

DIGI TOOLBOX

*DIGITAL TOOLS FOR
TEACHING*



VIDEOMAKING AND CODING TOOLS



Co-funded by
the European Union

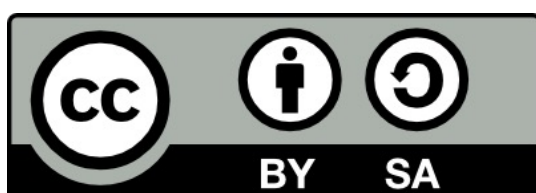
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This Product has been conceived and developed by the partnership of the Digischool project.

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INTRODUCTION

The Digi Toolbox is one of the products designed during the Erasmus+ **Digischool 2021-1-DE02-KA220-VET-000033261** project, developed with the contribution of all project partners.

The Digi Toolbox is a useful tool for teachers and trainers, who will be able to find descriptions of software, platforms and methodologies that can be used to make the learning process more engaging and efficient.

Each proposed tool will have a presentation card, through which the reader can immediately understand what type of software, game or site it is, if it is available in his/her native language and if it can be used in shared mode. The presentation card serves to provide simply and clearly the main information about an instrument, which is often not so easy to find on the official website.

Subsequently, each tool and methodology is explained in more detail with a description of the most important and interesting functions with the insertion of screen and video tutorials useful to better understand how it works.

The third section is that of tips and tricks in which the reader will find interesting ideas and tips to use the tool, even in an innovative way concerning the purposes for which it was created.

Since the toolkit is aimed at teachers and trainers, in drafting the contents, we thought it appropriate to add some more indications on how each tool can be useful for certain subjects and achieve specific learning outcomes.

The Digi Toolkit is a complex and rich guide that collects over 50 tools, so you just have to browse it and find the most effective ones for each need.

LEGEND



Language Icon

There will be the indication about the language available.



Co-working Icon

The icon indicates if the tool has a co-working mode.



Free/Premium tool

There will be the indication if the tool has a free use mode or are available subscription mode.



Operating System

There will be the indication if the tool work and is available on the most common operating system



Level of difficulty

1 star indicates more complex tools.
5 stars indicate the easiest tools



Previous Knowledge

Indication of previous knowledge needed to use the tool.



Learning Disorder

The tool is useful to create contents friendly for students affected by Learning Disorders



“The play button is the most compelling call to action on the web.”

Michael Litt

FLIPGRID

PRESENTATION SCHEDULE



The platform is only available in English but the content can be adapted to any language



The platform provides collaboration and content sharing features



Completely free



You can create Flip videos on most browsers and mobile devices. To check if your system meets the minimum requirements, [visit our system check](#).



Basic level in the use of digital tools



It's a great tool for those less socially able students to express their thoughts and feelings



FLIP

FUNCTION DESCRIPTION

Flip (before called Flipgrid) is a video-based tool platform that can be used by teachers, students and families. Flip is that enables discussion through digital devices, but in a fun and engaging way that makes it ideal for use in education.

The functionality of this platform is really appealing, as teachers can publish any kind of resource by presenting a topic or sharing questions, which the students in the class can then answer with short videos of their own production. It is a very easy-to-use and fun tool. This makes it ideal for both students and teachers. You can easily **sign up** for a Flip account with your email address. Your email address must be connected to a Microsoft, Google, or Apple account.

As a teacher, you can create a Group for your class and invite students to join. The Group is the shared space where your students get to interact, learn, and share video responses.

To create a Group: Log in to your Flipgrid account and click on '+Group' and provide a name for your Group. Set up how members can join your Group:

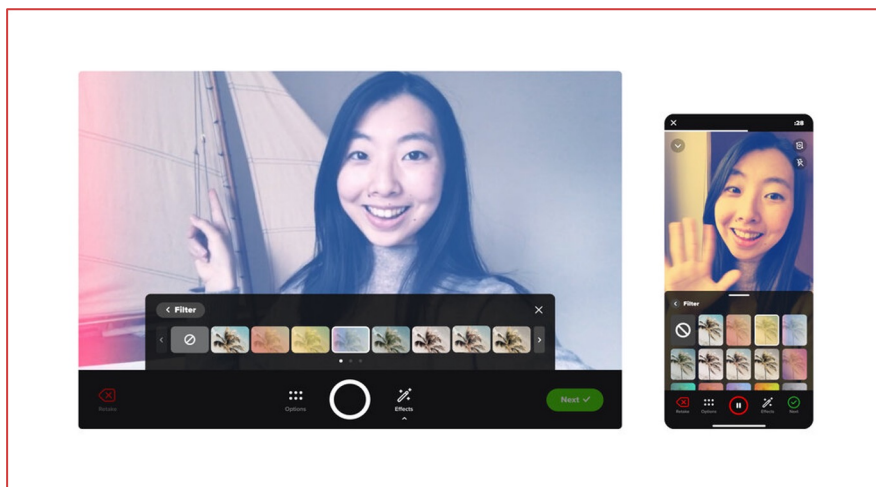
- Email and school domain: only those with approved emails can join
- Google Classroom: Import Google Classroom roster and allow students to easily access your Group using their Google Classroom account.
- Username: Assign students specific usernames and use these usernames to invite them to join the Group.



