



Creativity + Innovation & Technology

O-CITY PROJECT



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2 -Cooperation for innovation and the exchange
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Topic 2 - Lesson 4. Creating an infographic

This lesson has been prepared with the aim of teaching students some key steps needed to realize an infographic with a graphics tool, in order to allow them to create their infographics, that can be uploaded on the O-City World platform.

Introduction to a graphic tool useful to realize the infographic for the O-City World platform

An infographic, like that required as the final output of this course, can be realized through a dedicated online tool or a graphics software. The latter is usually employed for many different purposes in visual design, from the graphic of a flyer to the visual elements of a user interface. Dedicated online tools have less functions than typical graphics softwares, but they are more focused on the elements the users need the most to create an infographic. In addition, they have some presetted templates customizable by users. However, they offer a limited set of functions for a free basic account. On the other hand, graphics softwares are more elaborated and offer users less aid in respect of ready-made solutions, but they have no restrictions on functions.

In this lesson, we will explain some key features of an open source graphics software, as an example for illustrating some main aspects to consider and some key steps to follow when creating an infographic.

The functions we are going to explain are available alike or almost similar in other graphic softwares and dedicated online tools, such as some of those introduced in Lesson 3 of Topic 2. However, it is not our intention to teach how to fully use the software, but rather to highlight some key steps to complete for creating the infographic, along with some functions to use for making it. Besides, some free-to-use online resources will be indicated, as a source of inspiration and support, especially for non-expert designers.

How to use Gimp to create an infographic for the O-City World platform

The graphics software we are going to use is Gimp, a free and open source Image Manipulation Program.

Take the following steps as a reference showing some functions that can be found in many tools used to create infographics. If you want to learn more in depth how to use Gimp you can find a lot of online tutorials that can help you. Here those available on the official website:

<https://www.gimp.org/tutorials/>.

To start creating your infographic, first of all, you need to download and install the program. You can do it from the Gimp website: <https://www.gimp.org/>.



The Free & Open Source Image Editor

This is the official website of the GNU Image Manipulation Program (GIMP).

GIMP is a cross-platform image editor available for GNU/Linux, OS X, Windows and more operating systems. It is free software, you can change its source code and distribute your changes.

Whether you are a graphic designer, photographer, illustrator, or scientist, GIMP provides you with sophisticated tools to get your job done. You can further enhance your productivity with GIMP thanks to many customization options and 3rd party

Recent News

Development release GIMP 2.99.4 is out
2020-12-25

GIMP 2.10.22 Released for macOS
2020-12-25

This is 25
2020-11-21

Development release GIMP 2.99.2 is out
2020-11-06

Fig.1 - Download of Gimp program available on the official website: <https://www.gimp.org/>

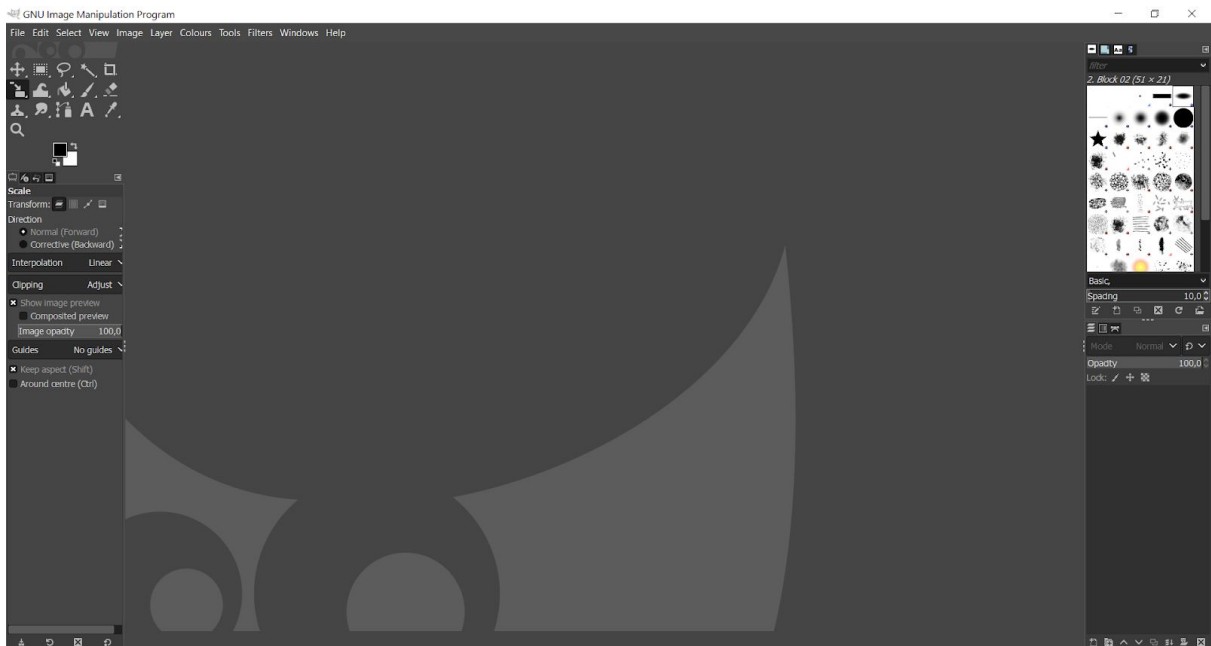


Fig.2 - UI of Gimp program

Assuming that we already have done the design of our infographic and that we already have made the infographic prototype (sketch), we will proceed by levels for realizing all the different layers of the infographic. You can take these steps as a reference for creating your infographic.

1- Set the size of the infographic

To define the dimensions of your infographic you shall click on “File” and select “New” (Figure 3). Then you can set up the image size by typing the values of width and height in the corresponding boxes (Figure 4).

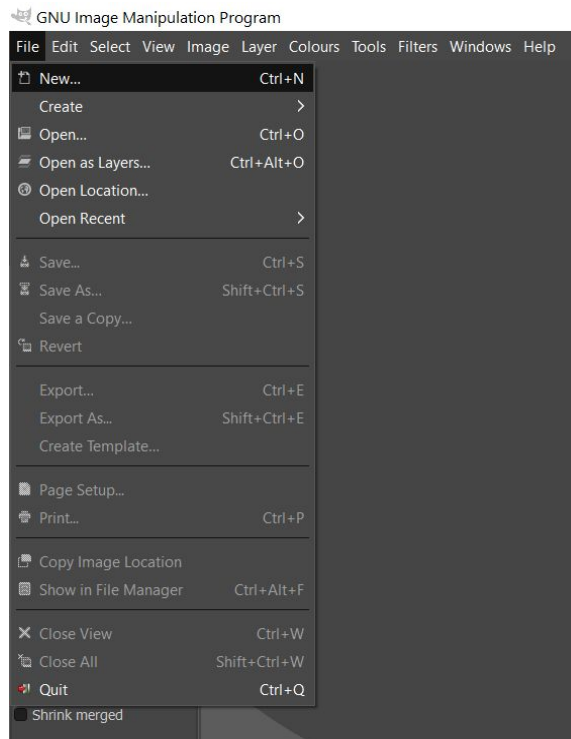


Fig.3 - UI of Gimp program: Create a New Image.

