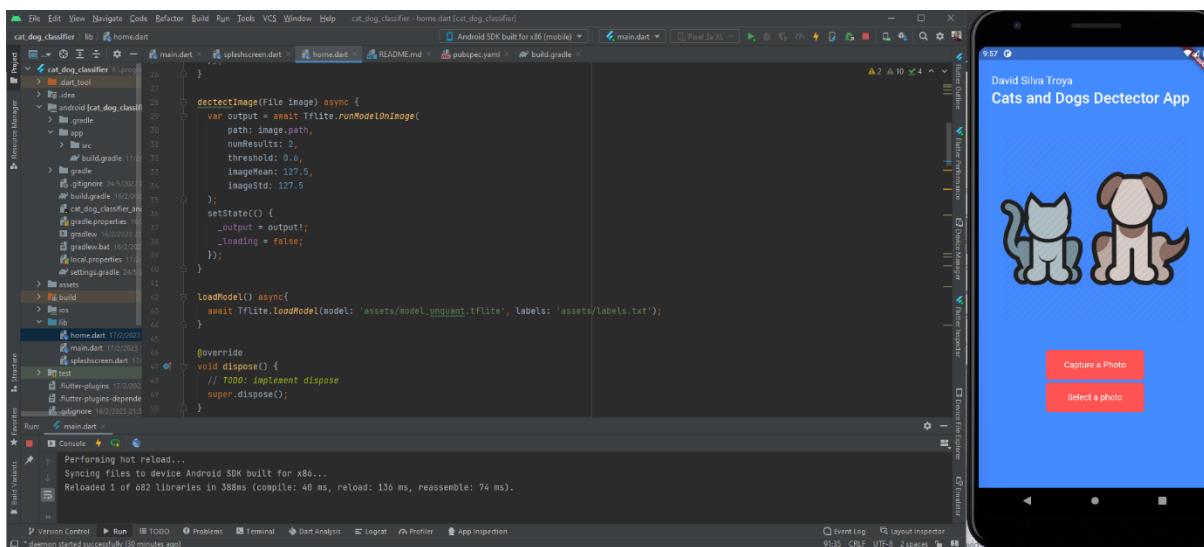
Kaggle link: <https://www.kaggle.com/datasets/tongpython/cat-and-dog>

Google Teachable Machine: <https://teachablemachine.withgoogle.com/>



## Adding TFlite Functions

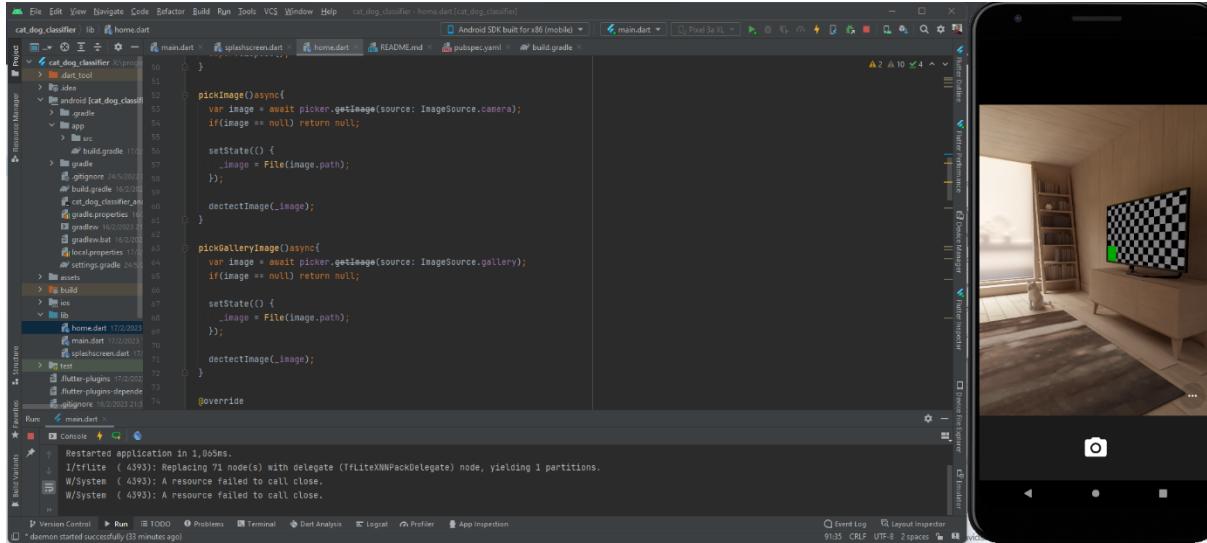
Ok, here we add quite too much code for one screenshot but at least I can show how the model part looks like.



## Creating Functions for Capturing Image and Pick Image from Gallery

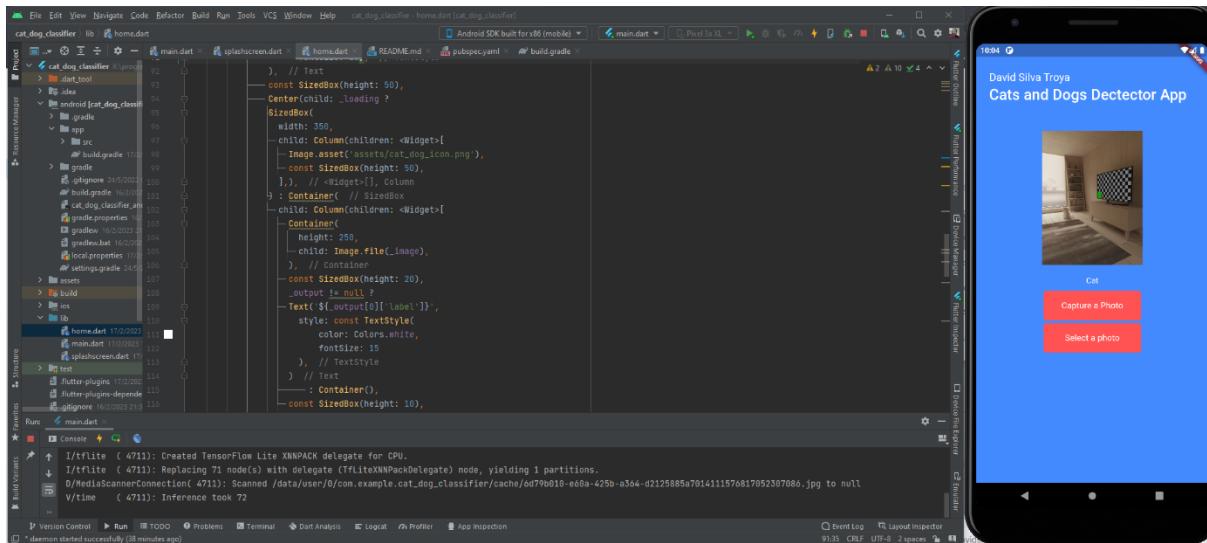
I have to mention here that when I tried to use the camara in the emulator phone I was thinking I will see the webcam but actually it gives a kind of Virtual Reality space.

Now the functions to use the camera and see the gallery are working.



## Completing App and Texting the App

Now we finish the code by adding the function to showing the picture with the label in text.

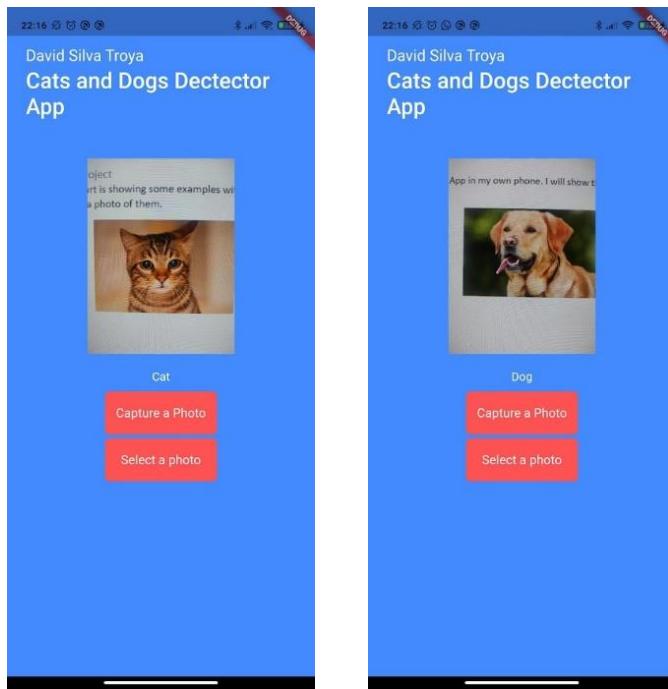


## Completed Project

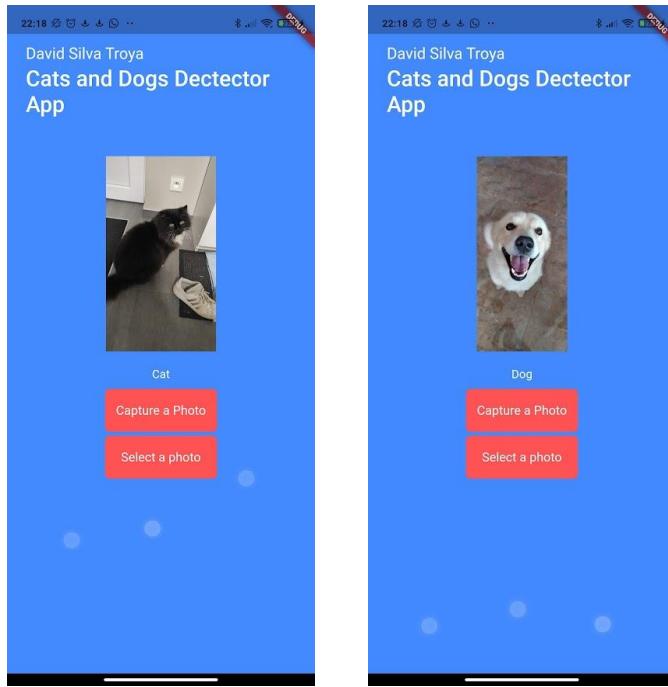
And the last part is showing some examples with the App in my own phone. I will show the examples here and take a photo of them.