Share your Group with students: once the Group is created you can then use the generated join code or link to invite students to join your Group.

FUNCTION DESCRIPTION

Topics are discussion prompts to engage students in Group discussions. Topics take different forms: you can use text, video, or choose a ready-to-go Topic from Flipgrid's Discovery Library. To add a Topic to your class Group, click on "+Topic" and add the following details: title and description of your Topic, add media which can be an image, a recorded video (maximum recording time 10 minutes), emoji, an uploaded video, a YouTube or Vimeo video; or you can insert media from Adobe Spark or Buncee, and/or add attachment links.



Now that you created a Topic, students will now be able to respond to the Topic using short videos recorded by Flipgrid camera, and according to the settings you have chosen when you created the Topic.

Flip video tutorial



Other resources:

[Toolkit for educators](#)
[Tips, tricks and tutorials](#)

FLIP

TIPS AND TRICKS

- You can import your classroom in Flip from **Google Classroom**
- The platform is integrated with **Canva** and leads can create Canvas assignments that are connected to Flip topics, so member videos show up in SpeedGrader and give members access to those topics from their Canvas accounts.
- You can edit the settings of responses. For instance, you can choose whether students' video responses can have attachment links or not, allow likes, display view count, and allow download and share. Likewise, you can control the settings of Flipgrid's camera.
- Flipgrid allows custom media (images) to be uploaded and moved around live during recording. This could be used for creating animations or showing how things interact.
- Flipgrid allows re-sizing, horizontal flipping, and rotation of custom media and stickers.
- The function **Mic Only Mode** allow students to record their voice without the camera on while still using fun and creative effects like emojis and filters.
- Flipgrid makes it easy to switch to a different camera. Combine with the "pause and resume" technique to smoothly use multiple cameras in the same video!
- The **Discovery Library** has over 30,000 ready-to-launch Topics that can be used in own Groups! Simply search by audience, subject, or keyword and add the Topic.
- Using check-in Topics with your students helps to ensure they are heard, valued, and connected.



LEARNING OBJECTIVES & BENEFITS OF USING

- Flip promotes the methodology of 'didactics turned upside down', i.e. putting the student at the centre and in a certain sense 'turning upside down' the traditional approach that refers to the so-called frontal lecture that sees the teacher as the sole repository of knowledge and the students as passive actors.
- Improve communication for students and teachers.
- The ability to re-record responses helps relieve pressure, making this a very useful tool for education.
- Flipgrid is designed to help group discussions, but in a way that leaves no student in the lurch.
- It is an excellent tool for less socially able students to express their thoughts and feelings to the class



SCREENCAST-O-MATIC

PRESENTATION SCHEDULE



Screen-o-matic is available in several languages, including some of the languages of the project (italian, german and spanish).



The results can be shared with other people but not edited simultaneously.



It can be used with a free registration, but for recordings over 15 minutes and for advanced editing a subscription is required.



This tool is compatible with Windows, Mac, Chromebook, iOS and Android.



It doesn't require previous knowledge in video creation or video editing.



Screen-o-matic has a huge potential to be used with students with learning disorders.



SCREENCAST-O-MATIC

FUNCTION DESCRIPTION

Screencast-o-matic is a program that helps users to create, edit, share and manage screencast videos that can be used by teachers in classroom for flipped/blended learning, assignments, feedback, etc.

Its main features are:

- It can record the full screen, part of it or a specific window.
- It is possible to record from the webcam and sync it with the screen recording.
- The program adds a video editing tool with which it is easy to add music and text to the recordings.
- It is possible to draw figures, use markers and pointers during the recording to emphasize or remark certain points during the explanations.
- Recordings can be easily shared with several platforms (drive, youtube, twitter, teams...) or exported to a file.
- Resolution of videos can be up to maximum screen resolution, which includes 4k.

On the counterpart, main limitations are:

- In the free plan recordings can not exceed 15 minutes (unlimited in the paid plans).
- In the free plan it is not possible to directly capture system audio in the recordings.
- All the recording will include a watermark in the free plans.
- The edition tool is too limited in the free version and only allows very little edition possibilities.



FUNCTION DESCRIPTION

These 2 videos are a complete step-by-step tutorial that takes you through all the basic functions that you can use for free.

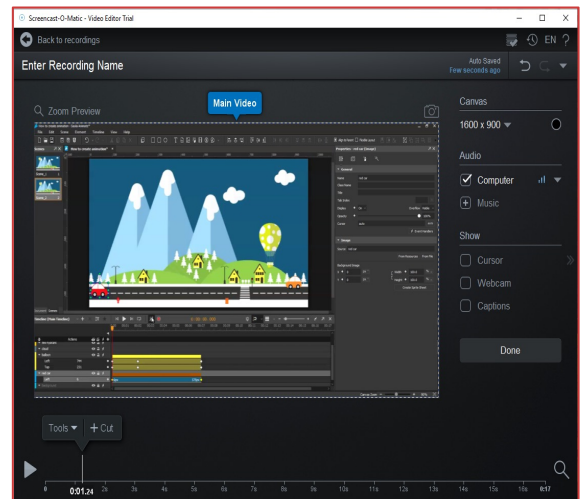
The first video will take you through the key functions that screencast-o-Matic uses. For example, you will learn to create a video and you will also learn to include a webcam along with the screencast video. It will also show you several possible settings when working with screencast technology.