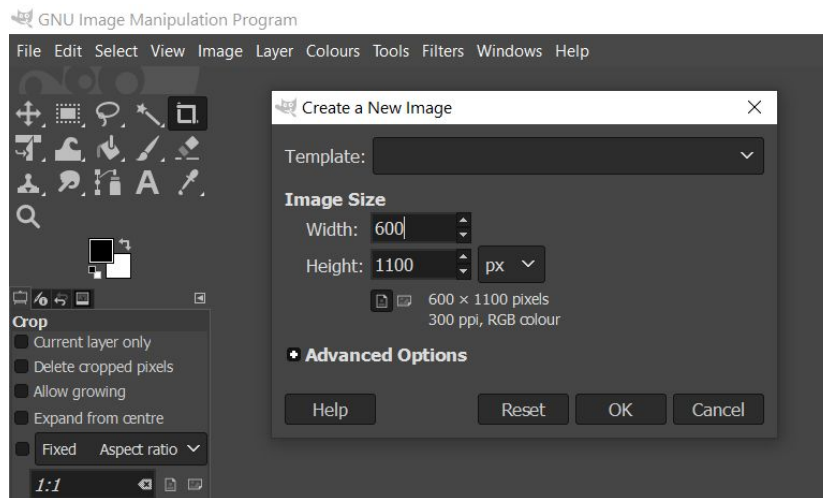


Fig.4 - UI of Gimp program: "Create a New Image" dialog box.

The ideal dimensions of an infographic change according to the platform or mode of use for which you are creating it, i.e. where it will be published, who will be using it, and what its content will be. However, a width of not more than 800 pixels (we suggest 600 pixels) and a length not exceeding 1100 can be a measure fitting the most of the cases. Indeed, infographic can be vertical or horizontal, or even square. Following a more detailed guide summing up the most frequent infographic dimensions (Figure 5).



Fig.5 - The most used infographic dimensions according to Visme. Source: <https://visme.co/blog/infographic-dimensions/>

2- Create the infographic background

To create the visual elements of your infographic, start from the background.

You can fill the background with one or more colours and patterns or you can insert an image. Click on “Edit”, then choose one of the available options to fill the area (Figure 6). Otherwise, you can click on “File” and select “Open as Layers” to import an image (Figure 7).

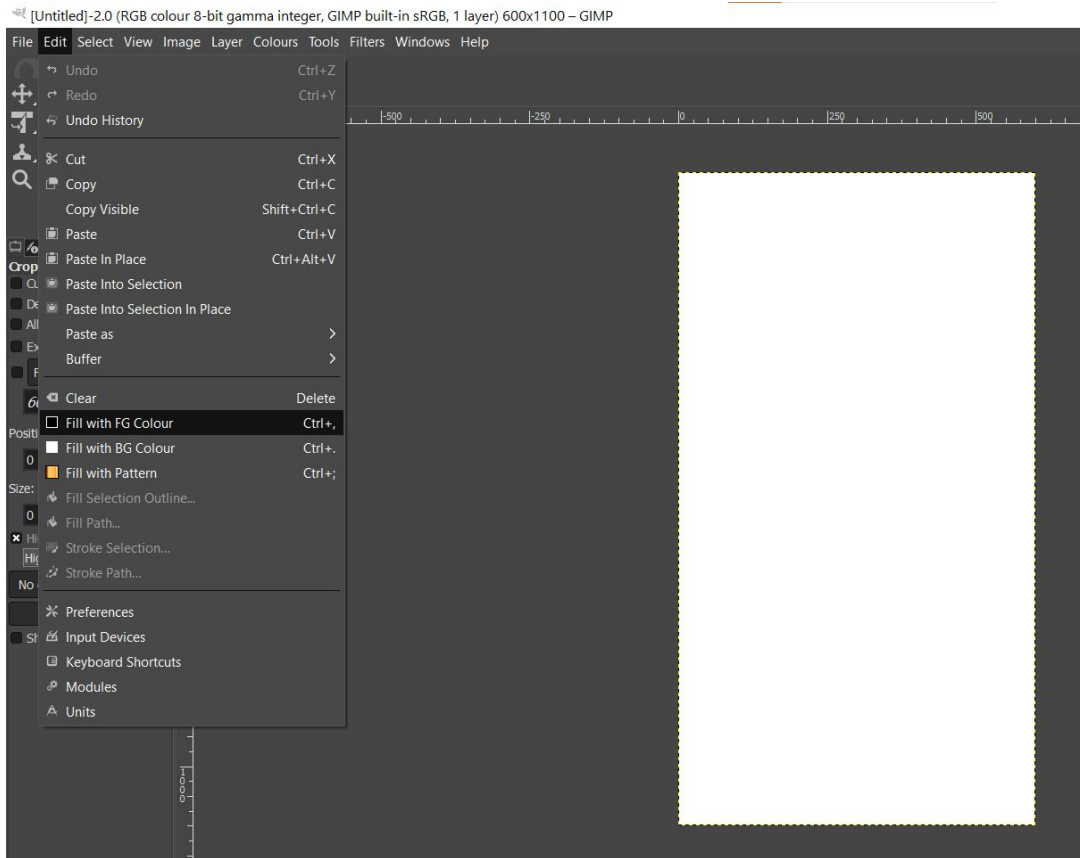


Fig.6 - UI of Gimp program: Fill with Colour or Pattern.

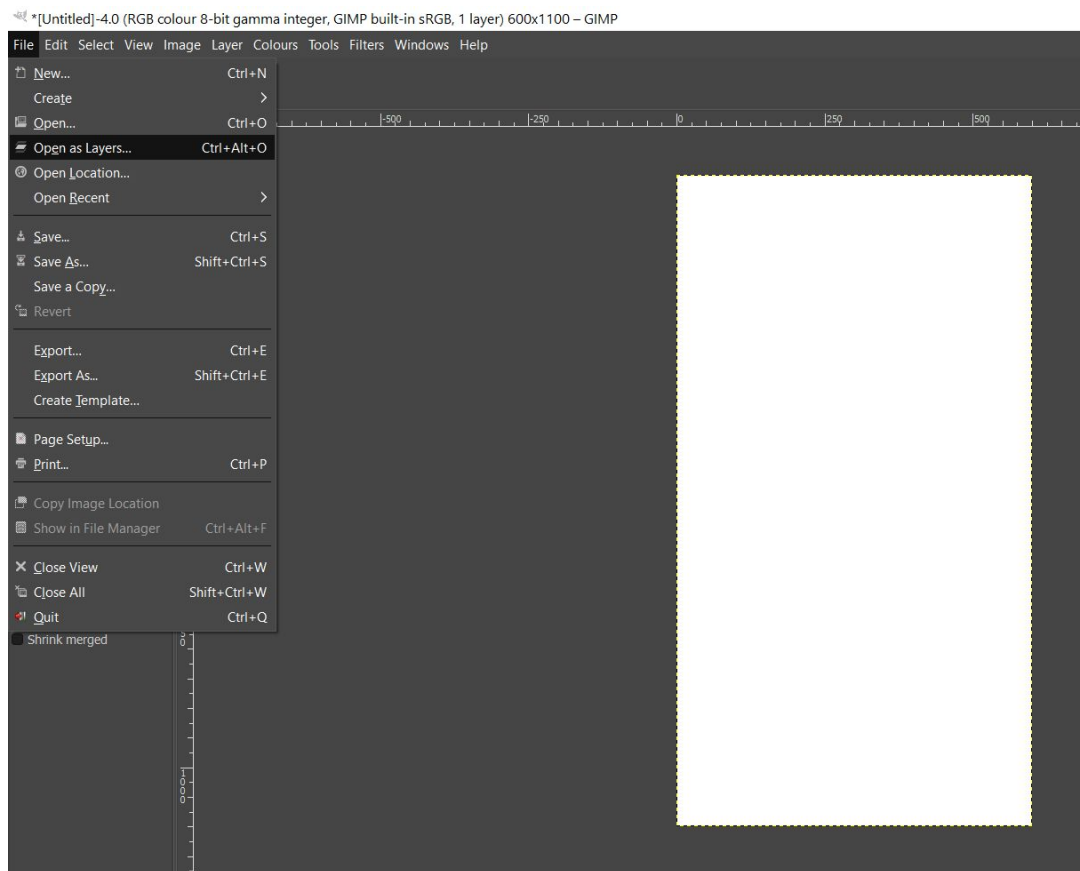


Fig.7 - UI of Gimp program: Open an Image File as Layers.