Now the results of **taking the picture**.



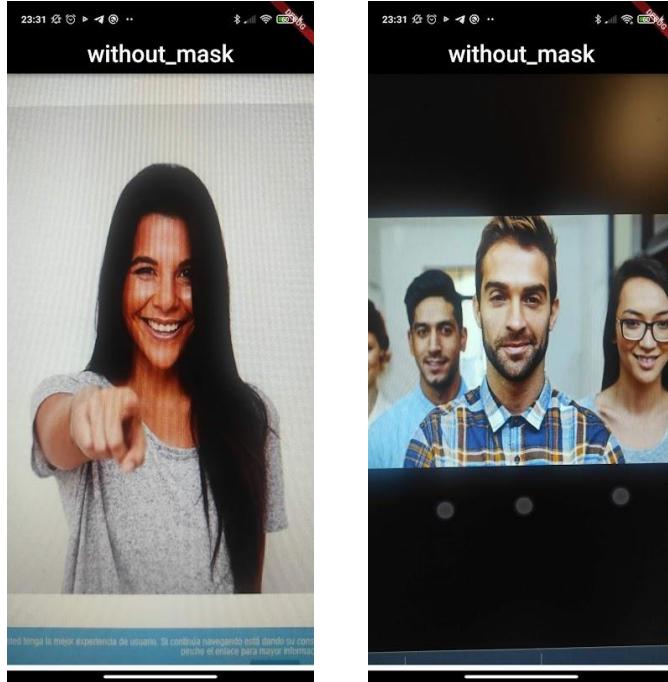
And the result of using **the Gallery**. (The 3 white dots are my fingers taking a screenshot)



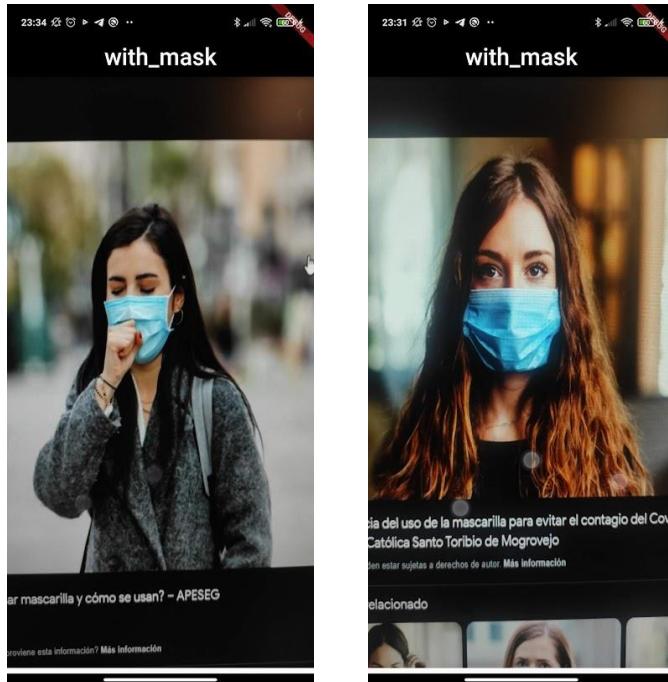
## Section 4: Face Mask Detection App

### Completed Project

The same procedure as the previous project but now with a live camera library. Here some examples when people are not using masks.



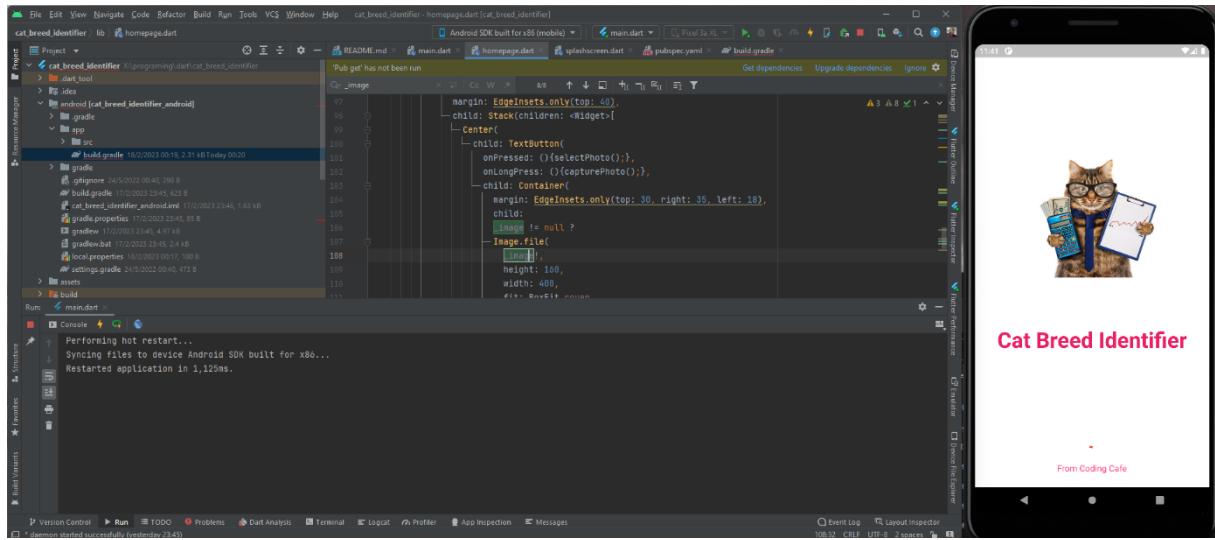
And some other examples with people using masks, but the model has problems recognizing more than one person with a mask.



## Section 5: Cats Breed Identifier App

### Completed Project

After fixing some error with some null variables and late initialization the app is finally working.



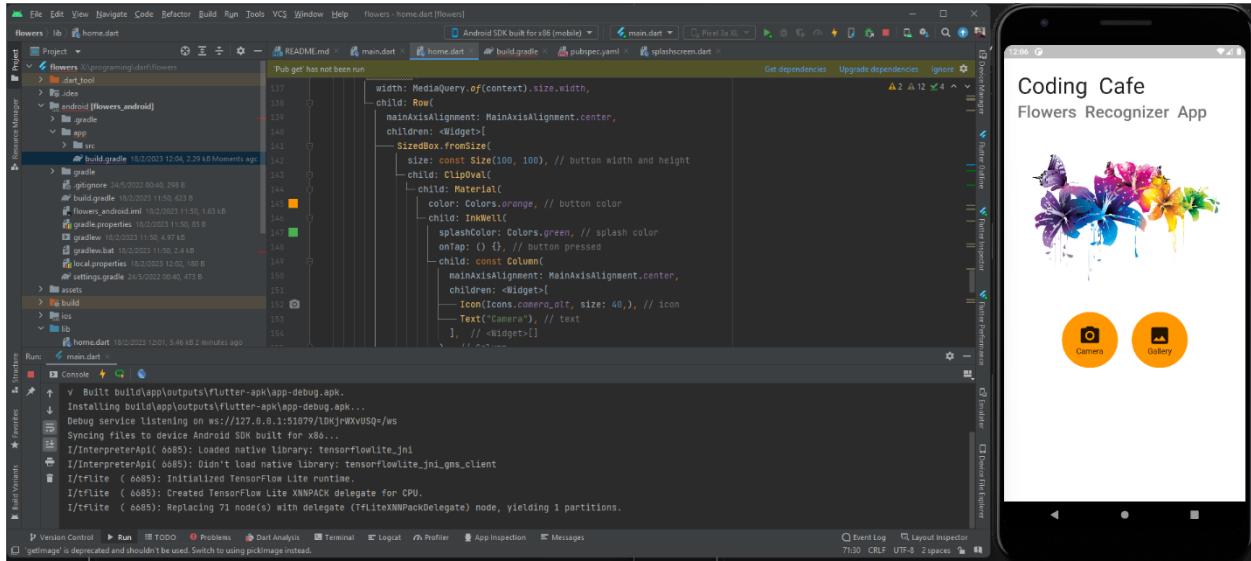
And here an example of how it works taking images from the gallery. The number at the beginning is just the position of the label.



