




Virtual Mobility



ErasmusPlus 2020-2022
Tourism, innovation and sustainability



Virtual mobility

9-11 february 2021

TUESDAY 9 FEB

9 AM

Introduction and
activity presentation

10 AM

Tools we will use:
Hardware and
Software

11 AM

Drone footage: how
and where it is
possible

WEDNESDAY 10 FEB

9 AM

Photo and video
editing

10 AM

Mobile app and
professional editing
tools

11 AM

360° Photo and video

THURSDAY 11 FEB

9 AM

Website creation

10 AM

Create a virtual
itinerary

11 AM

Publish and sharing

Co-funded by the
Erasmus+ Programme
of the European Union



TOURISM, INNOVATION
AND SUSTAINABILITY

9-10-11
FEBRUARY 2021

VIRTUAL
MOBILITY

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**TOURISM, INNOVATION
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**VIRTUAL
MOBILITY**

ATLANTIC
OCEAN

Introduction and activity presentation

Original project plan

10/2020 - Short-term joint staff training events - Italy

11/2020 - Short-term exchanges of groups of pupils - Slovenia

02/2021 - Short-term exchanges of groups of pupils - Spain

05/2021 - Short-term exchanges of groups of pupils - Turkey

10/2021 - Short-term exchanges of groups of pupils - France

04/2022 - Short-term exchanges of groups of pupils - Italy

New hypothetical plan...

02/2021 - Short-term joint staff training events - Italy - Virtual mobility


10/2021 - Short-term exchanges of groups of pupils - Slovenia

02/2022 - Short-term exchanges of groups of pupils - Spain

05/2022 - Short-term exchanges of groups of pupils - Turkey

10/2022 - Short-term exchanges of groups of pupils - France

04/2023 - Short-term exchanges of groups of pupils - Italy



we can extend the
project until
30 september 2023

Who we are...

School and Team



IIS "Galileo Galilei" - Canicattì

www.galileicanicatti.edu.it

scuola@galileicanicatti.edu.it



Costruisci il tuo
progetto di vita con noi

ISS “G. Galilei”

www.galileicanicatti.edu.it



About us

Galilei is a technical and vocational institute situated in [Canicattì](#), which is Agrigento's province fourth-largest municipality. You will find Canicattì with its 35.000 inhabitants on the south coast of Sicily.

We are close to "Valle dei Templi" and other spectacular natural and cultural heritage .

Galileo Galilei is a technical and vocational secondary school with about 1000 students and 170 teachers.







ALILEO
ALILEI

Costruisci il tuo
progetto di vita con noi

VIA PIRANDELLO N. 4 - 92024 CANICATTI (AG)

0922852999 - AGIS027004@ISTRUZIONE.IT

Serena Di Maida

Computer Science Teacher

prof.dimaidaserena@galileicanicatti.edu.it



Luisa La Morella

English Teacher

prof.lamorellaluisa@galileicanicatti.edu.it



Salvatore Venturella

Support Teacher

prof.venturella@galileicanicatti.edu.it



Our partners

presentation

- France
- Slovenia
- Spain
- Turkey



What we want to realize together

... and we will have fun doing it!

A website with a space dedicated to each mobility, which will contain

- a short film with the shots taken by the drone and all the other cams (including students' smartphones).
 - a virtual tour created using Google Earth
-

Tools we will use:

Hardware and Software

Drones

DJI Family



Our approved project

we plan to buy

- 360° Cam
- Drone
- Pilot License

Description and Justification	Requested Grant (75%)
360 Degree Camera - To shot spherical image useful for creating virtual tours (indoor and outdoor) or itineraries (like streetview)	600,00 EUR
Drone - A drone that allows us to make impressive aerial shots during all the outings of the students in the various countries. These will enrich the products made by the students and give an impression of professionalism to the works.	1.200,00 EUR
Achievement of the drone pilot license (VL / MC) issued by ENAC (National Agency for Civil Aviation) valid throughout the European territory and drone insurance.	1.900,00 EUR

But... something is changing

Price and EU Regulation are changing, and we will buy 2 drones with the same budget and you will know why when we will explain new regulations.



DJI Mavic Air 2



DJI Mavic Mini 2

360° Camera

the easiest way to make
spectacular shots



Super
5.7K 360° Capture



4K Wide Angle



FlowState
Stabilization



Waterproof to 5m
(16.4ft)



Invisible
Selfie Stick



Auto Frame



Hyperlapse



Point to Track



Voice Control



Slow Motion



HDR



Night Shot

An aerial, wide-angle shot of the village of Hallstatt, Austria, taken from a high vantage point over the lake. The village is built on a narrow peninsula, with a large white church with a tall spire as the central landmark. To the right, there are several smaller buildings, including a large wooden structure that appears to be a hotel or restaurant. The lake is calm, reflecting the sky and the surrounding green hills. The sky is a clear, deep blue. The overall scene is peaceful and scenic.