There are a lot of repositories with free images that you can use in your infographic, such as [Unsplash](https://unsplash.com/) (Figure 8), [Pexels](https://www.pexels.com/), or [Pixabay](https://pixabay.com/) (Figure 9), but be sure to use them legally (Figure 10), for example by providing attribution and credits how required, if it is the case.

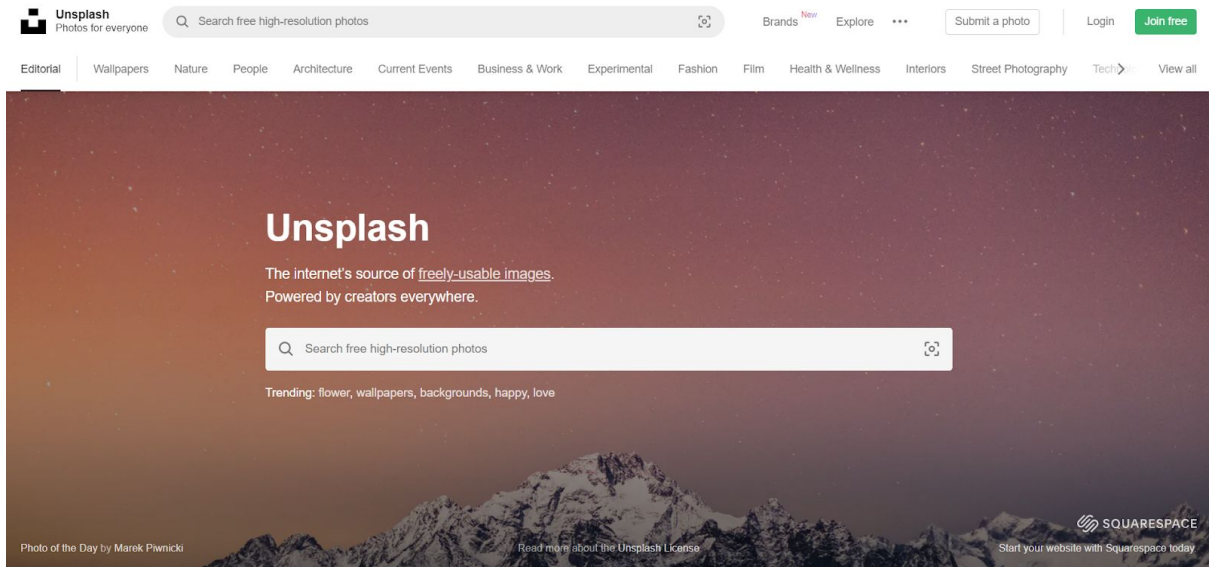


Fig.8 - Unsplash website: <https://unsplash.com/>

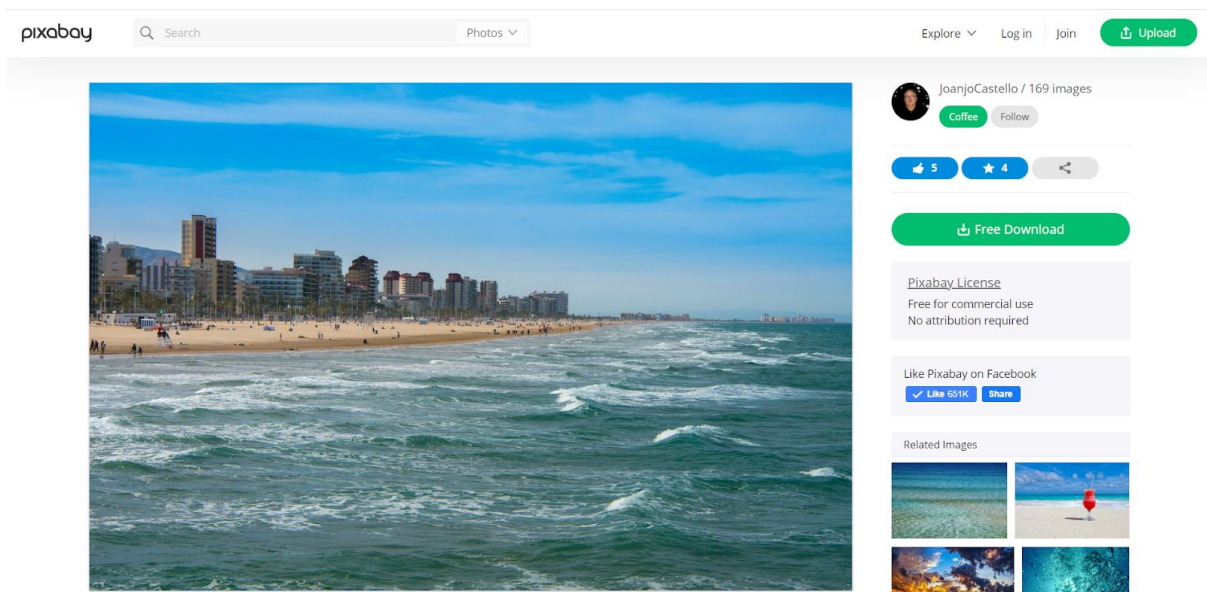


Fig.9 - An image freely downloadable from Pixabay indicating terms and references for license and credits. Source: <https://pixabay.com/photos/sea-body-of-water-travel-costa-sky-3283608/>



1 MAKE YOUR OWN IMAGE

The simplest way to ensure that you own all rights to an image is to make it yourself! You can capture an image, hire a photographer, make a custom digital image, or hire a designer.

2 ASK PERMISSION TO USE AN IMAGE OR ARTWORK

When you contact a designer or photographer, ask them for ownership rights to the image and detail what you want to use it for, if you want to alter it and how to provide attribution.



3 USE PUBLIC DOMAIN IMAGES WITH CREATIVE COMMONS LICENSES

You can easily find public domain images suitable for a variety of uses simply by searching the internet. Before using an image, read the license and restriction information.

4 CONSIDER IF FAIR USE PROVISIONS MAY APPLY

If you want to use an image for education, research or repurposing, usage may fall under fair use provisions.



5 BUY STOCK IMAGES: HOW MUCH DO STOCK IMAGES COST?

If your company uses quite a few images for your website, blog, and marketing material, a medium-priced subscription with quality images may prove to be a sound investment.

Source: <http://blog.visme.co/copyright-images/>

ROCKETLAWYER. Made with Visme

Fig.10 - Infographic about how to use images legally. Source: <https://visme.co/blog/copyright-images/>

The same applied to other kinds of resources, such as icons, vectors, etc.

Following, a few examples of free repositories useful to create an infographic or a user interface:

- [Freepik](#): Database of free free vectors, stock photos, icons, and PSD formats.
- [Flaticon](#): Database of free icons available in PNG, SVG, EPS, PSD and BASE 64 formats.
- [Iconmonstr](#): Database of free icons.
- [Vecteezy](#): Database of free vector art, stock photos, and videos.
- [Font Squirrel](#): Database of free fonts.

This list is not exhaustive, but it is a good starting point for finding themed graphics and templates to use in your infographic.