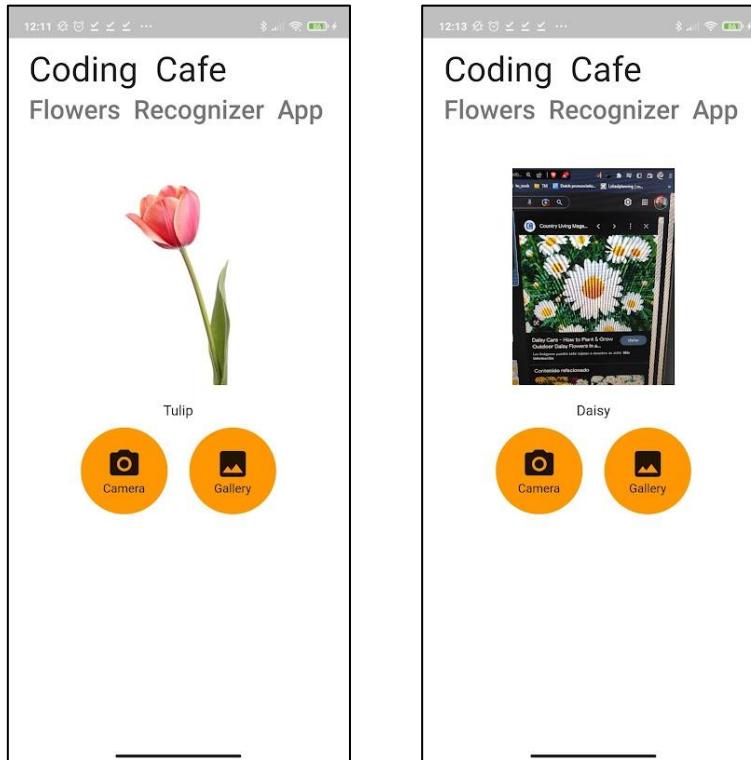
## Section 6: Flower types Identifier App

### Completed Project

Like usual just checking and modifying some libraries, but all working fine.



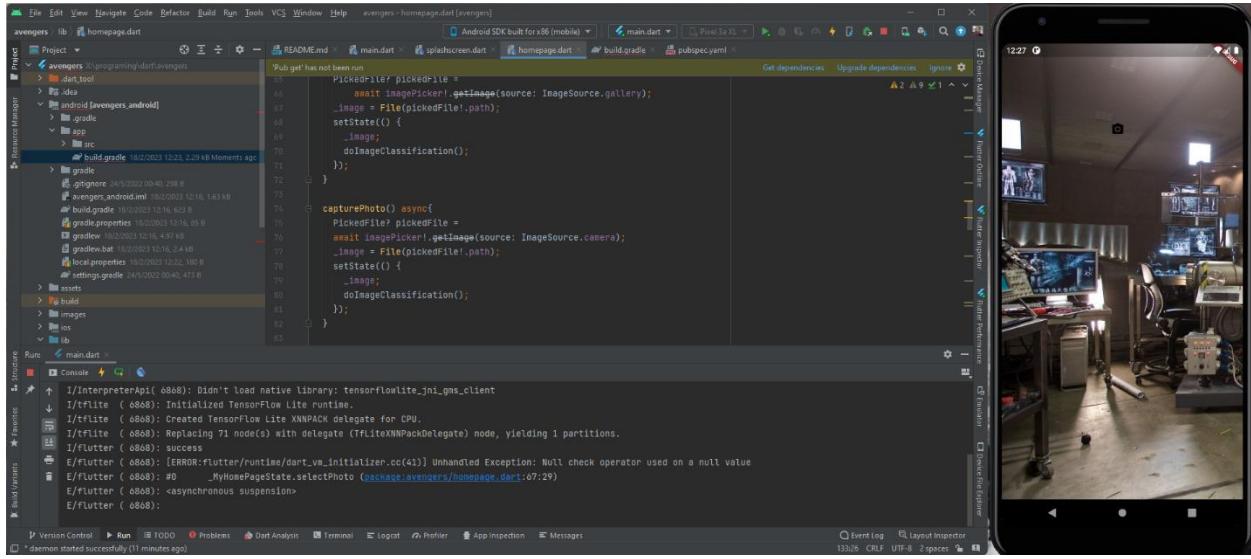
And the example using the Gallery and taking a picture.



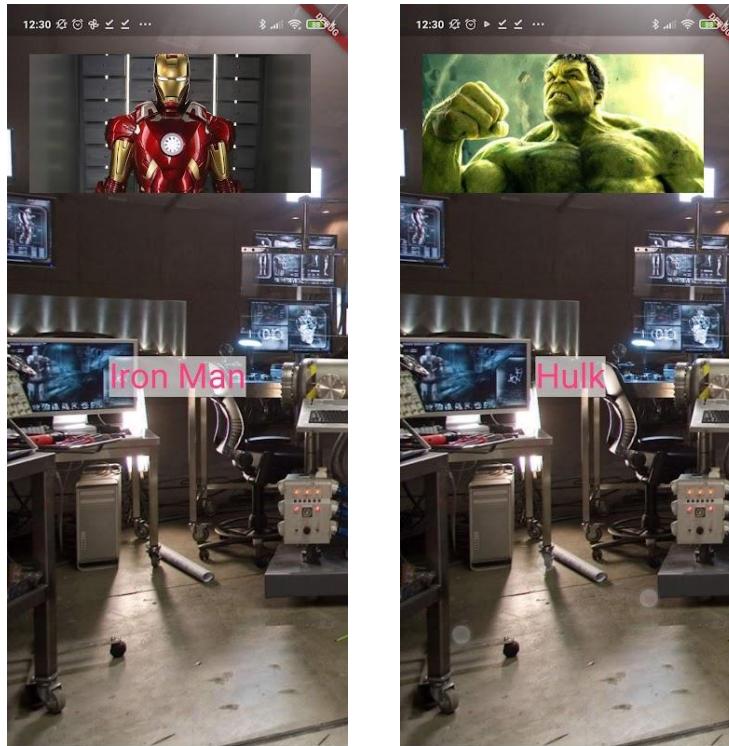
## Section 7: Avengers Characters Recognizer App

Completed Project

Updating libraries and running.

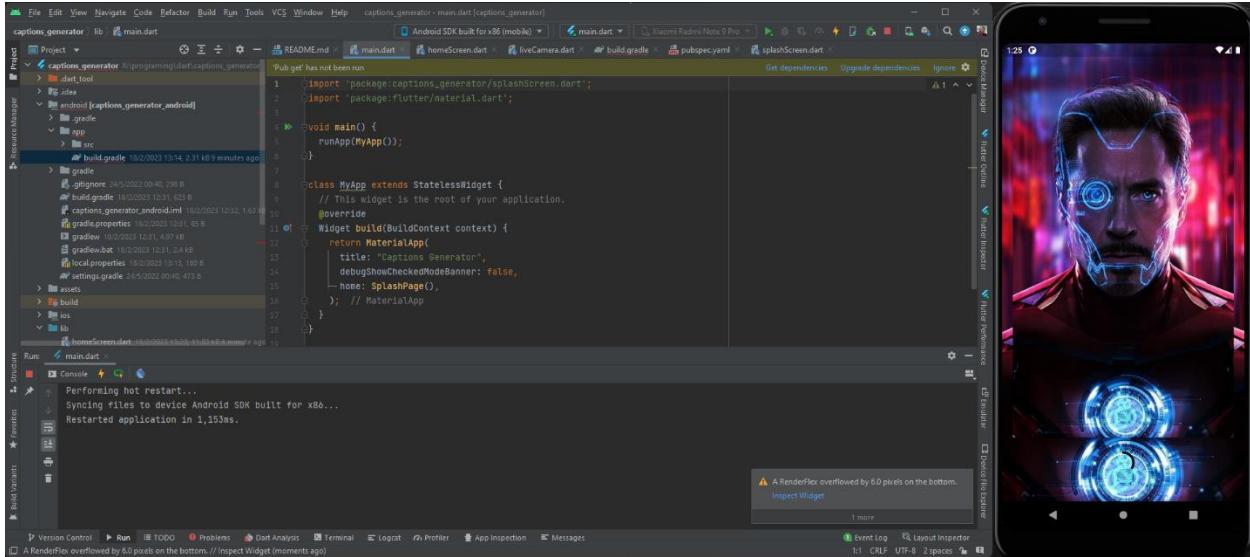


Example of detecting the Avenger.