The second video has a look at some of the more advanced features when working with screencast-o-Matic. The advanced features that the video focuses on include creating a video and adding it up onto your Google Drive.

VIDEO 1: https://www.youtube.com/watch?v=LAg4_eFITNc

VIDEO 2: <https://www.youtube.com/watch?v=08wjwFpQnbk>

Source: www.teachertrainingvideos.com



When you open Screencast-o-matic you will be asked to choose the area of the screen you want to capture, the quality of the capture, and the source of the sound. You can:

- Capture only the screen, your webcam or both.
- Choose the resolution of the video captured.
- Decide if you want to record the sound of your computer or what captures your mic.

Once you have finished capturing your video you will be redirected to the editor. Here you can edit what you have captured, adding effects, music, text...

SCREENCAST-O-MATIC

TIPS AND TRICKS

- Plan your video. The better you plan the less you'll have to edit later. Try writing a script to keep you on point during the recording.
- Never leave the recording as it is. Edit it.
- Cut the video in smaller portions and add other materials that you need in order to emphasize your message.
- Eliminate pauses you made while explaining or showing something in the screen. These pauses will only make audience to lose interest in your video.
- Use transitions to put together different parts of the video and to make it look more dynamic.
- Until you have the final version of the video, and you have already tested it, keep all your footage. Maybe you decide to make some changes once you test it and for that you will need that footage you didn't use in the first iteration.
- Just show what you need to show. Everything you cast in your screen has to be aligned with the message you want to transmit with the video, so if you have more material, consider doing several videos instead of one (i. e. For a tutorial it is better to do different videos, each one for one specific thing of the tutorial).
- If when you check the recording you find errors, try to remove them if they don't affect the message. If they do, consider shooting again those parts.
- Background noise is annoying so try to cut it in the moments when you are not speaking.
- Once you have the final video, use a platform to share it instead of sending the file by email or uploading to drive. That will allow receivers to stream it, making it more usable.



LEARNING OBJECTIVES & BENEFITS OF USING

- The tool allows the teachers to perform all the edits, and more, that they are likely to need.
- Teachers won't be afraid of making mistakes when recording the videos. Whichever mistakes they make, they can continue recording normally and suppress them in the edition process.
- Being able to add text, pictures or graphics to the videos, will increase the retention of the lessons by the learners.
- Recorded lessons can be easily updated if information recorded changes, reducing the time of preparation of the classes.
- Easy connection with other apps used, such as google suite for education.
- Improves teachers' creativity, providing more opportunities for lessons personalization.
- Keeps absent students from falling behind as students can watch at their own pace and catch up to their peers.



ANIMAKER

PRESENTATION SCHEDULE



Available in several languages, including some of the languages of the project (italian, german and Spanish).



It is possible to create and manage working teams that work together in the cloud in real time.



Animaker has a free subscription with certain limitations regarding the number of projects that can be done with the tool per month and their length.



It can be used in any device with an internet connection and a compatible browser, regardless the operating system



It doesn't require previous knowledge.



The tool can be useful to create contents to be used with students with learning disorders.



ANIMAKER

FUNCTION DESCRIPTION

Animaker is a video animation tool that allows users to create animated videos using pre-built characters and templates.

Animaker provides you with all the tools and materials you need to create your first professionally looking animated video. You simply drag and drop elements such as characters, backgrounds, visuals and many other pre-designed elements accessible through Animaker library. You can then edit your video, add pop up effects, hand craft animations, scene transitions and when your video is ready you can download, upload it to YouTube or share it with others through social media websites.

Its main features are:

- It is not needed to install any program.
- The videos can be created from scratch or using one of the many templates included.
- It includes a very comprehensive character builder for characters customization.
- The auto lip-sync feature make possible to add voice to the character making them look as real toons.
- Animaker has an entire assests library with over 100 million items in it.
- It includes a powerful text-to-speech feature to make your character talk or to create voiceovers.

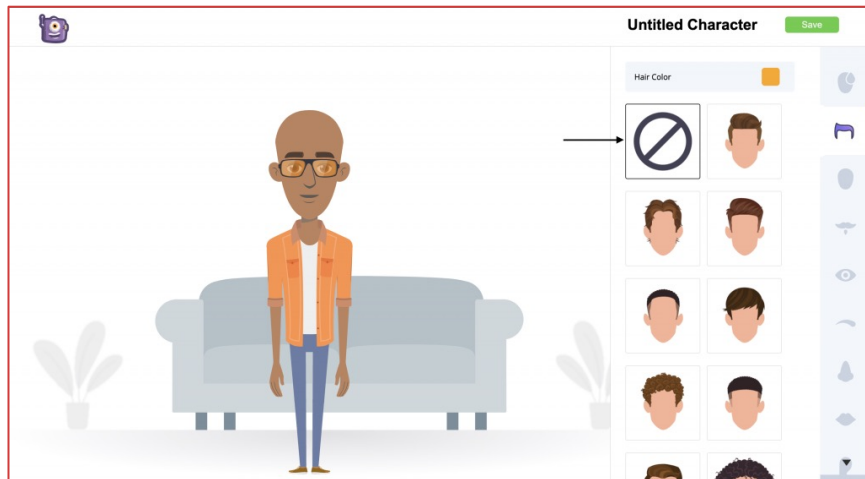
On the counterpart, main limitations are:

- The animations will include a watermark in the free subscription.
- The downloads are limited to 5 downloads per month.