HALLSTATT

INSTA360 CAMER

BULLET TIME





we can use all devices capable of
taking a photo or recording a
video...

From the reflex to the smartphone

Cameras

every type of camera



just be careful of orientation



✓ Yes / Right. Do it.



✗ No / Wrong.

Google Photo and Drive

to easely share picture and
video

After each mobility we will share all the photos and videos made with drones, smartphones and any other device in a google drive folder.

And we will create an Album on Google Photo.

This will be the easier way to share our work...

Google Earth

to create virtual tours

We will create one Google Earth Project for each country.

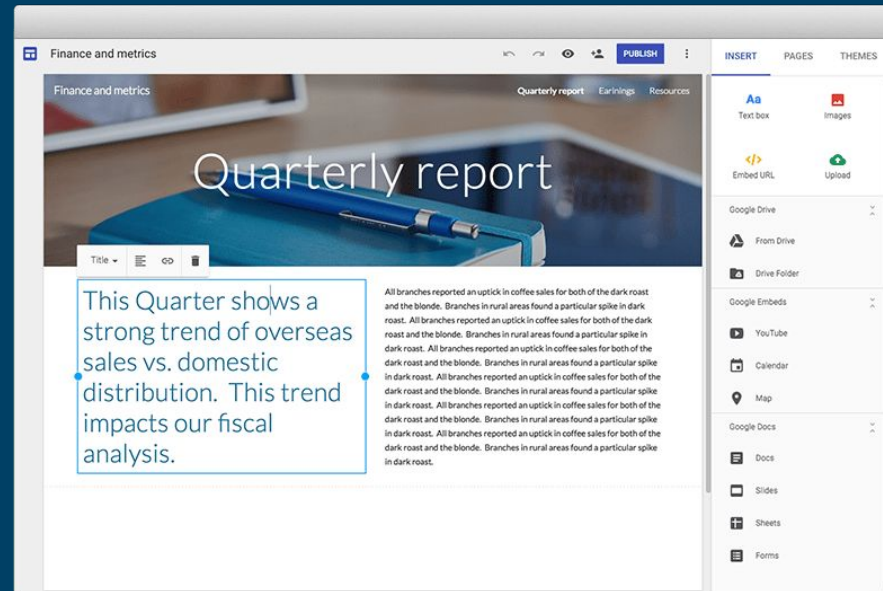
And we will share these on our project website.