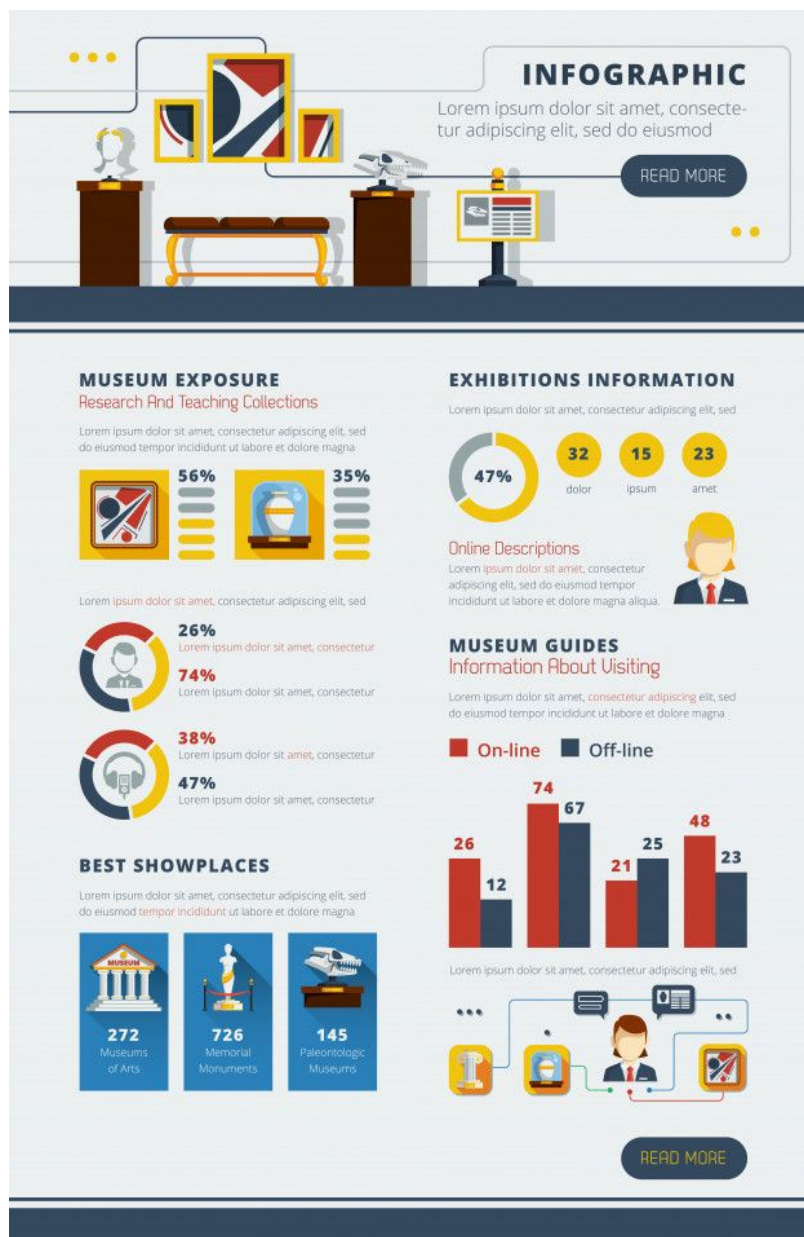


Fig.11 - Example. Template vector in .EPS format (editable by a graphics program) created by macrovector and available on Freepik (see licence terms). Source: https://www.freepik.com/free-vector/museum-infographic-poster_3794886.htm



Fig.12 - Example. Vector in .EPS format (editable by a graphics program) created by macrovector and available on Freepik (see licence terms). Source: https://www.freepik.com/free-vector/museum-isometric-infographics_6168550.htm

3- Create the infographic layout

Click on “View” and use grid and guides as a reference to draw the layout of the infographic (Figure 11). Then insert the shapes and create the frames that will contain the contents (Figure 12). You can change the colour of a shape by selecting that region and filling it with foreground or background color.

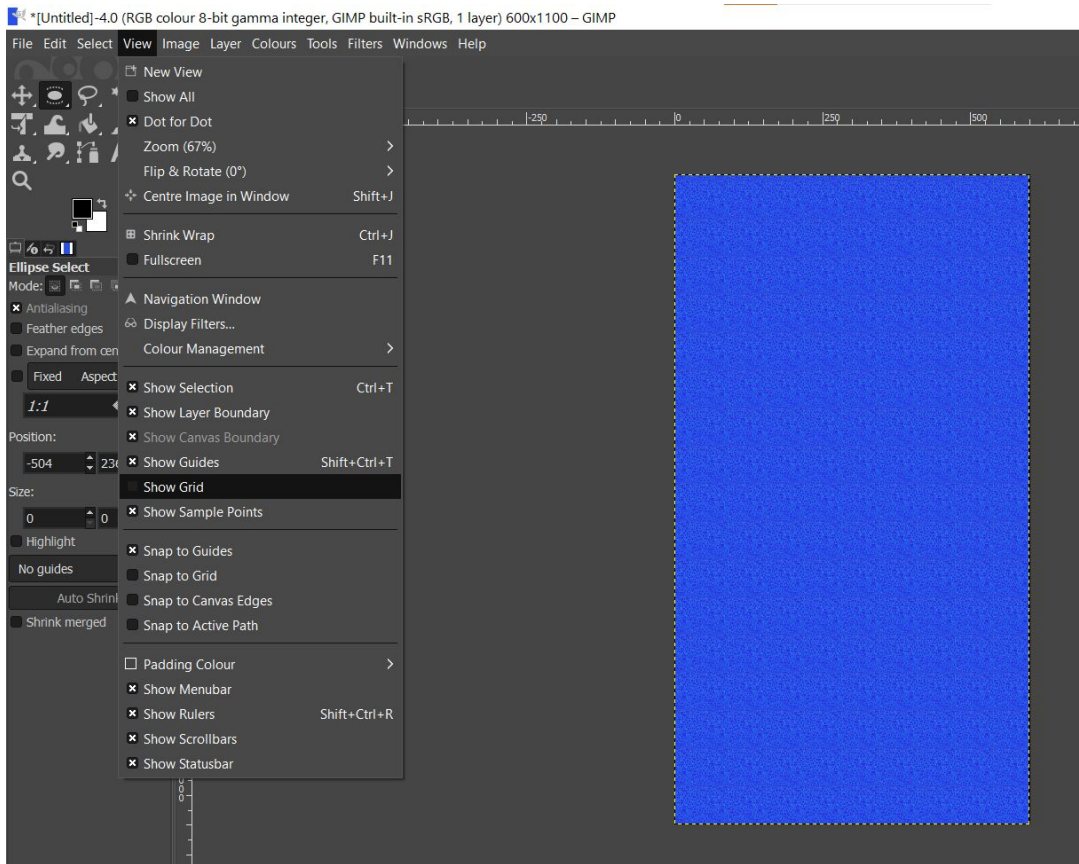


Fig.13 - UI of Gimp program: Show Grid and Guides.