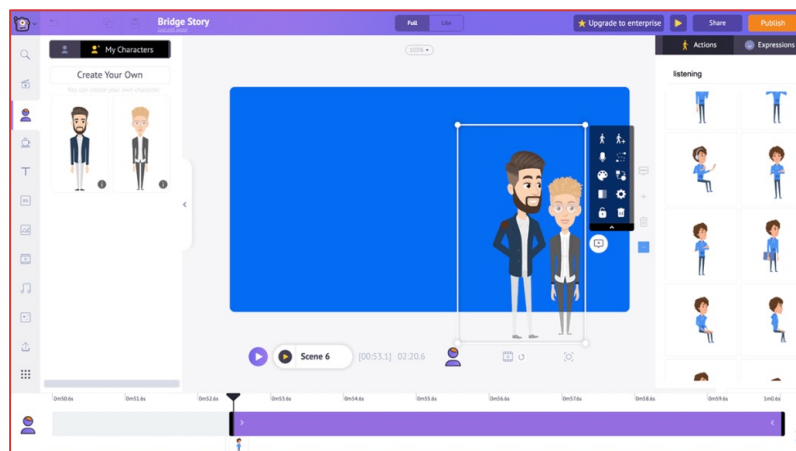


FUNCTION DESCRIPTION

Animaker is a very powerful, though complex, tool that will help you to create your own animations starting from scratch, but also new videos mixing images, music and text or even your own GIF's that you will be able to use in any other place.



The most interesting feature is to create your own animations. For this it is recommended to start by creating your characters. Although you can use any of the ones that already come included in the free version, creating your own ones will make your animations more unique and distinctive



The Scene editor is the most powerful feature of Animaker and what really gives sense to the creative process. Here you will have to choose the background, the characters appearing, the images used, the actions that the characters will develop, the music and the text you want to appear on the screen.

FUNCTION DESCRIPTION

At <https://www.youtube.com/c/Animaker> you can find a variety of videotutorials that will help you to start using Animaker. In the following links you may find some of the most relevant ones:

- How to make animated videos:
<https://www.youtube.com/watch?v=vV0mj43Al3E&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=2&t=7s>
- How to create animated videos from scratch:
<https://www.youtube.com/watch?v=Z9780iv7Jqw&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=45>
- How to create animated videos using templates:
https://www.youtube.com/watch?v=iMrmaZPBP_Q&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=46
- How to create animated educational videos:
<https://www.youtube.com/watch?v=QXHURxjcek8&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=5>
- How to add a voiceover to your characters:
<https://www.youtube.com/watch?v=xiFlhxE7B-E&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=13>
- How to animate your character with complex animations:
<https://www.youtube.com/watch?v=8LtPRVIF0g8&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=14>
- How to add text to videos:
<https://www.youtube.com/watch?v=Ae6jSXJANWk&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=16>
- How to edit a template:
https://www.youtube.com/watch?v=JuBdpnRp_Uw&list=PLMRGLivkz8dHtOyi-pXFB9kTi9pe9ApHc&index=20

ANIMAKER

TIPS AND TRICKS

- Since teenagers in our society are already true digital natives, students are used to instant information and to learn what they need in their lives with YouTube. Whis this in mind, teachers should use this tool to give instant information to their students in an easier way to consume.
- Generation Z is accustomed to multitasking and taking short burst of information on social media. So focusing on longer pieces of information can be a challenge for them. Some studies afirm that concentration and attention spans are only seven to ten minutes long so teachers should try to make videos of 10 minutes maximum.
- Evolution has made our instincts to pay more attention to moving things, so try to make your video with movement even when your message is simple.
- It is a proven fact that when you can associate some information to more than one sense, it is easier to remember. Use music they might like to make them subconsciously associate the information they read with the music they listen.
- Similar to the previous one, linking information to emotions is a useful trick to keep them engaged and make them remember the information you want. Try to do this including, for example, humour in your videos, although the most powerful emotions are fear and disgust.
- Our brain stores words and images in different parts of our memory. Take into account that visual information is 60.000 times faster processed than text, so the more images you can link to a word, the more links the students will have in their memories between them, even without having to write that word in the video.



LEARNING OBJECTIVES & BENEFITS OF USING

- Students will keep their attention for longer, making it possible for the teacher to have a greater impact on them.
- Animations can explain complex information, subjects or processes in a simple and entertaining way which learners can easily understand and engage with.
- The use of different multimedia techniques in the same animation will bring more senses into play in the students, increasing the chances of retention of what they learn.
- Visuals have been found to improve learning by up to 400% as our brains are designed to interpret relationships between objects, allowing for comprehension with minimal effort.
- Will make classes more fun.
- Using this tool will inspire learners and improve their creativity.



CODE.ORG

PRESENTATION SCHEDULE



Code.org is a website available in a great variety of languages, including all the languages of this project.



Projects created in Code.org can be shared with other users and all of them can work in the project simultaneously.



Code.org is a nonprofit dedicated to expanding access to computer science and access to all the resources created by Code.org is free.