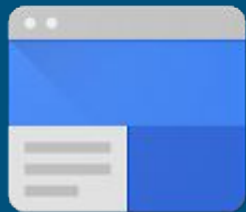
Google Site

to create a website and share
our work

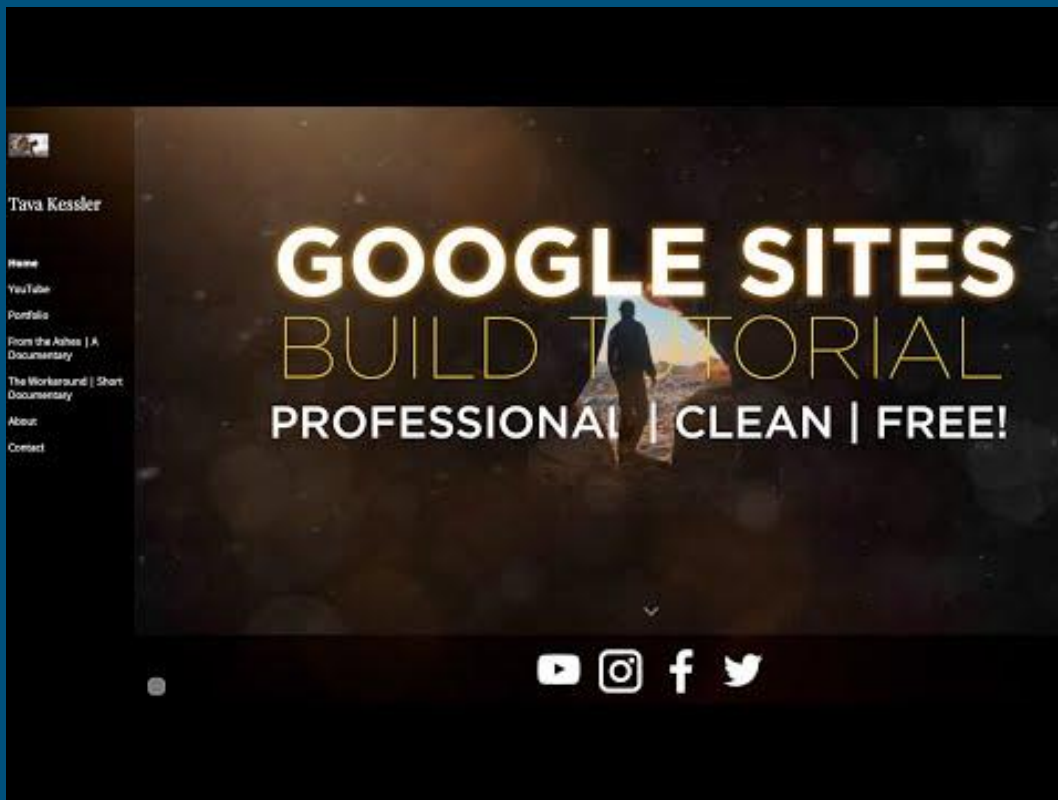


Everybody can be a web designer

You can find dozens of tutorials on youtube that explain you how to move on Sites in 10 minutes



Google Sites



Why Google?

because...

There are a lot of tools around the web but we think that for our project Google is the best compromise between results and commitment.

- It's FREE
 - it's collaborative
 - it's easy to use
 - we need just a google account
-

Drone footage: how and where it is possible

Why 2 drones...

Because since 1 January 2021 we have a new EU regulation.



<https://www.easa.europa.eu>



You want to fly me or not?

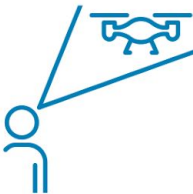
DO



Make sure you are adequately insured

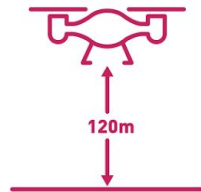


Check for no-fly zones and any limitations in the area where you want to fly



Keep the drone in sight at all times

DO NOT



Do not fly higher than 120m from the ground



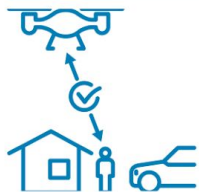
Do not fly near aircraft & in the proximity of airports, helipads or where an emergency response effort is ongoing



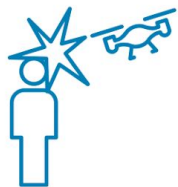
Do not infringe other people's privacy.



DO



Maintain a safe distance between the drone and people, animals and other aircraft and of at least a distance of 150m from residential, commercial, industrial and recreational areas



Inform your national aviation authority immediately if your drone is involved in an accident that results in a serious or fatal injury to a person, or that affects a manned aircraft

DO NOT

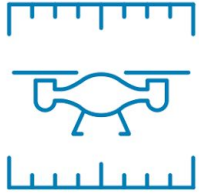


Do not record intentionally or publish photographs, videos or audio recordings of people without their permission



Do not use the drone to carry dangerous goods or to drop material

DO



Operate your drone within the limits defined in the manufacturer's instructions

DO NOT



Do not modify your drone. Only software uploads recommended by the drone manufacturer are allowed

Fly zone

Before flying we must check the rules in force in a specific area on specific apps

Cerca comandi o luoghi... [Ctrl+c]

Informazioni sul punto selezionato

Lat E 41° : 52' : 37" Lon N 12° : 28' : 52" Quota max 0 m

Regole dell'aria

Regola operatori professionali

Le operazioni non sono consentite. Si può operare in questa area unicamente dietro specifica autorizzazione rilasciata da ENAC, ai sensi della procedura ATM-09. Solo se l'area è interessata da un CTR

Regola utenti ricreativi

Zone sottostanti

LI R19/A - ROMA CITTA LIR19A

Id	Nome	Tipo
LIR19A	LI R19/A - ROMA CITTA	R
Classe	Limite basso	Limite alto
	0 m (SFC)	304 m (MSL)

ZONA/ZONE '1 LIRR1

LI R19/A - ROMA CITTA

43%

Lat N41°51'58" Lon E12°20'35"

Proibiteo

Dangerous

Acrobatic Activ.

National Park

Paratr. Activity

Aeroclub Activ.

Restricted

RAS

RAS Artillery

Airport

CTR

The EASA Open Category

A1: fly over people but not over assemblies of people;

A2: fly close to people;

A3: fly far from people.