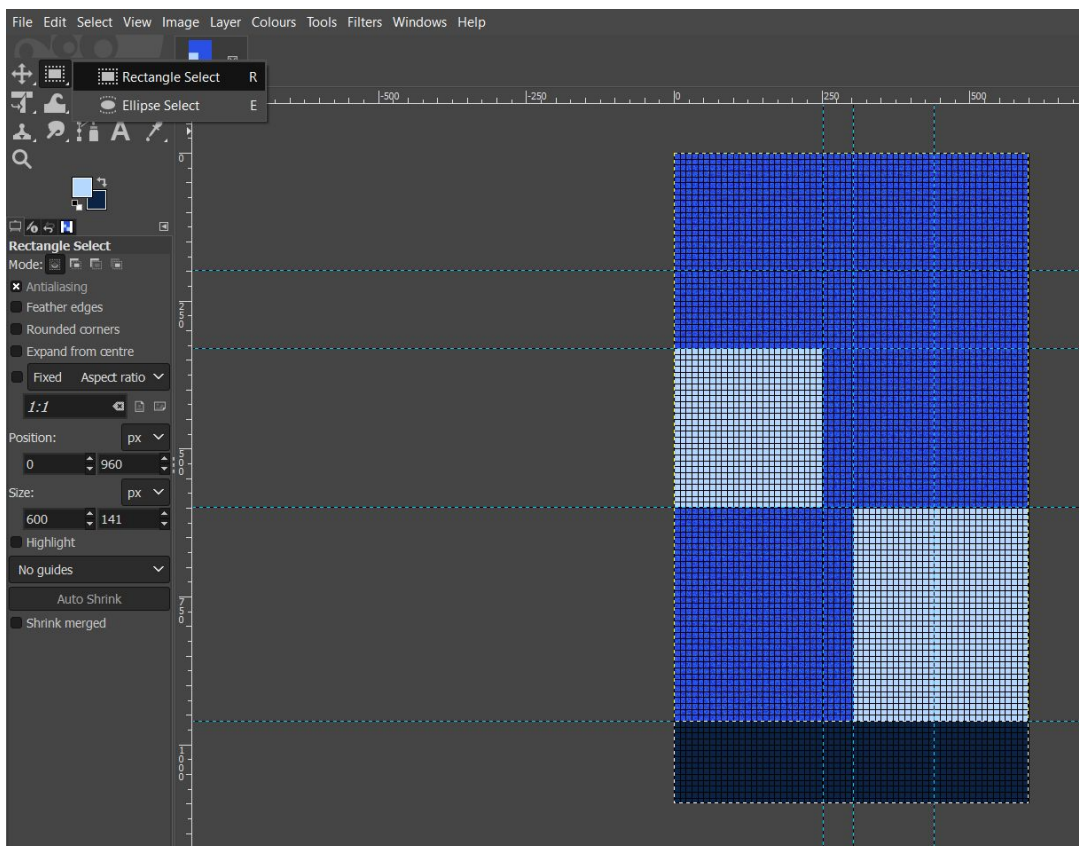


Fig.14 - UI of Gimp program: Rectangle or Ellipse Select Tool.

4- Add images, graphs, icons, illustrations, and other graphic elements to your infographic

When you insert an image or another graphic element as a new layer (Figure 7), you can resize it. Click on “Layer” and then on “Scale Layer” (Figure 15) or use the “Unified Transform Tool” or the other options in the Transformation Tools dialog box (Figures 16 and 17).

Remember to add the inserted image on a new layer (Figures 18 and 19), so that you can bring it to the front or send it to the back: Right-click on the image window and select “Layers Menu”, then click on “To New Layer” (Figure 19).

Move the images and the layers by using the “Move Tool” to arrange them as you wish.

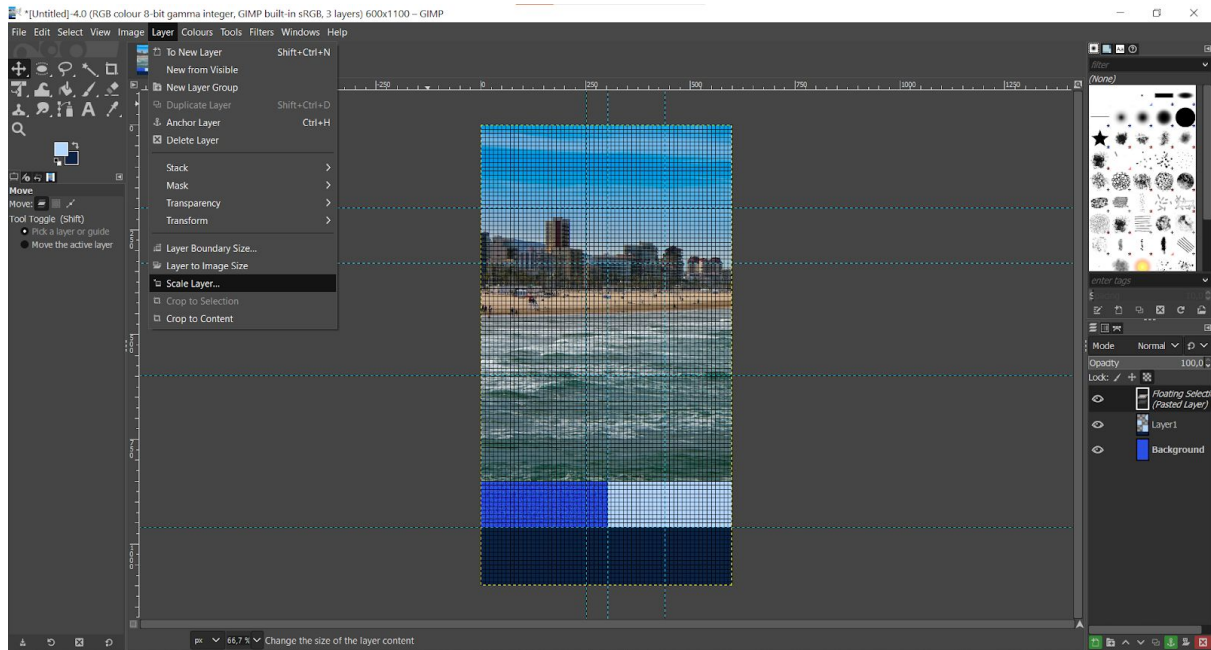


Fig.15 - UI of Gimp program: Scale Layer.

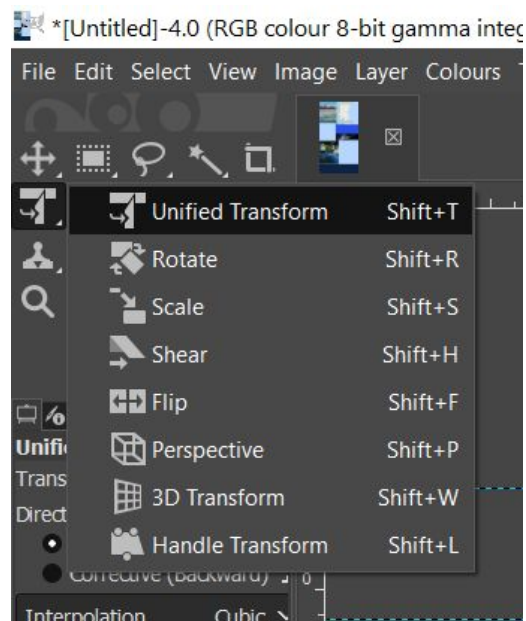


Fig.16 - UI of Gimp program: “Unified Transform Tool” and other options in the Transformation Tools dialog box that allow you to transform the image.

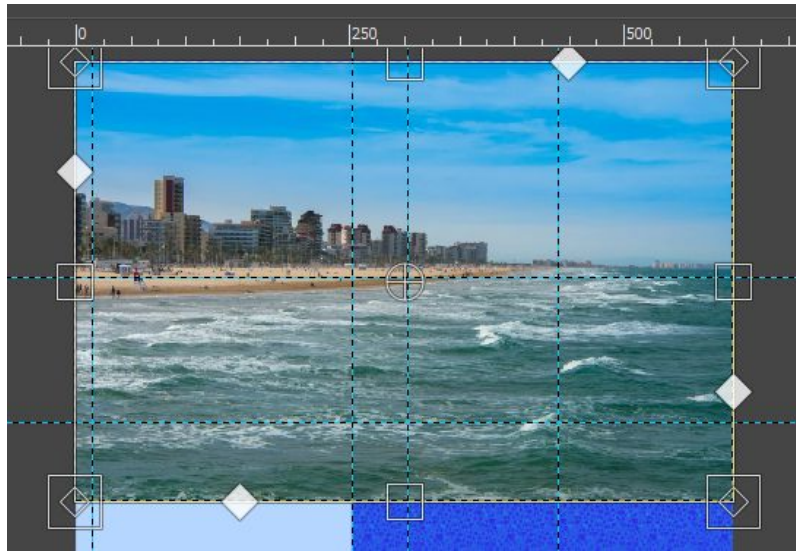


Fig.17 - UI of Gimp program: Transform the image by interacting with the UI controls.