Code.org is a website application, so it can be used from any device with an internet connection and a web browser.



Previous knowledge in programming is not necessary, since it is specially designed for beginners in computer sciences.



The aim of Code.org is to make computer science accessible to everybody, including students with learning disabilities.



CODE.ORG

FUNCTION DESCRIPTION

Code.org® is a nonprofit dedicated to expanding access to computer science in schools and increasing participation by young women and students from other underrepresented groups. In the website of Code.org a lot of resources are available for free, like tutorials, courses and also project developing environments.

Its main features are:

- The website resources are divided in two groups: courses and projects.
- Within the courses we can find a wide variety of coding tutorials and courses for different age groups, purposes, lengths, etc.
- Within the projects we can find a large amount of public projects created by Code.org users, and we can open and test them.
- The website offers the possibility to create our own projects for drawing, playing, mobile apps...
- The coding environment is especially designed for beginners, and the coding is developed by fitting puzzle pieces between them.

On the counterpart, main limitations are:

- Created programs are quite simple, complex programming is not supported by the application. The website is mainly a learning environment, not a developing environment.
- Programs can't be exported to other devices or environments, they can only be used in Code.org website.



FUNCTION DESCRIPTION



CODE.org is designed to make programming interesting and understandable for kids. With this purpose in mind, CODE.org uses pieces to make kids understand, in a very intuitive way, how programming works.

Each piece has a function, similar to $f(x)$ in programming, that can only be attached to certain types of pieces, and combining several of them will bring action to their screens, so they can directly see what the effects of their combinations are and keep on trying until they get the effect they were looking for.

In the next 2 videos you will find the basics to start using code.org

In the first video tutorial with the important information about signing up in code.org. Also you will find information about the course catalogues available to learn using code.org. and see some examples of what you can do using code.org.

In the second video you will find information about how to create your first simple app in a step-by-step tutorial.

VIDEO 1: https://www.youtube.com/watch?v=M_VQ4o4n2ho

VIDEO 2: <https://www.youtube.com/watch?v=tDnoxkOSfQw>

Source: <https://code.org/> /
<https://www.youtube.com/c/DearDISes>

CODE.ORG

TIPS AND TRICKS

- Explore the website and learn how the resources are organized.
- Select the courses you need depending on the age and level of your students.
- Follow a full course with your students. In the course you will find lessons, videos, exercises, challenges...
- Check the project ideas available in the project section of the website and follow the guides to make them with your students.
- Check the projects made available by other developers like public projects and try to do something similar in your own dashboard.
- While programming, pay attention to the instruction's shape. It will give you a hint about which instructions can be written in each position of the code.



LEARNING OBJECTIVES & BENEFITS OF USING

- Coding can help students improve their logical thinking skills by allowing them to see problems from a new perspective.
- Student's creativity is enhanced when they learn to create programs to solve everyday problems.
- Through coding, students learn to think and learn about different situations that are not the norm. They learn to analyze options and have to come up with a way to solve any challenges they come across.



DOODLY

PRESENTATION SCHEDULE



User interface English



For individually use



No free basic or free trial version available; two different pricing levels. The creators offer a 30-day money-back guarantee if one does not like it.



Usable on any operating system; Internet connection required



No specific previous Knowledge required, but basic Internet skills / navigating skills



Learning Disorder

The tool **can be** useful to create contents friendly for students affected by Learning Disorders.



DOODLY

FUNCTION DESCRIPTION

Doodly is a drag-and-drop animation program for creating videos that appear to be recorded as if someone drew them on a whiteboard.

Doodly has a vast range of abilities, but most can be categorized into four main types: media, sound, editing, and exporting.

Once you open Doodly and decide to start a new project, you'll be prompted to choose the background of the project and a title.

The interface is divided into a few sections. The first section is the canvas, which is in the middle. You can drag and drop media here. Media is found on the left panel and has five different tabs for five different kinds of graphics. The mirrored panel on the right is split into two sections: the top contains tools for playing back the scene, while the bottom section lists each element of media you add to the canvas.

With Doodly, media graphics come in four main formats: Scenes, Characters, Props, and Text. These are all tabs on the left side of the screen. A few things are the same across all media types:

- Double-clicking or choosing the item in the media list will allow you to flip, reorder, move, or resize the media.
- You can change the color of an item by double-clicking and then choosing the small gear icon.

FUNCTION DESCRIPTION

Scene objects are a unique feature of Doodly. These are pre-built pictures that create a great background for a lengthy voiceover or if you're conveying interactions within a specific setting. Make sure to remember that a "scene" is a group of items on a specific canvas slide, while a "scene object" is a type of media you can add to a normal scene. These depictions range from a schoolhouse to a doctor's office - but you can only have one scene object per screen. So, if you want to add a car or a character, you'll have to get them from the Characters or Props panel.

If you choose to add a scene object to your Doodly video, it will appear in the media items lists as all the individual objects it is made up of, not as a single item.

When it comes to people and characters. Doodly has a very large library. If you have the most basic plan, you'll have access to 10 characters in 20 poses. If you have the platinum or enterprise plan, you'll have 30 characters with 25 poses each. The characters are very versatile and offer a good variety of poses (depending on the payment plan).