Categoria **Certified**



Anche trasporto
merci pericolose
e persone

Categoria **Specific**



Peso e quota	Volo
Nessun limite	anche BVLOS

Scenari standard

SORA

SAIL 6

SAIL 5

SAIL 4

SAIL 3

SAIL 2

SAIL 1

Categoria **Open**



A3 Volo lontano dalle persone

Peso	Quota max	Volo
<25 kg	120m AGL	VL0S

A2 Volo vicino alle persone

A1 Volo sulle persone



Scenario

SAIL 1

Categoria *Open*



A3 Volo lontano dalle persone

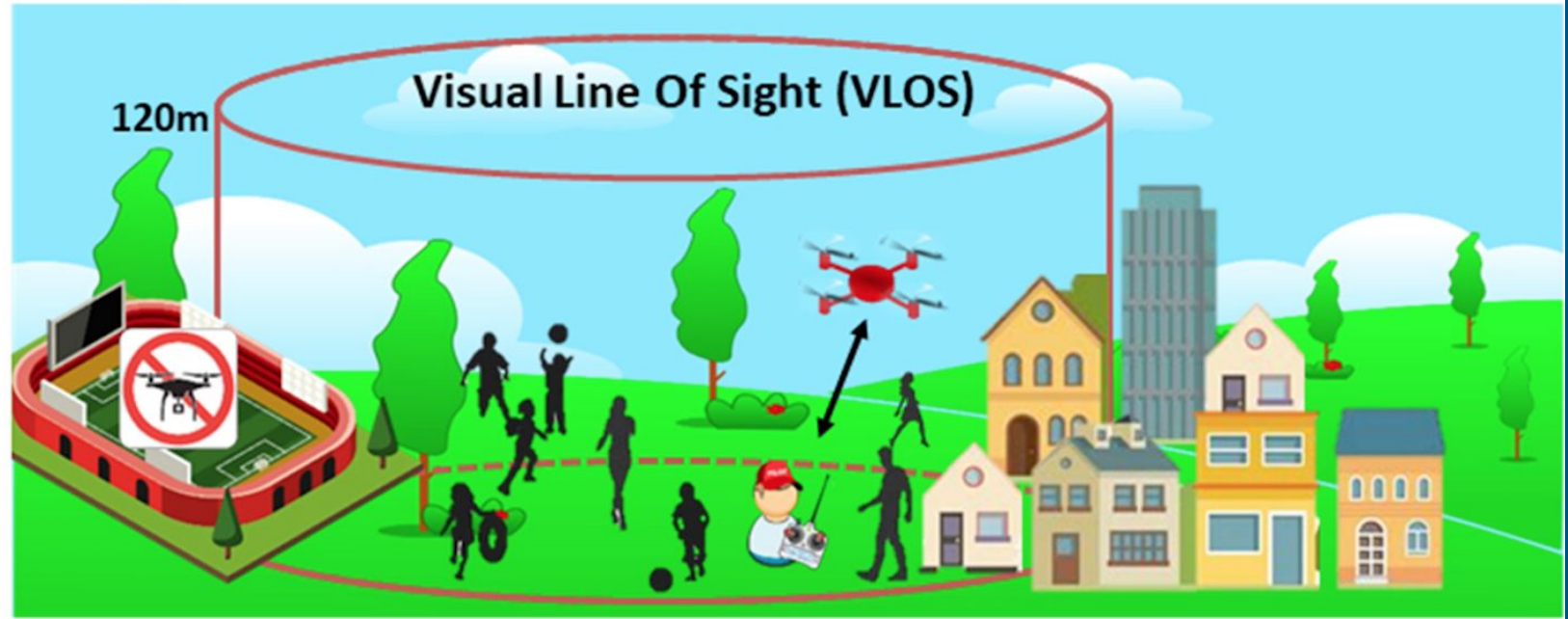
Peso	Quota max	Volo
<25 kg	120m AGL	VLOS