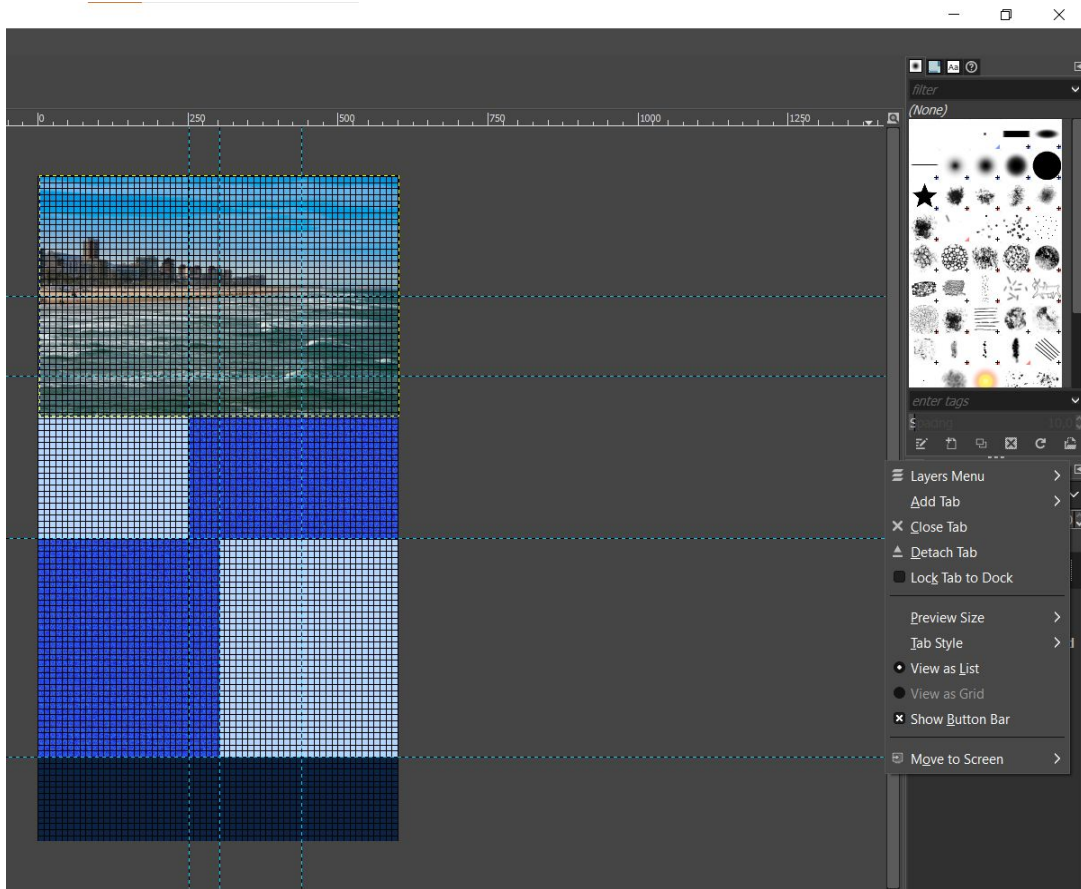


Fig.18 - UI of Gimp program: Layers Menu.

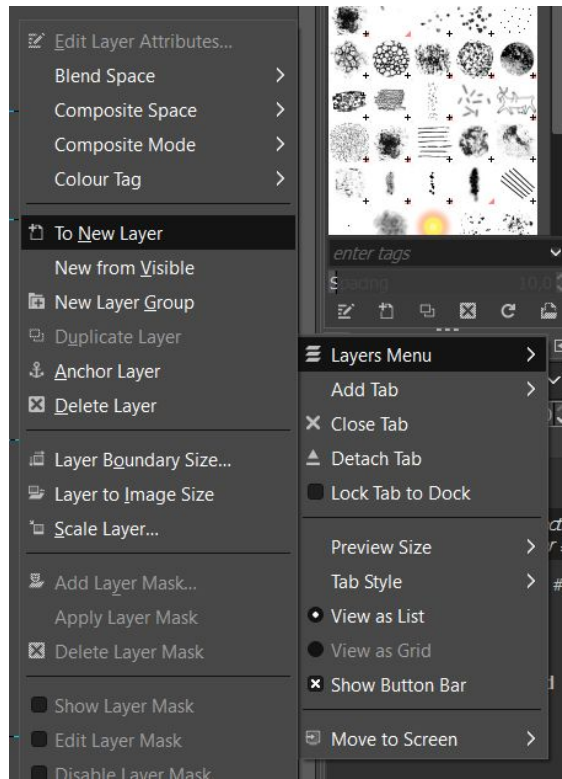


Fig.19 - UI of Gimp program: "Layers Menu" detail.

Another operation you can do to modify images and graphic elements is selecting a region of the image (you can use the "Rectangle or Ellipse Select Tool" or the "Fuzzy Select Tool") and cutting off that part of the image by clicking on "Edit" and then on "Cut" (Figures 20 and 21). However, if possible, it is preferable to hide that part of the image under other layers, rather than cut it. Especially if you would like to make adjustments later.