Props are Doodly's inhuman or inanimate graphics. These range from plants and animals to speech bubbles to tractor logos, and like other media, they can be resized and edited by double-clicking.

Doodly offers one somewhat customizable way to export your videos: mp4. You can choose the resolution, frame rate, and quality.

<https://www.youtube.com/watch?v=-I5Gm0QVhX0&list=PLvCrTe3h4inftA8S94CZmRVWB0EzihJeQ&index=4>

DOODLY

TIPS AND TRICKS

- Doodly offers two different soundtrack slots: one for background music and one for a voiceover. You can adjust the volume of these two channels so that they blend or separate.
- The timeline is located at the bottom of the program interface. You can use this to grab an entire scene and reorder it via drag-and-drop. Right-clicking a scene in the timeline will also give you preview, duplicate, and delete options. You can also open settings (left timeline corner) to change your video style or edit the graphic of the hand drawing it.
- If you want to reorder individual elements, you'll have to use the media list on the right-hand side of the window. This window contains every element you added to the scene, be it character, prop, or text (scene objects are shown as their individual elements).
- "Duration" refers to how long it takes to draw that asset, and "delay" causes the video to wait a specified time before it begins drawing the object.
- The order of objects in this list determines which is drawn first, from top to bottom. This tiny window does not expand, so if you want to change the order you have to painstakingly drag and drop the frame up one slot at a time. Your best bet would be to add elements to the canvas in the order you want them displayed to avoid this, especially if a scene has a lot of assets in it.

Selection of a few useful links:

<https://www.doodly.com/#section-5>

<https://www.youtube.com/channel/UC0naFmQzU8GtFEZiTkBqaSg>

LEARNING OBJECTIVES & BENEFITS OF USING

- The interface is intuitive enough for most people to get going straight away.
- Creativity is unleashed and class content is more memorable and impactful.
- Concept introduction and simplification in classrooms for students of all ages.
- Present complex topics in a more simple and understandable way.
- Can also be used by students to teach, e.g., to work out a specific topic/presentation individually or in groups - Promotes independent learning, creativity and enthusiasm for learning



POWTOON

PRESENTATION SCHEDULE



Interface languages in English, French, German, Italian, Spanish, Portuguese (some languages only partly)



Cloud-based sharing and managing projects and libraries with teams, and social or marketing platforms



Four account types: "Free User" (minimum set of features), "Premium"; "Powtoon for Business", "Powtoon for Education"



No specific operating system required; Internet connectivity necessary



No design or technical skills are necessary



Learning Disorder

The tool **can be** useful to create contents friendly for students affected by Learning Disorders

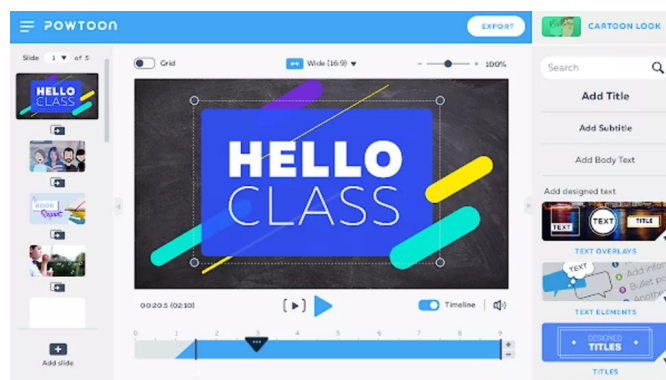


POWTOON

FUNCTION DESCRIPTION

The name Powtoon was derived from the words PowerPoint and cartoon. Through a very simple and user-friendly web-based interface, drag-and-drop can be used to create all kinds of engaging video content, including animated explainer videos, marketing videos, promotional videos and educational films or presentations for teaching, as a teaching or learning tool. In this way, text, images and sound can be easily combined in the web editor to create explanatory videos or animated presentations, either freely or with the help of templates.

It is helpful to think about a script with a certain storyline and structure beforehand. At the beginning, if necessary, one can choose from one of the many templates on different themes. The object library contains numerous elements such as backgrounds, figures, objects and arrows. Of course, one can also upload own images and graphics. In addition, music tracks are available for the background music of videos. However, self-spoken texts can also be added to the comic strip as audio files. The music transitions, as well as the appearance and hiding of the other elements, can be easily set using drag & drop.



(Image Credit: Scratch)

FUNCTION DESCRIPTION



<https://www.youtube.com/watch?v=IEQiZQi-aGY>

Powtoon comes with a wide selection of templates to get you started, however, it is also full of images and videos that can be used to personalize the end result. The idea being it can be used by teachers and students alike without taking too much time and without a big learning curve.

This can be used in the classroom as well as for remote learning or even as a resource to be shared for viewing outside the class. Perhaps as a way of setting assignments so you have more time free to spend on what you need in the class.

Start a free trial and you can begin creating videos right away. Select that you're a teacher and the grade you teach, and you'll be taken to a home screen filled with education specific templates.

Pick the type of video you want - be it animated explained, whiteboard presentation, or more - to start and you can select from a wide pick of templates to edit and personalize as you need. Or begin from scratch and build using the simple tools to mold your presentation.

Once you select the Edit In Studio option, you'll be taken into the editing program, right there within your browser. Here you can personalize the project and, ultimately, export as a video file ready to share as you need.