A2 Volo vicino alle persone

A1 Volo sulle persone

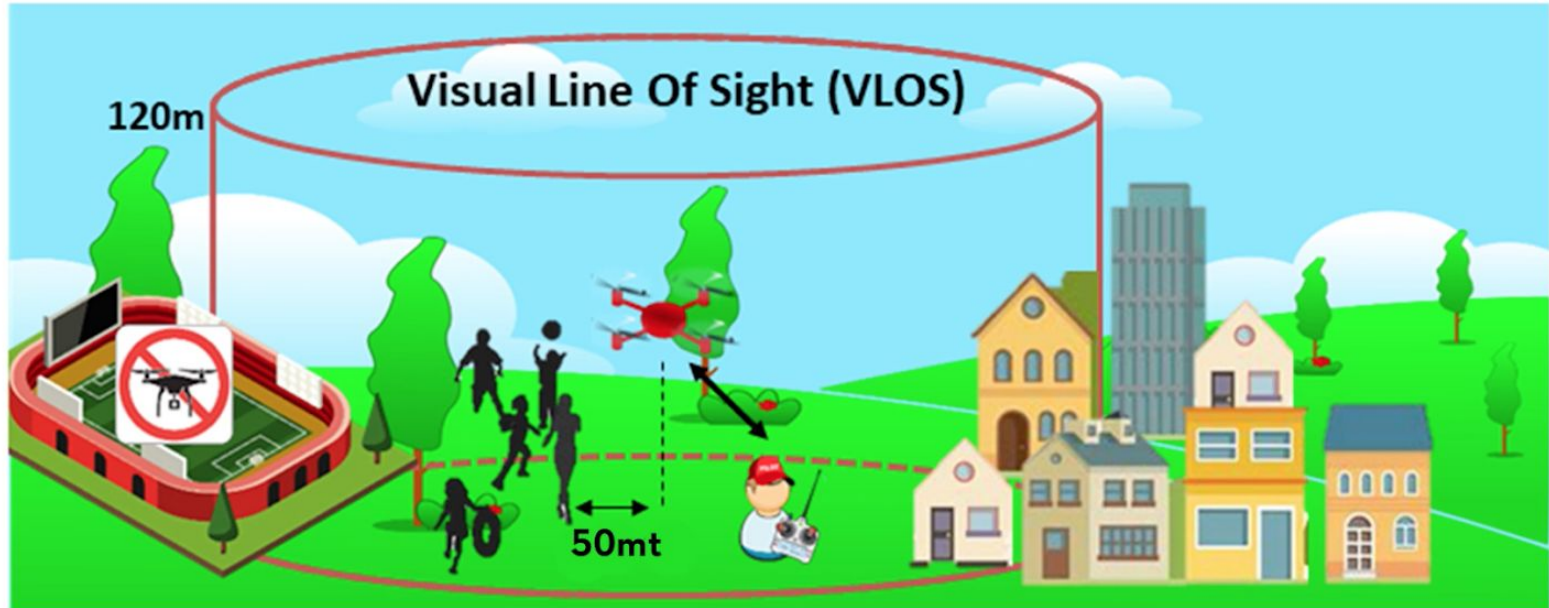


LIMITED OPEN CATEGORY - A1



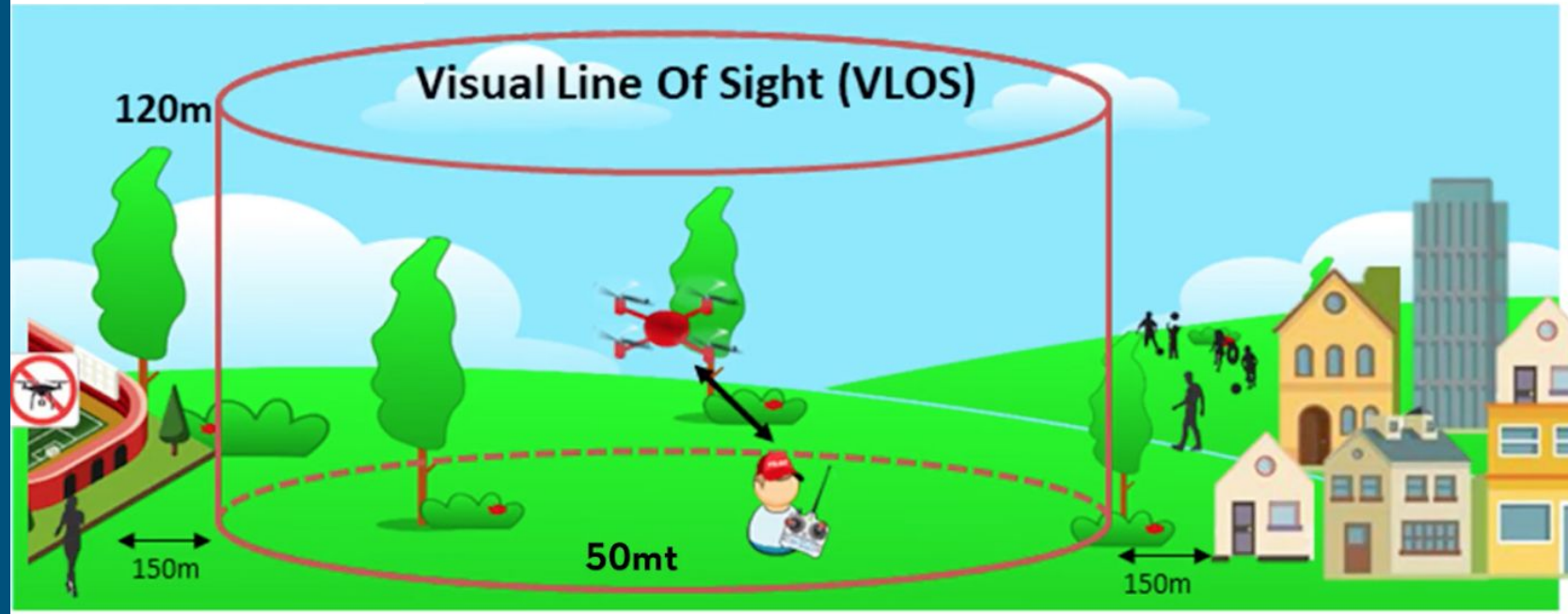
A1: fly over people but not over assemblies of people;

LIMITED OPEN CATEGORY - A2



A2: fly close to people;

LIMITED OPEN CATEGORY - A3



A3: fly far from people.