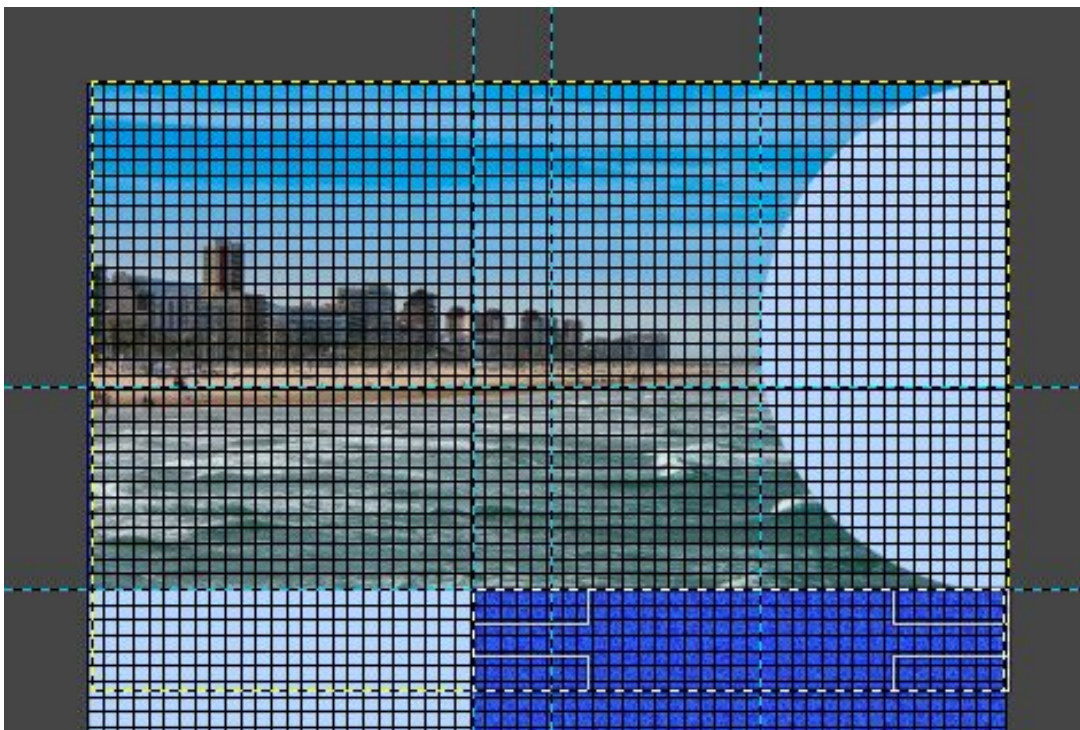
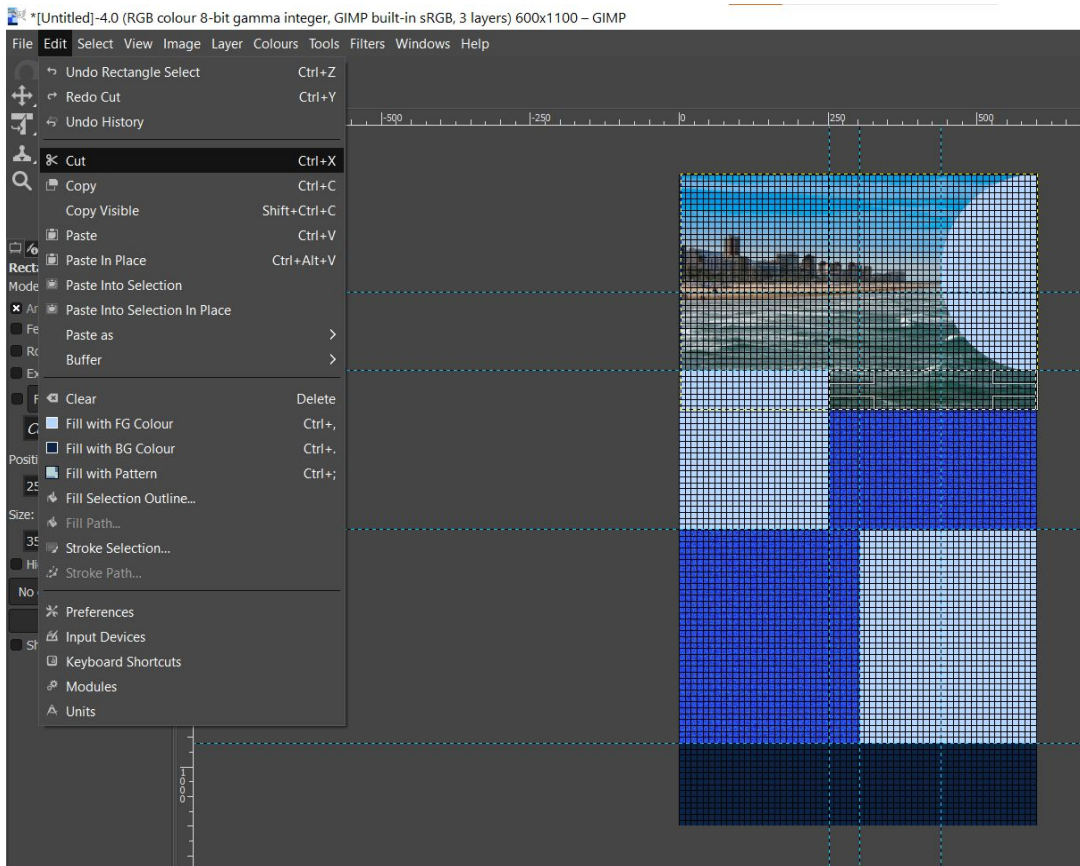


Fig.20,21 - UIs of Gimp program: "Cut" function (before and after the cut).

5- Insert texts and select the chosen font

Once created the composition and arranged the graphic elements, add the text (Figure 22) using the dedicated tool and apply the chosen font or fonts. You can manage different options from the bar

straight on the text (Figure 22) or from the Tool options dialog box under the Main Toolbox panel (Figure 23).

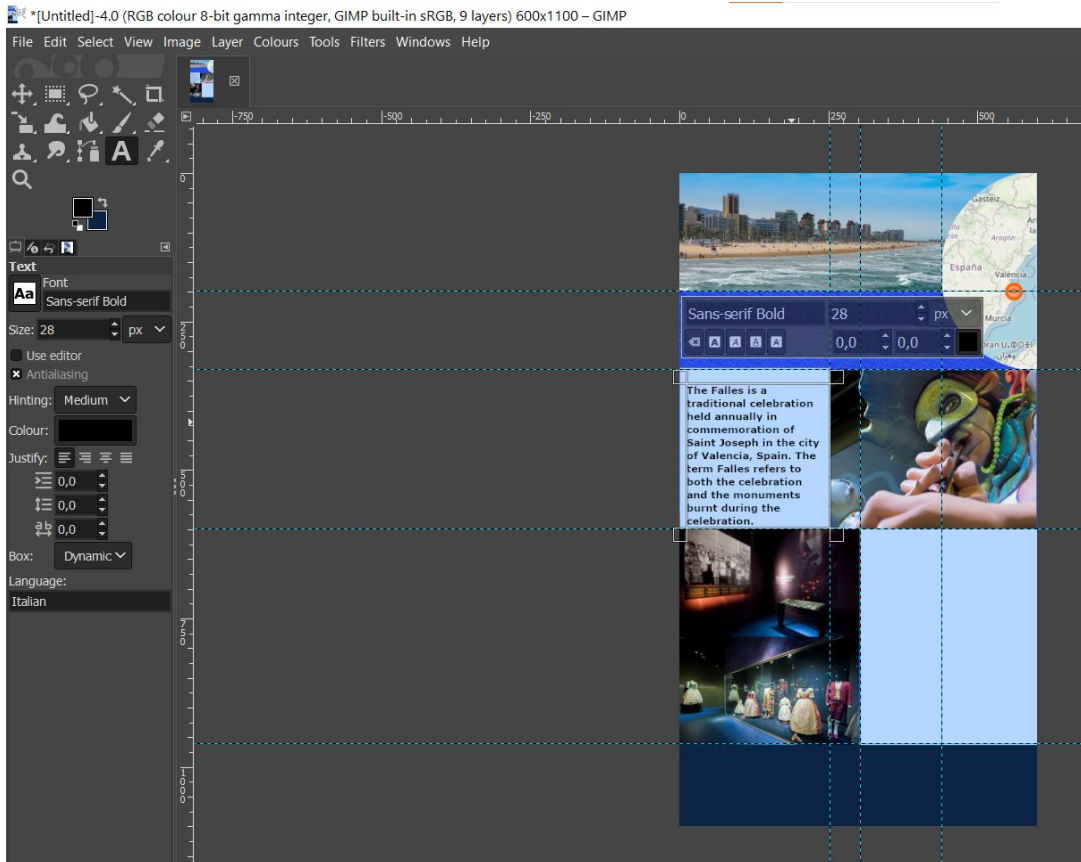


Fig.22 - UI of Gimp program: Text Tool.

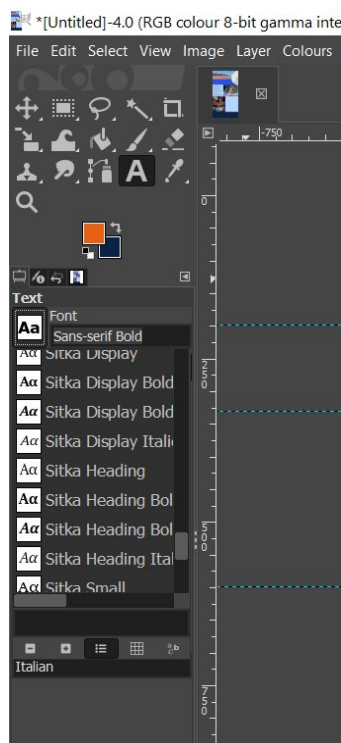


Fig.23 - UI of Gimp program: Detail of the font selection from the Tool options dialog box.

6- Refine and adjust the infographic details

To complete your work, adjust fonts, colors, and the other graphics details that allow you to refine your design. As you can see, the number of layers in the right windows has considerably increased since the beginning (Figure 24).