POWTOON

TIPS AND TRICKS

- Creation of animated infographics (e.g., for complex processes or scientific results), animated short videos (e.g., explanatory videos, video tutorials for lesson preparation in Inverted/Flipped Classroom)
- Use in short presentations (e.g., elevator pitch), animated presentations as an introduction (e.g., to a new topic in a lecture, introduction of oneself)
- Creating your own projects works mostly intuitive, no special knowledge is required.
- On the web and on the Powtoon website there are countless tutorials and sample projects that you can watch to get an idea of the possibilities of the tool.
- To enhance one's skills and abilities, Powtoon itself offers a wide range of free on-demand webinars.

Sample projects:

Assign homework:

<https://www.youtube.com/embed/H85buaLTRug>

Communicate or summarize lesson content:

<https://www.youtube.com/watch?v=SGmgLVHfaY4&t=13s>



LEARNING OBJECTIVES & BENEFITS OF USING

- Reflection medium (e.g., short summary of contents or processes), Students can deepen a topic in a creative way
- Endless use cases for both teachers and students in a blended learning environment
- Creativity is unleashed and class content is more memorable and impactful
- Students can develop lifelong skills such as critical thinking, creativity, collaboration; helping each other with cooperative projects
- Makes class more fun



SCRATCH

PRESENTATION SCHEDULE



Available in more than 70 languages



Created projects can be shared, viewed, commented or even processed. A variety of discussion forums are available for exchange.



Totally free; All you have to do is set up a user account.



No special operating system is required, only Internet access. However, it can also be used offline if the Scratch app was downloaded beforehand.



No special previous knowledge is required. Scratch is usable for 8 - 99 years old; students must have basic literacy and numeracy skills (basic arithmetic)



Learning Disorder

The tool **can be** useful to create contents friendly for students affected by Learning Disorders



SCRATCH

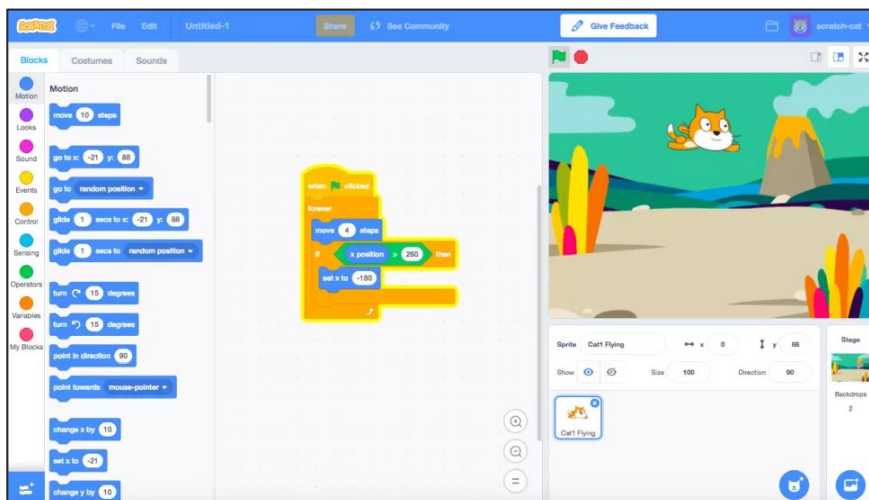
FUNCTION DESCRIPTION

Scratch is the world's largest coding community for kids and a simple, visual block-based programming language that makes it easy for young people to create digital stories, games, and animations. The idea was to offer a visually engaging platform that creates an end result that can be enjoyed while learning the basics of coding along the way.

The name Scratch references DJs mixing records, as this program allows students to mix projects such as animations, video games, and more, using sounds and images - all through a block code-based interface.

Scratch 3.0, which is the latest iteration at the time of publishing, features three sections: a stage area, a block palette, and a coding area.

The stage area shows the results, such as an animated video, The block palette is where all the commands can be found to drag and drop into the project through the coding area.



(Image Credit: Scratch)

FUNCTION DESCRIPTION

Scratch has a zero-code interface, which means that users (who call themselves scratchers) don't have to write source code for the programs they create.

Instead, they assemble component blocks that are actually units of code represented by different interconnecting shapes. Each block has a specific command and unique function and once the user has connected a series of blocks, he or she can click a green flag to run the script and see what the program does.

This visual, building block approach to programming is similar to the way some other low-code/no-code (LCNC) development platforms work for enterprises.

Short tutorial:



<https://www.youtube.com/watch?v=jXUZaf5D12A>

SCRATCH

TIPS AND TRICKS

- There is a wide range of tutorials and explainer videos, step-by-step instructions, forums, also specifically for teachers and parents.
- As a member of the Scratch Online community, one can experiment and discover new things in an open learning environment with other members, no matter how old they are, where or how they live. One can share projects, give feedback and learn from each other.
- Get started:
<https://scratch.mit.edu/projects/editor/?tutorial=getStarted>
- Learn programming with Scratch:
<https://www.youtube.com/watch?v=frAvd2l0AIs>
- Scratch discussion home: <https://scratch.mit.edu/discuss/>
- Facebook group:
<https://www.facebook.com/groups/TeachingwithScratch/>



LEARNING OBJECTIVES & BENEFITS OF USING

- Enhancement of informational thinking and problem-solving skills, working with projects, and communicating ideas
- Creativity in teaching and learning, self-expression and teamwork
- Equal opportunities in computing
- Usable for all ages (from elementary school to university) and all subjects
- Usable in all kind of areas and institutions, at home, in school education, remedial teaching
- Also, well applicable for teachers in distance learning or Flipped Classroom
- Several studies showed that the work developed in Scratch allowed students, for example, to better understand the concepts, rules and symbols of mathematics.