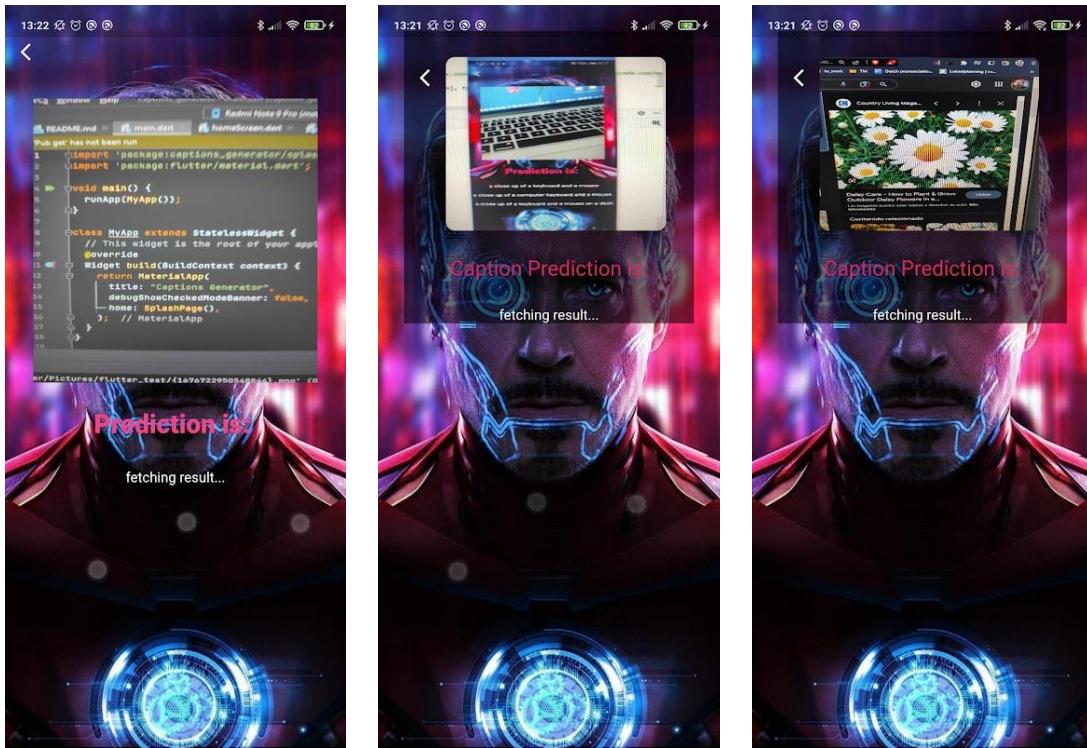


## Section 8: Image Caption Generator App

### Completed Project



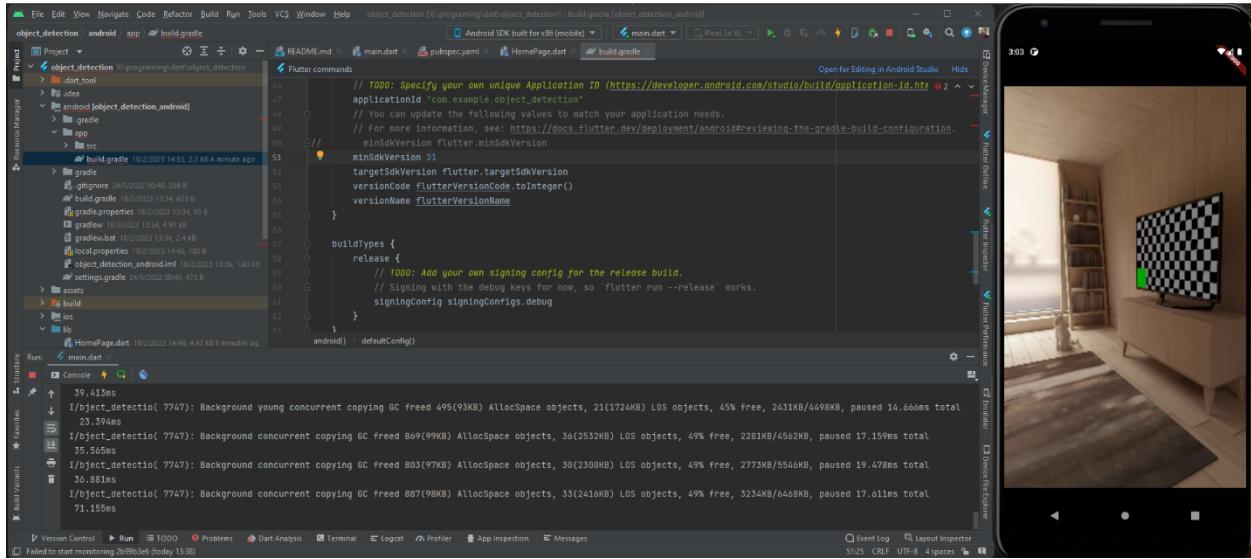
This App use an API and more libraries, with the new versions some things changed and now it is not getting the result of the caption.



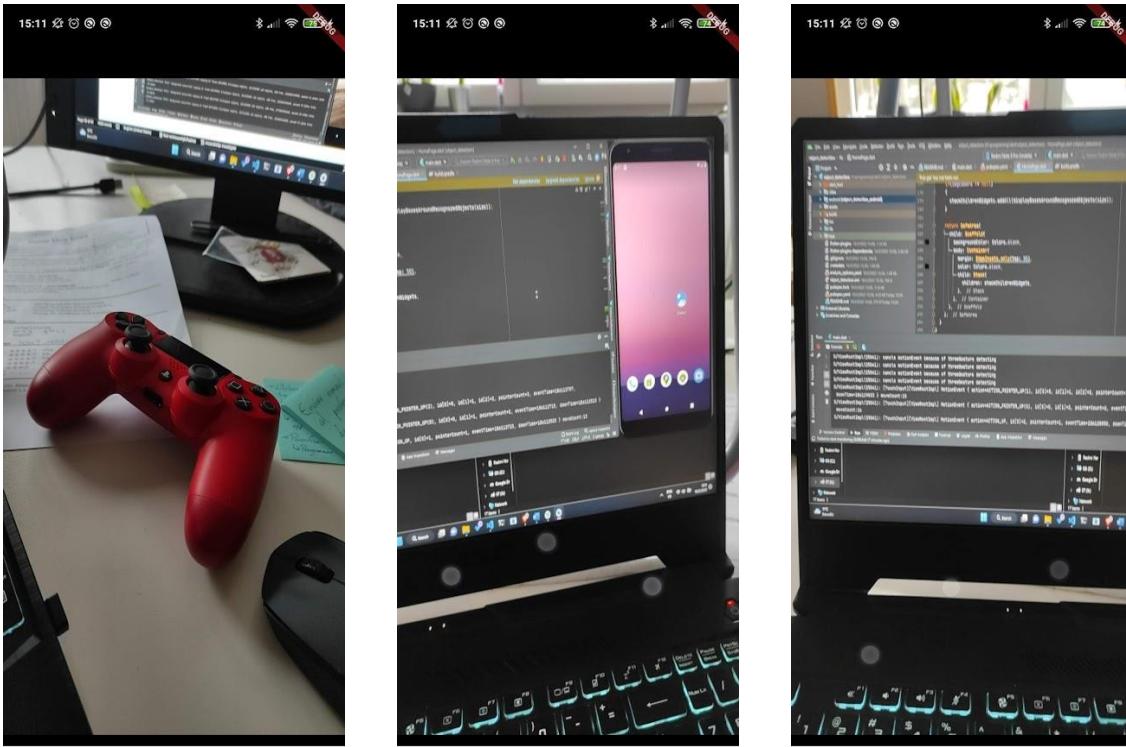
## Section 9: Live Object Detection App

### Completed Project

Again running on problems with the libraries and new versions of dart with null safety.



So, the final Example is opening the camera but not giving the results and making the boxes for the objects. The new library **is not working** like the old library.



## Section 10: More Projects

Conclusion and Link of the repository:

This course took more than the time it should because all the search of new libraries and fixing the error with the new update of Dart, the project in this course has null variables o variables that are initialized later but sometimes this is forgotten but this does not mean the variable is null. Plus, in the Dart documentation is written to avoid null values always.

GitHub repository: [https://github.com/DavidSilTroy/Flutter-AI--more\\_than\\_15\\_Apps](https://github.com/DavidSilTroy/Flutter-AI--more_than_15_Apps)

Certificate from Flutter Artificial Intelligence Course – Build 15+ AI Apps.

Screenshot from the Udemy website

The screenshot shows a certificate page from Udemy. At the top, there's a navigation bar with the Udemy logo, categories, a search bar, and links for Udemy Business, Enseña en Udemy, Mi aprendizaje, and user profile. Below the header, the certificate itself is displayed. It features the Udemy logo and the title "CERTIFICADO DE FINALIZACIÓN" in bold capital letters. The main title of the course is "Flutter Artificial Intelligence Course - Build 15+ AI Apps". Below the title, it says "Instructores Coding Cafe". A section for the recipient, "Destinatario del certificado:", shows a profile picture of David Silva Troya, his name, and his title as a Mechatronic Engineer || Applied Computer Science Student. Another section, "Acerca del curso:", includes a thumbnail image of a smartphone displaying a Flutter app, the course title, instructor, rating (3.4 stars), duration (9.5 hours), price (19,99 €), and download/share buttons. At the bottom of the certificate, there's a note about updating the certificate with the student's name and preferred language.