UAS		Operation		Drone Operator/pilot		
Class	MTOM	Subcategory	Operational restrictions	Drone Operator registration	Remote pilot competence	Remote pilot minimum age
Privately built	< 250 g	A1 (can also fly in subcategory A3)	<ul style="list-style-type: none"> - No flying expected over uninvolved people (if it happens, should be minimised) - no flying over assemblies of people 	No, unless camera / sensor on board and a drone is not a toy	- no training needed	No minimum age
Drones without class identification label	< 500 g			Yes	<ul style="list-style-type: none"> - read user manual - complete the training and pass the exam defined by your national competent authority 	16*
Drones without class identification label	< 2 kg	A2 (can also fly in subcategory A3)	<ul style="list-style-type: none"> - no flying over uninvolved people - keep horizontal distance of 50 m from uninvolved people (this can be reduced to 	Yes	<ul style="list-style-type: none"> - read user manual - complete the training and pass the exam defined by your national competent authority 	16*
Drones without class identification label or privately built	< 25 kg	A3	<ul style="list-style-type: none"> - do not fly near people - fly outside of urban areas (150 m distance) 	Yes	<ul style="list-style-type: none"> - read user manual - complete the training and pass the exam defined by your national competent authority 	16*

Figure 1 - Limited open category valid until January 1, 2023, using drones without class identification label

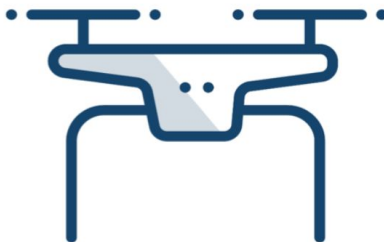
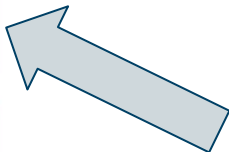
mavic mini 2

mavic air 2

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A1-A3
OPEN

Operazioni
non
critiche



Attestato di Pilota di APR (Operazioni Non Critiche)

(Proof of completion of the online training)

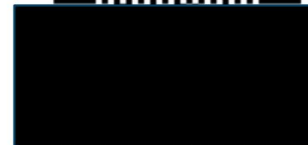
Nome: **Serena**
(First Name)

Cognome: **Di Maida**
(Last Name)

ITA-RP-0

Data Scadenza: **03/11/2025**
(Expiration date)

ENAC - Il Direttore Regolazione Personale
e Operazioni Volo



So We need A2 license to
fly in some condition

but only for drones >500gr



MAVIC AIR 2



Up Your Game



To fly (almost) everywhere

we need a Mavic Mini 2 (250 gr)

دجی

MINI 2

YOU ARE RESPONSIBLE FOR EVERY FLIGHT



YOU MUST REGISTER AS A DRONE OPERATOR



COMPLETE THE ONLINE TRAINING AND TESTS



ALWAYS KEEP YOUR DRONE IN SIGHT



DO NOT FLY ABOVE 120M (400 FT)



STAY AWAY FROM AIRPORTS, AIRFIELDS AND AIRCRAFT



**KEEP THE RIGHT DISTANCE
FROM PEOPLE AND PROPERTY**



CHECK WHERE YOU ARE ALLOWED TO FLY



KNOW HOW TO FLY YOUR DRONE



PREPARE YOUR DRONE FOR EVERY FLIGHT



RESPECT PEOPLE'S PRIVACY



10 february

- Photo and video editing
- Mobile app and professional editing tools
- 360° Photo and video

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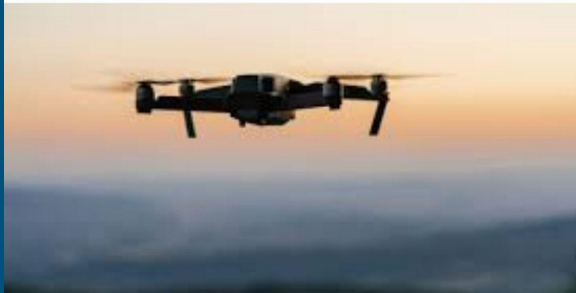
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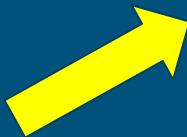
Photo and video editing

do we need an expert?



We are not experts...

But we have tools that allow even an amateur (students or teachers) to obtain excellent quality video products.



I mounted this using a mobile app in my smartphone in half hour.