MIT App Inventor

PRESENTATION SCHEDULE



English.



Users can share their codes and work together.



MIT App Inventor is for free.



This app can be used on any computer, even on phones or tablets.



It is expected that users have no previous knowledge of programming and this shall be their first time.



Users with severe learning difficulties might have problems using this app.



MIT App Inventor

FUNCTION DESCRIPTION

This cloud-based app is free. It allows users to make their mobile apps by using a visual blocks-based programming language.

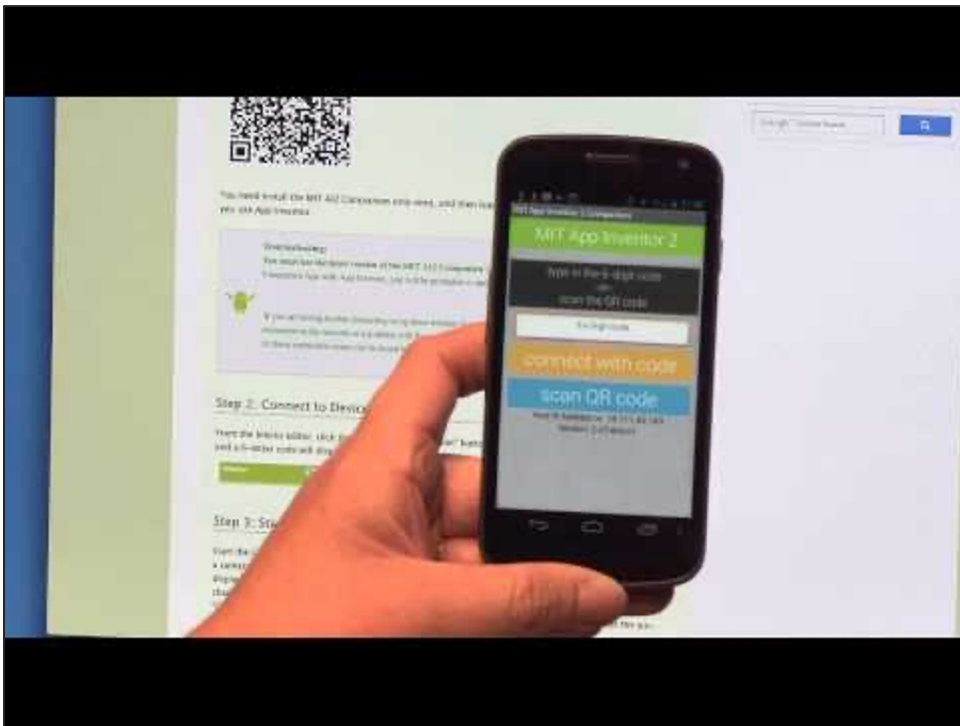
MIT App Inventor is a very intuitive, visual programming environment that allows students as well as teachers to build fully functional apps for smartphones and tablets (iOS and Android). This environment is based on block programming, which means that users are programming visually through the use of blocks that represent specific functions and users link them together and create new functions. This way they achieve more complex behavior of the program.

The MIT App Inventor can be reached using a web browser. The MIT App is very easy to use thus it is suitable for the first contact with programming. The blocks app building is easy so even students who are not much into programming might like it.

Users can build any app they can imagine, such as games, informational apps with user-generated data, personal convenience apps, apps to help people communicate, apps that use phone sensors, and even apps that “talk” to some web services.



FUNCTION DESCRIPTION



<https://www.youtube.com/watch?v=Vdo8UdkgDD8>

There are many tutorials on how to use this programming app. They are also available in many national languages including our project partners' languages.

First of all, students need to know what kind of app they are supposed to create so they can choose how to start building their apps. Once they know it, they can start combining blocks and actually creating their apps.

You can help your students by providing them feedback and learning what steps or blocks they could have omitted to be more effective and to have a better app.

MIT App Inventor

TIPS AND TRICKS

- Teachers should give students a goal/an app they should build, this way it will be easier for students to do the app.
- It is also a good idea to draw the app interface on paper. It will be easier to stick to the plan.
- Users can connect their phones to the app in a process to see what it looks like and check it in real time.
- If students are sharing their codes, you can review their codes and add comments.
- Remind your students that the simple, the better the app will be. Does not apply to apps only.
- In the beginning it might be better if students work in pairs so they can help each other, however, it is only a suggestion.
- There are many tutorials for the MIT App Inventor so students can watch them at home while they work on their apps.



LEARNING OBJECTIVES & BENEFITS OF USING

- MIT App Inventor is good for those who did not have any previous contact with programming but want to try it.
- After having first contact with programming, it will be easier for students to understand the principles of building a program.
- With this tool students can build apps that can help their classmates who might have difficulties with reading etc. Thus it can be a good social tool for the class.



DIGIToolKIT



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