Link to see the certificate:

<http://ude.my/UC-abea81af-d031-4744-81ae-4c50a22e89e7>

## Deep Learning Course with Flutter & Python – Build 6 AI Apps

Flutter is a framework that uses Dart as program language, this was created by Google and allows us to create apps for Android and iOS. Plus, Flutter can be used to create websites. Deep Learning is a specific field of Artificial Intelligence where the machine learns from the data, recognizing patterns or improving the detection from predefined or labeled data.

This course has **6.5 hours** in total.

The screenshot shows the Udemy course page for 'Deep Learning Course with Flutter & Python – Build 6 AI Apps'. At the top, there's a navigation bar with the Udemy logo, categories, a search bar, and user account options. The main title is 'Deep Learning Course with Flutter & Python – Build 6 AI Apps'. Below it, a subtitle reads 'Build 6 Cutting-Edge Deep Learning Mobile Applications with Flutter & Python!'. The course has a rating of 3.7 stars from 326 reviews and 22,879 students. It was created by 'The AI Whisperer' and last updated on 4/2021. The course is in English with automatic subtitles. A large video thumbnail on the right shows a grid of six mobile phone screens displaying various AI applications. Below the thumbnail, a message says 'Has comprado este curso el Jan 14, 2023'. A 'Vista previa de este curso' button is also present. To the right of the video thumbnail, there are buttons for 'Ir al curso', 'Garantía de reembolso de 30 días', and 'Acceso de por vida'. Below these are buttons for 'Compartir', 'Regalar este curso', and 'Aplicar cupón'. A section titled '¿La formación es para 5 o más personas?' offers a 'Prueba Udemy Business' button. On the left, a box lists what you'll learn, including building neural networks in Python, using Flutter, and implementing AI ideas on mobile phones.

**Lo que aprenderás**

- ✓ Learn how to build State-of-the-Art algorithms in Python and then implement them into a Flutter application!
- ✓ Have a clear understanding of different types of Neural Networks and how you can use them to your advantage.
- ✓ Use different strategies to get Neural Networks with 90%+ accuracy.
- ✓ Building CNN in Python and Implementing it in Flutter
- ✓ Flutter Machine Learning
- ✓ Build any Neural Networks in Python and then export them into your Flutter application.
- ✓ The tools and skills to develop any AI idea you have onto a mobile phone.
- ✓ Building GAN in Python and Implementing it in Flutter
- ✓ Implementing NLP Algorithms in Flutter

### Section 1: Introduction to the Course

#### Course Introduction

Brief explanations about AI, code editor, framework and the projects we are going to make.

The screenshot shows a video player for the first section of the course. The video frame displays a man in a pink shirt standing next to several smartphones showing different AI applications. The video player interface includes controls for volume, playback, and settings. To the right of the video, a sidebar titled 'Contenido del curso' (Course Content) lists the sections and their sub-components. Section 1: Introduction to Course contains three sub-sections: '1. Course Introduction' (4 min), '2. Extensions on VS Code used in Course' (2 min), and '3. Installing Flutter on Mac & Windows' (3 min). Section 2: Sign Language Detector in Teachable Machine contains one sub-section: '4. Simple NN - Building a Sign Language Detector in Teachable Machine' (7 min). Section 3: Cat and Dog Classifier contains one sub-section: '5. Building a Cat and Dog Classifier' (11 min).

Contenido del curso

Sección 1: Introduction to Course

- 1. Course Introduction 4 min
- 2. Extensions on VS Code used in Course 2 min
- 3. Installing Flutter on Mac & Windows 3 min

Sección 2: Sign Language Detector in Teachable Machine

- 4. Simple NN - Building a Sign Language Detector in Teachable Machine 7 min

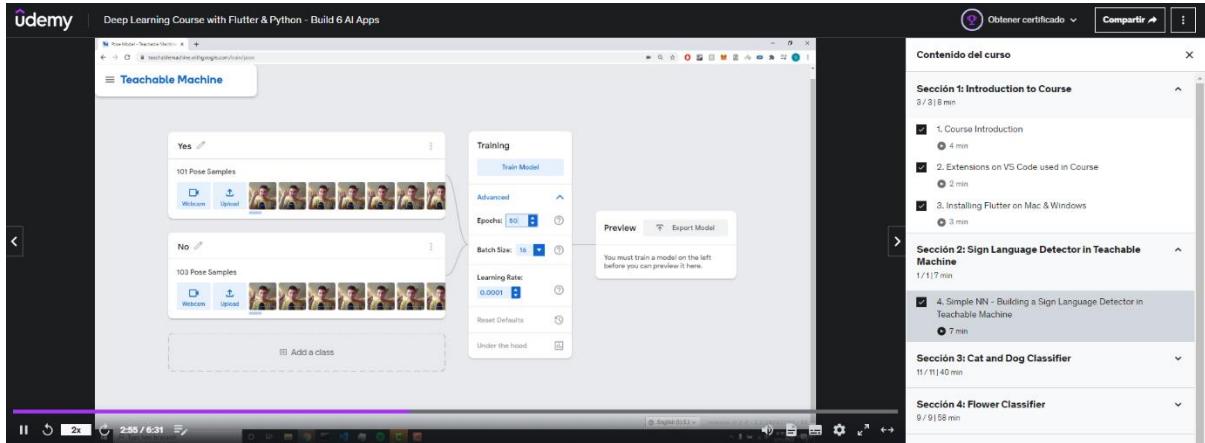
Sección 3: Cat and Dog Classifier

- 5. Building a Cat and Dog Classifier 11 min

## Section 2: Sign Language Detector in Teachable Machine

### Simple NN – Building a Sign Language Detector in Teachable Machine

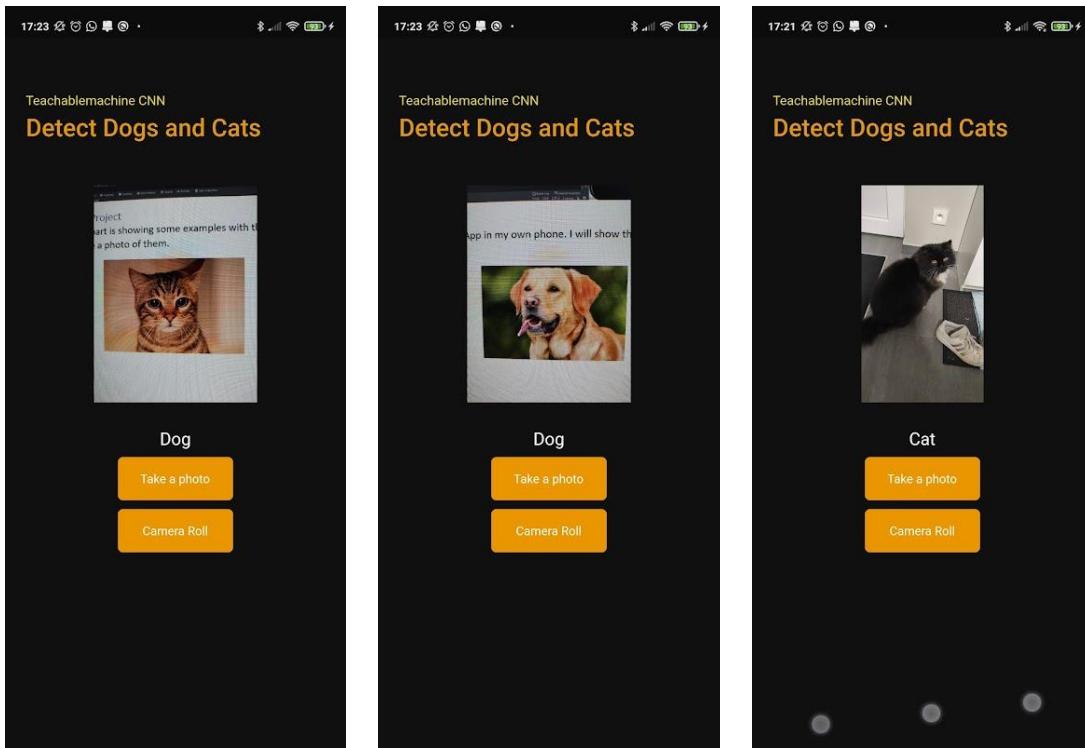
Showing how to use Teachable Machine of Google in the browser to create your own dataset with real time camera and export the model.