Mobile app and professional tools

some tools

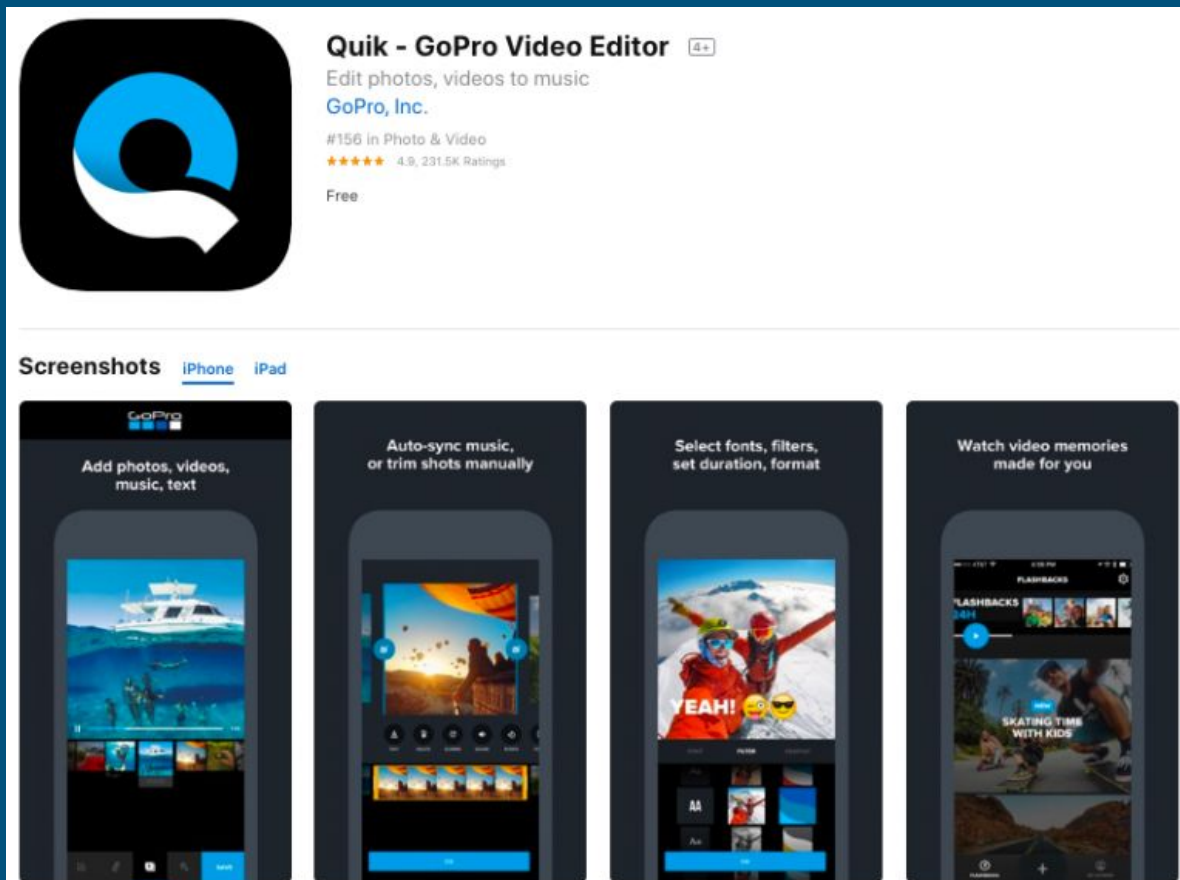


Quik

is a free app that GOPRO release on Play Store (Android) and App Store (IOS) for all smartphones and Tablet.

Very easy to use and include tens of templates ready to use.

Excellent results with minimal effort.



GOPRO:

Capture App –
Hand Off +
Edit in Quik

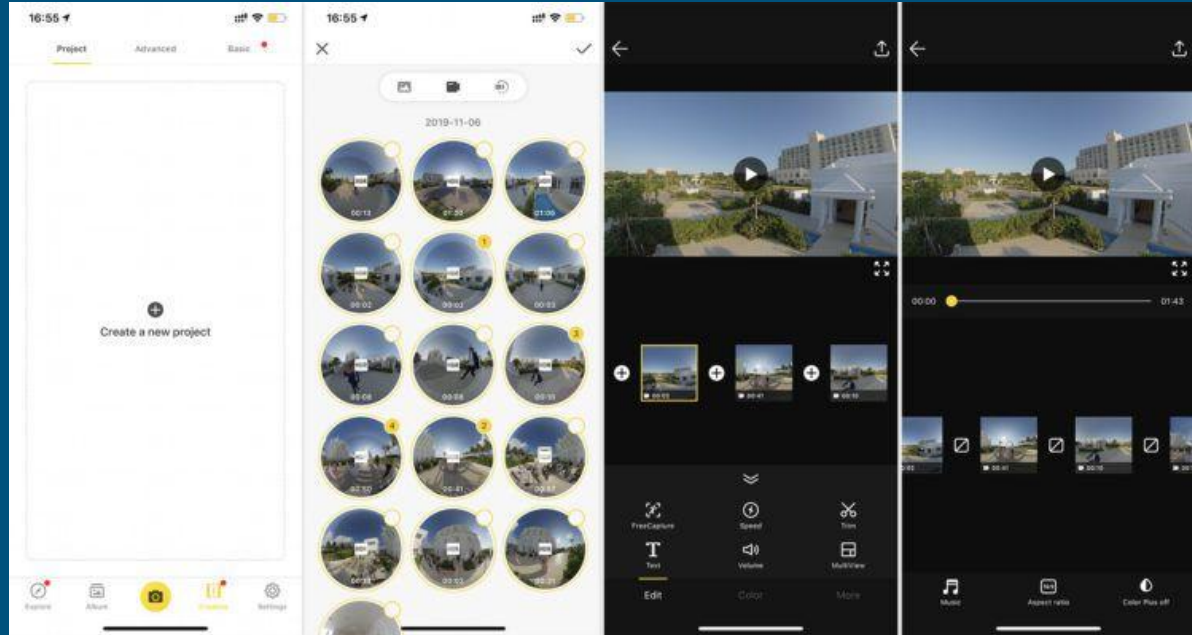


Insta 360

Insta360 cameras give us to create like we've never created.

The Insta360 App is a creative powerhouse in your pocket that acts as your camera's sidekick.

Editing on your phone has never been easier.



Final cut and Premiere

Are not Free and are professional video editor tools.

Not easy to use if you don't have experience with these tools.

But if any of you have experience and want to have fun with our students ...



Filmora

Filmora represents an excellent compromise.

It is in fact a tool that allows you to obtain very professional looking results and which is not very difficult to use.

You can use it for free (with filmora watermark) or you can buy it for 70 euros.

Available on MacOSX/Windows and also for mobile devices.



iMovie

If you are part of the Apple world, you will surely know iMovie.

Even iMovie when used well can help us to achieve excellent results.



So... which?

We think that is not important which...

We can do a beautiful work also using a free mobile app.

After any mobility we will produce a short video (between 2 and 3 minutes) using all the shots to promote tourism in our special places.



360° photo and video

but don't overdo it ... they make
your head spin





Orbix360

We can create a virtual tour like this::

<https://orbix360.com/t/h12Ucf94BHTBCobjlbA4jbDA3g72/5850580194951168/iiss-galilei?edit=yes#>

And it is possible to embed it in a web page.

11 february

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- Create a virtual itinerary
- Publish and share

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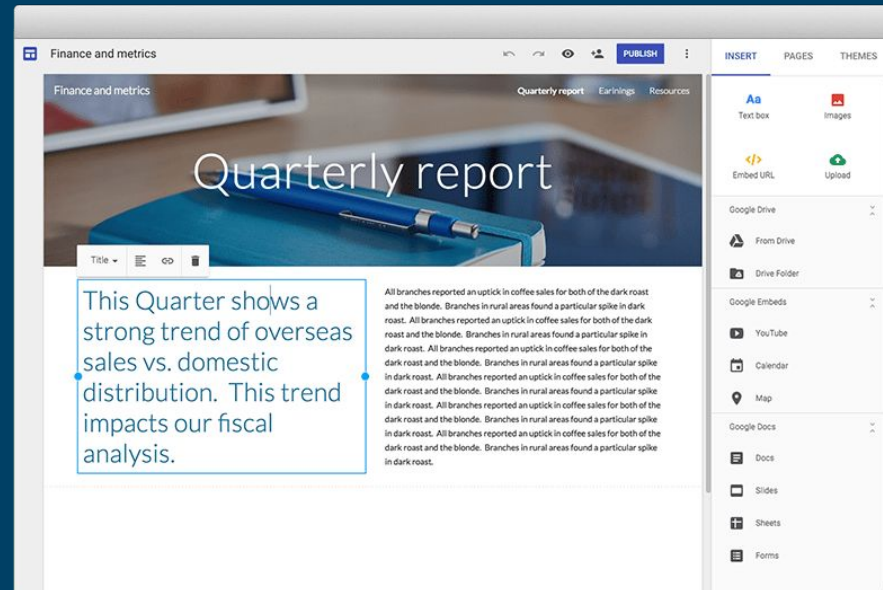
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**VIRTUAL
MOBILITY**

ATLANTIC

Website creation

Google Site



Virtual itinerary

Google Earth



Publish and share

Social and TwinSpace



Publish and share

- Facebook project page
- Instagram profile
- TwinSpace
- Website (Google Site)
- YouTube Channel
- Vimeo Channel