## Section 3: Cat and Dog Classifier

### Completed Project

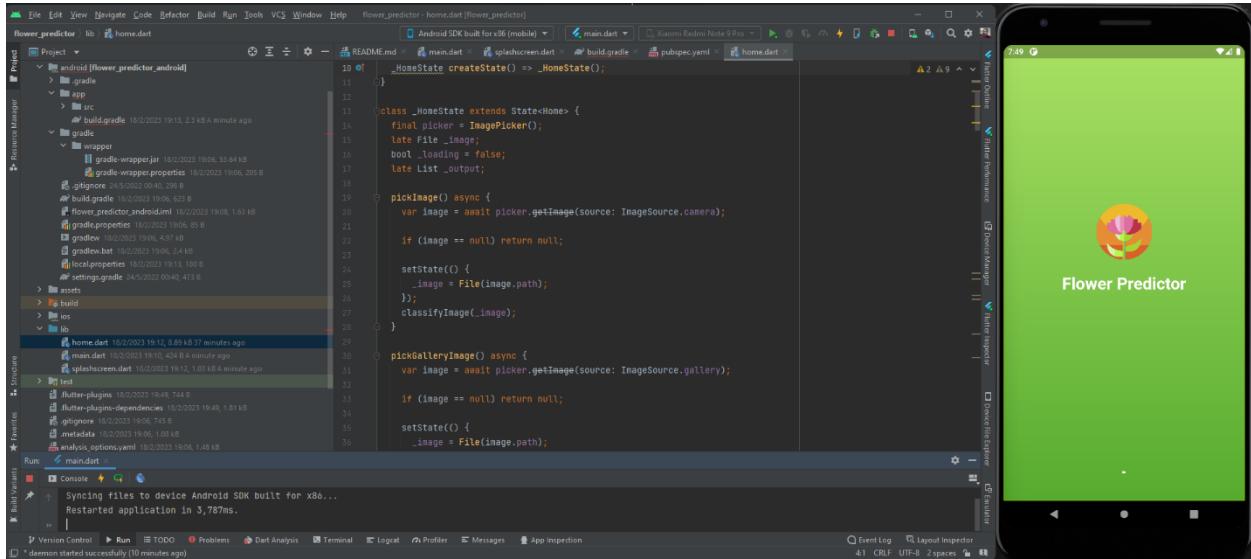
Example of the App working. It is similar to the App from the other class but the model is different, so the result of the prediction can be different. That is why is detecting a dog when it is a cat.



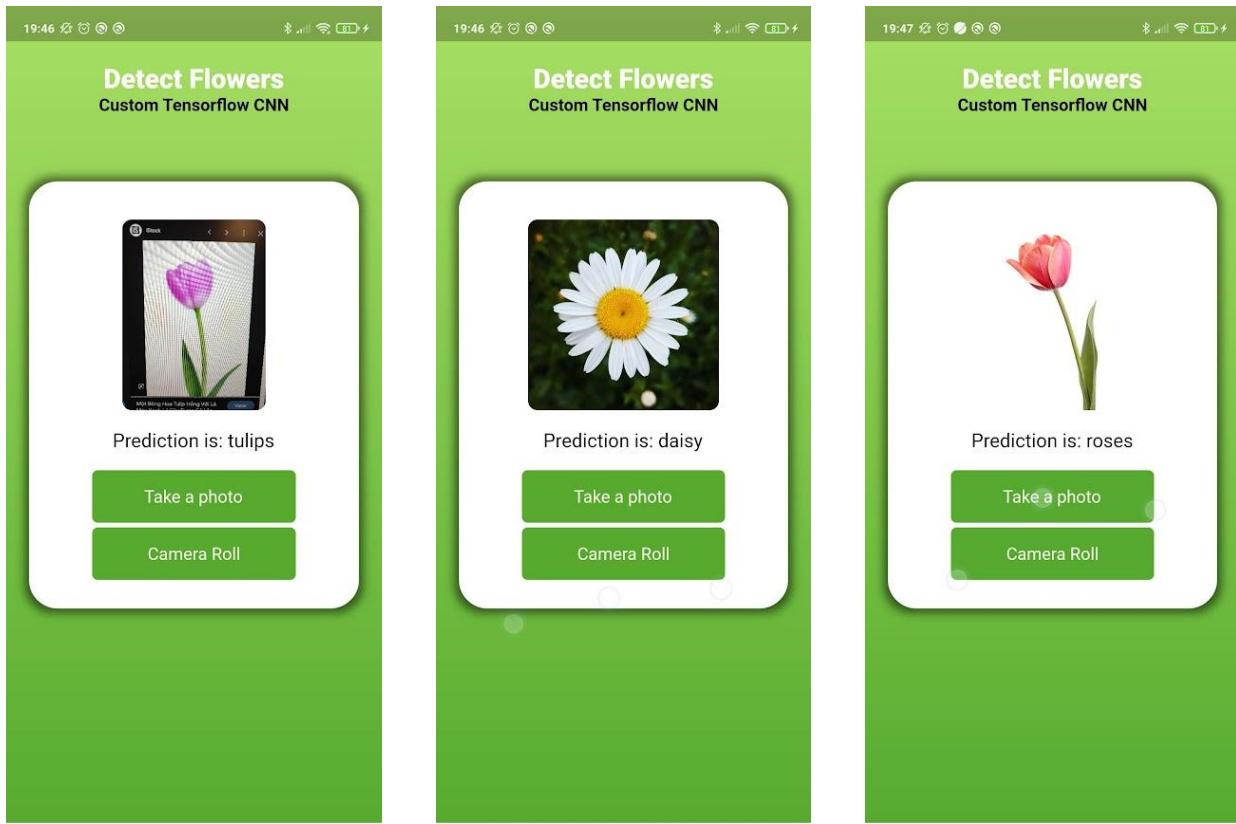
## Section 4: Flower Classifier

### Completed Project

It works taking a photo or selecting the picture from the gallery.

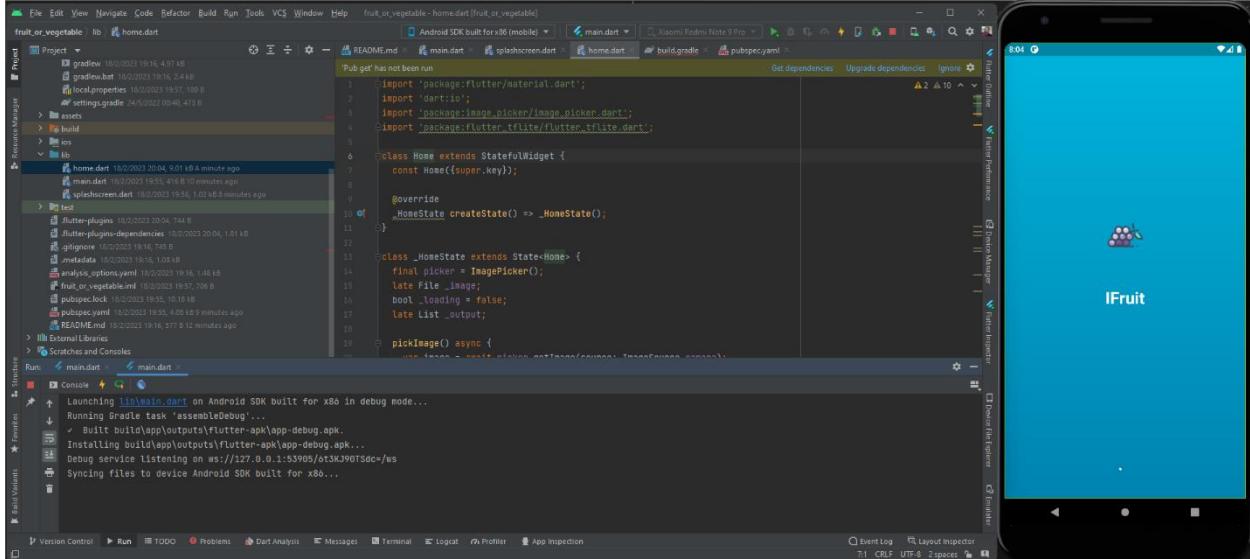


Example of the App working in my phone.

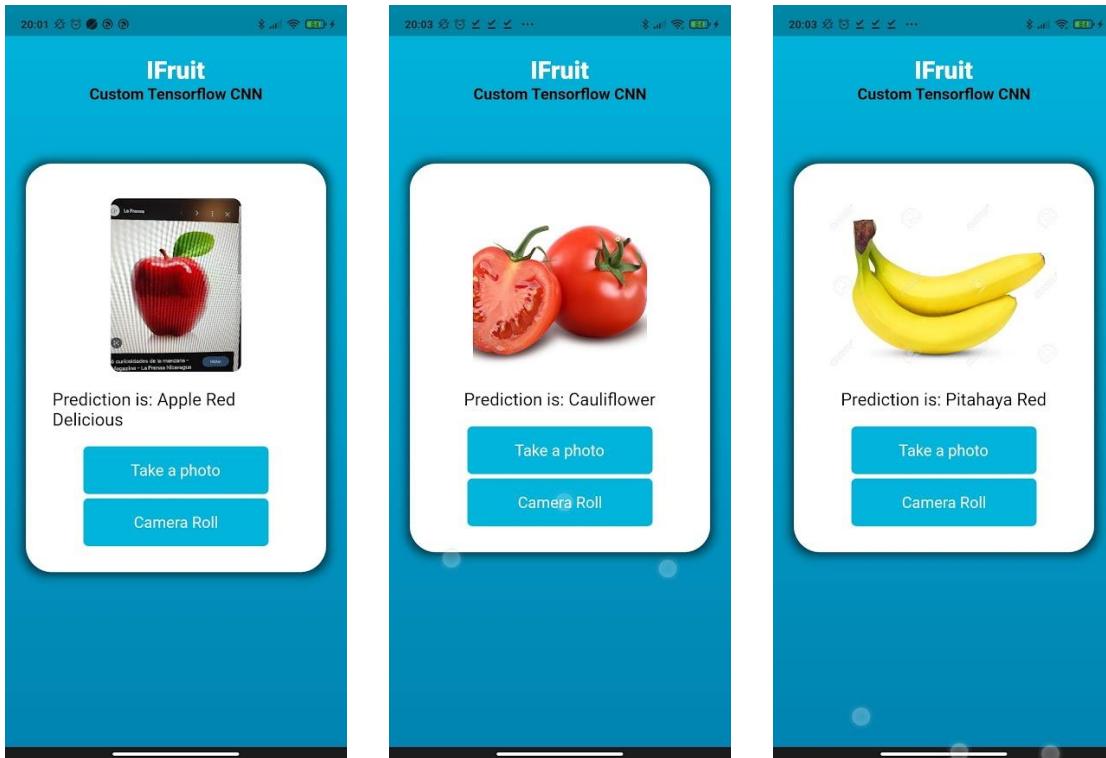


## Section 5: Fruit and Vegetable Classifier

### Completed Project



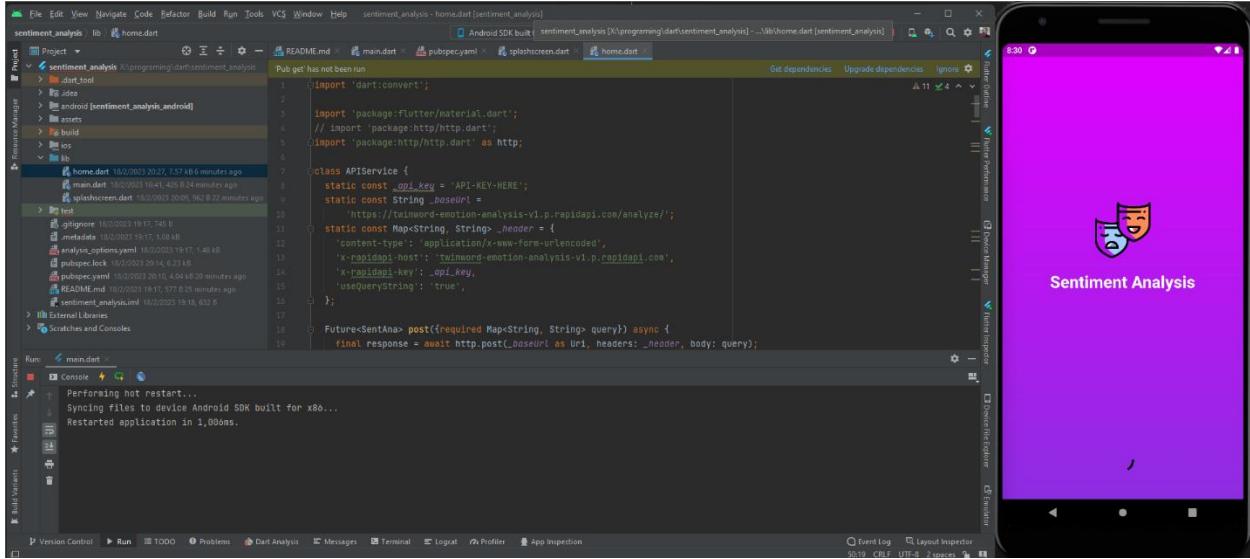
Taking a picture of a photo of an Apple gave a good result but using pictures from the gallery is predicting bad, the model needs more training.



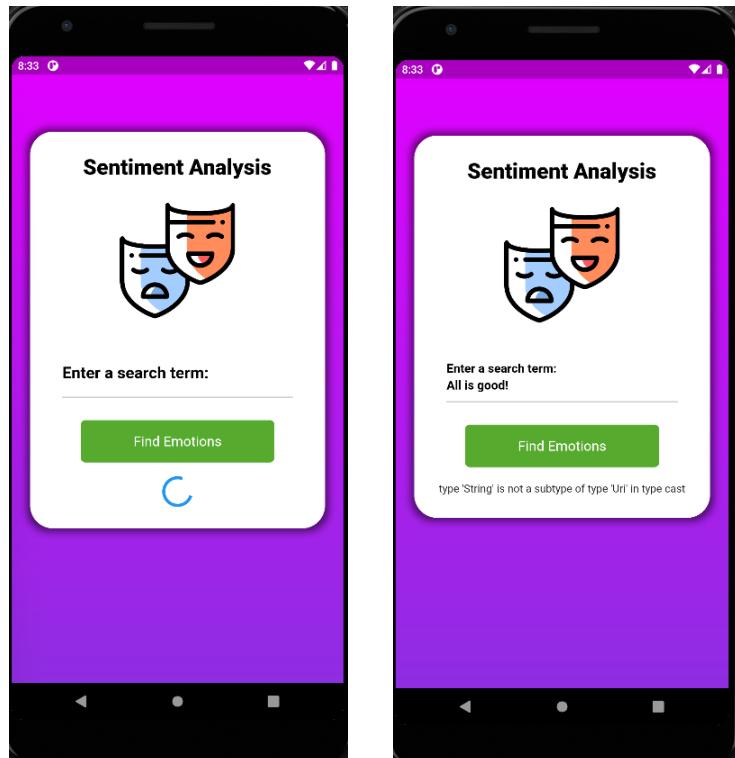
## Section 6: Sentiment Analysis NLP Algorithm

## Completed Project

The problem with this App is that is using an API that even for the free version ask for the Credit Card number. So the app runs but without an API it doesn't do something



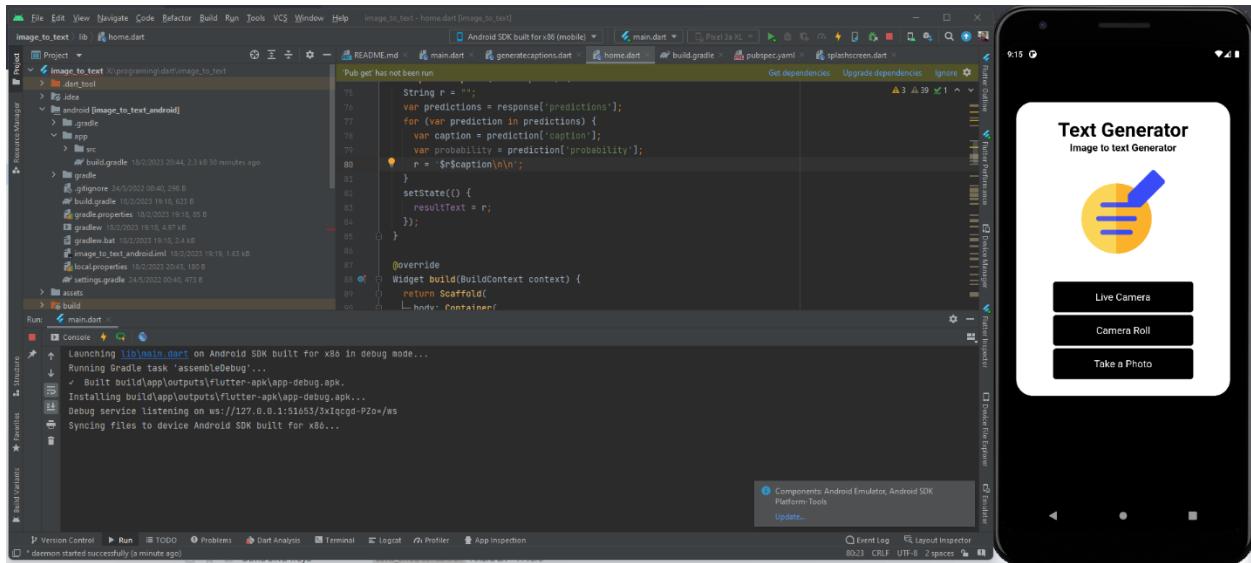
Another problem is the way that the new library for request the API es working, now it need an Uri instead of a String with the url.



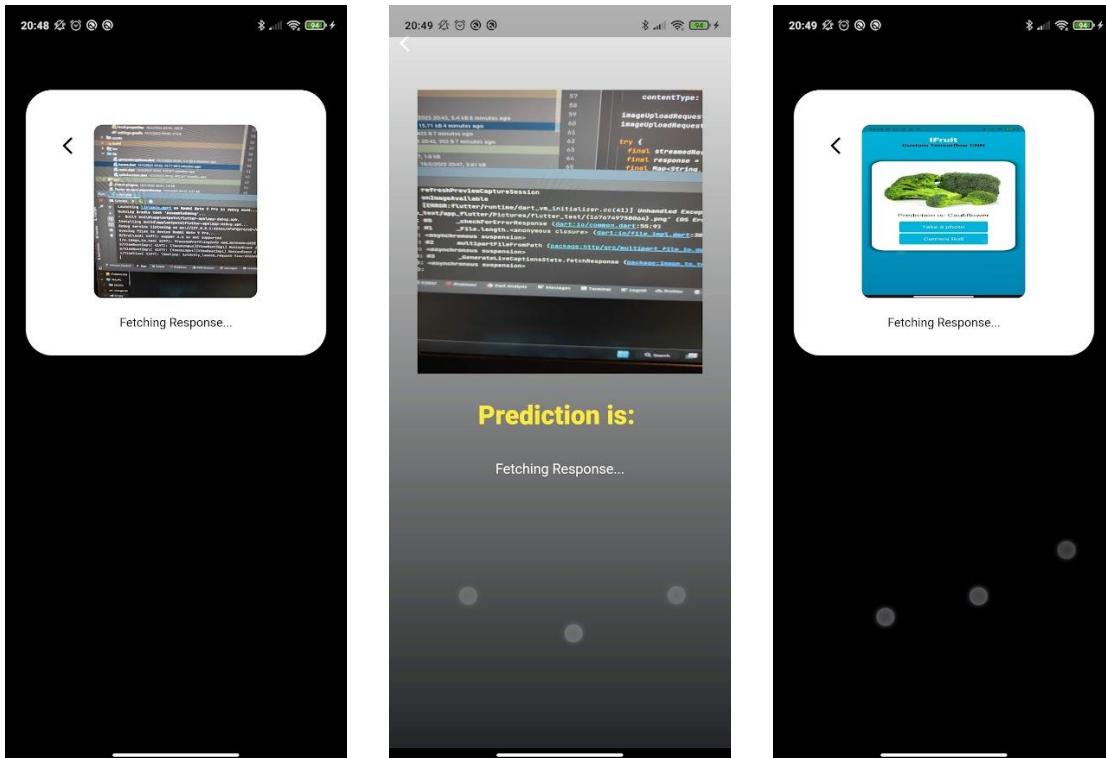
## Section 7: Image-To-Text NLP Algorithm

### Completed Project

Another project that starts to fail with the update of the libraries, the prediction never comes.



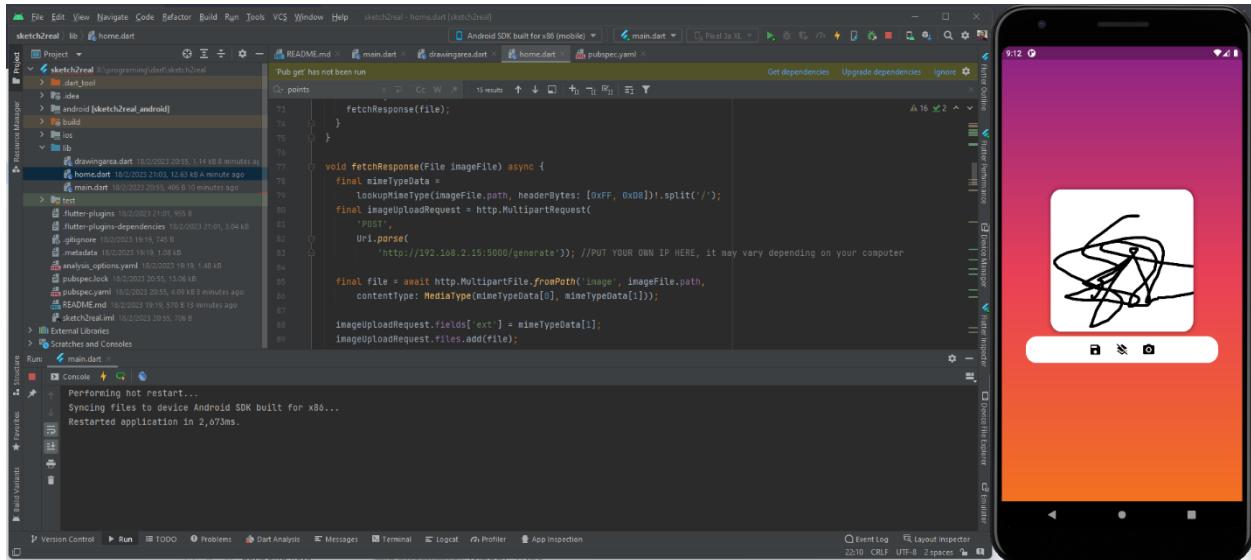
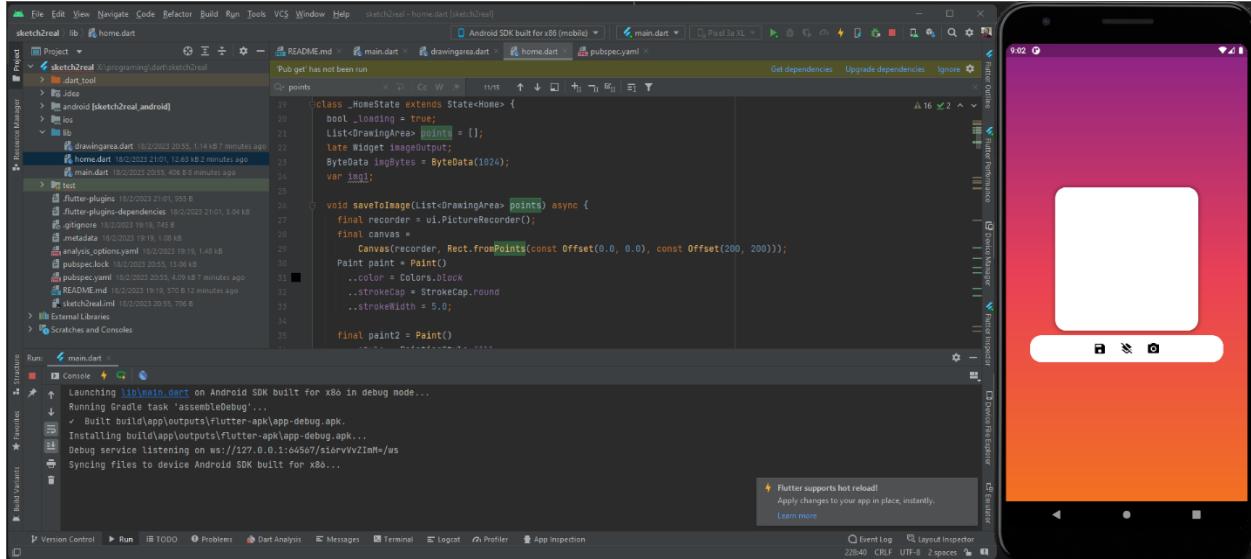
All 3 options stayed in a eternal loading to give back the response, but never worked.



## Section 8: Sketch2Real GAN App

### Completed Project

With this one it was used an API in python using Flask and Keras, but the library of Keras also had change and the Python Script was giving errors, so at the end was not possible to make the sketch real.



## Section 10: Projects

### Conclusion and Link of the repository

The speed of the technology changing is giving us better software but, in this case, also the code can be considered “old” too fast when there is a new update from the program language like dart or also from libraries like Keras from TensorFlow. Sadly, in this case the teachers have not updated the classes or code to work with the new versions and some programs require a higher knowledge in dart and flutter.

GitHub Repository: <https://github.com/DavidSilTroy/Flutter-AI--DL-6-Apps>

## Certificate from Deep Learning Course with Flutter & Python – Build 6 AI Apps.

Screenshot from the Udemy website

The screenshot shows a certificate page from the Udemy website. At the top, the Udemy logo and navigation links for 'Categorías', 'Buscar cualquier cosa', 'Udemy Business', 'Enseña en Udemy', 'Mi aprendizaje', and user profile are visible. Below the header, the certificate details are displayed:

**Destinatario del certificado:**  
David Silva Troya  
Mechatronic Engineer || Applied Computer Science Student

**Acerca del curso:**  
**Deep Learning Course with Flutter & Python - Build 6 AI Apps**  
The A.I. Whisperer  
3.7 ★★★★☆ (327)  
6.5 horas en total · 64 clases  
**19,99 €**

**David Silva Troya**  
Fecha 14 de Febrero de 2023  
Duración 6.5 horas en total

**Actualiza tu certificado** con tu nombre correcto o idioma preferido

At the bottom left, a note states: "El anterior certificado garantiza que David Silva Troya ha completado con éxito el curso Deep Learning Course with Flutter & Python - Build 6 AI Apps a fecha de 14/02/2023, habiendo sido impartido por The A.I. Whisperer en Udemy. El certificado indica que se ha completado la totalidad del curso, según lo validado por el estudiante. La duración del curso representa el total de horas de video del curso en el momento de finalización más reciente."

Link to see the certificate:

<http://ude.my/UC-5fa10a85-6da6-4d8b-981d-2cbcc2f9603e>