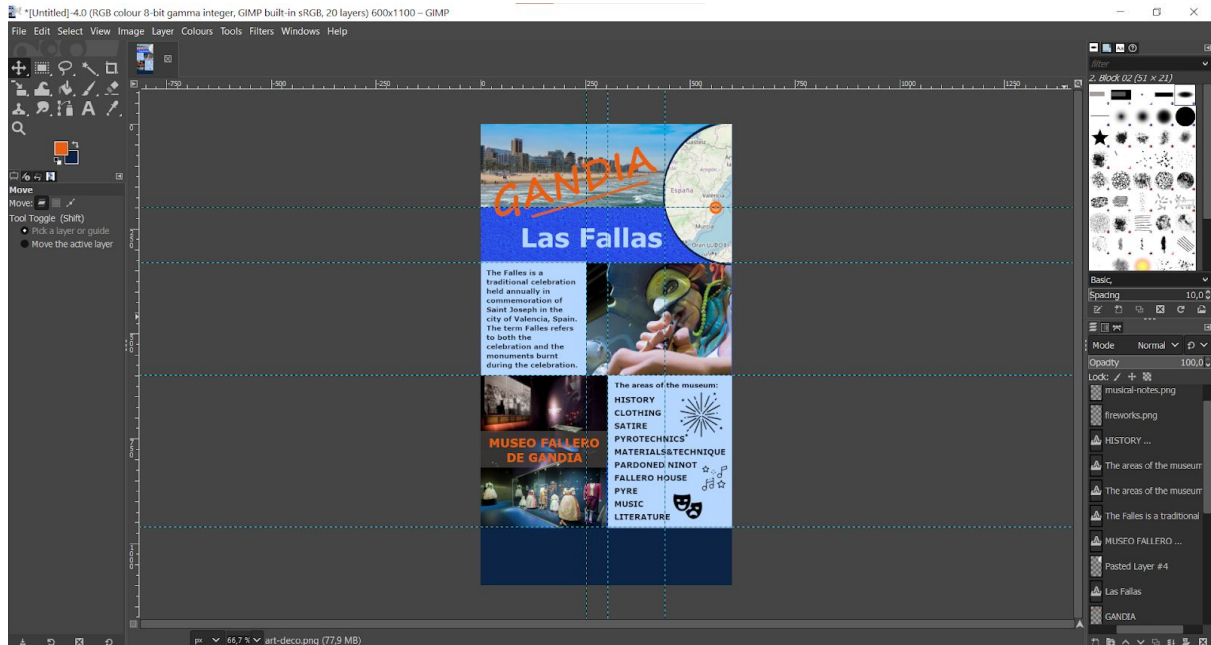


Fig.24 - UI of Gimp program: Adjustments and refinements made by working by layers.

7- Cite sources and give credits

In the end, remember to always cite your sources and to give credits to the authors of the graphics you used, if it is the case, in order to create a “legal” and reliable infographic. Also, you can add your name, as the designer of the infographic (Figure 25).

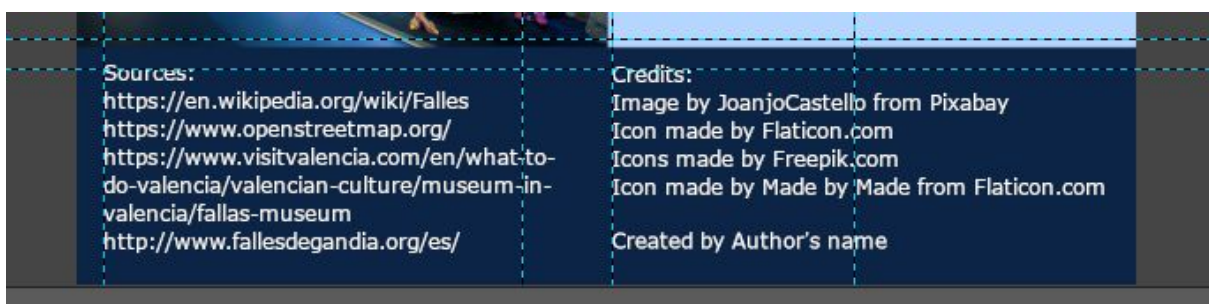


Fig.25 - UI of Gimp program: Sources and Credits inserted within the infographic.

7- Save and export your infographic

The last step in creating your infographic is saving or exporting it as .PNG, .JPEG, or .PDF format. Click on “File”, then on “Export as” and export the image to the chosen file format (Figure 26).

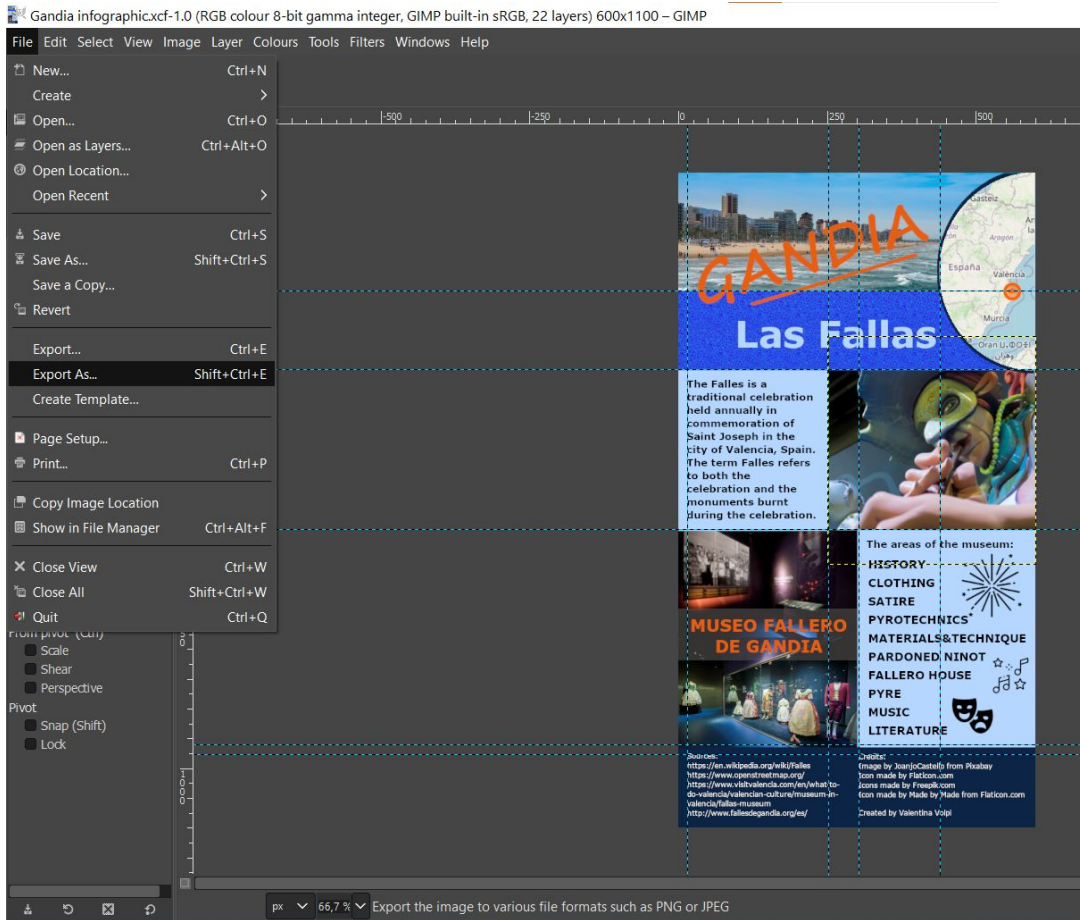


Fig.26 - UI of Gimp program: "Export As" function.

Following you can see the final infographic we made as an example (Figure 27).



Fig.27 - The final infographic made with Gimp.

There are many other functions offered by Gimp that you can use to work on images to realize your infographic, as well as many tricks and shortcuts, that you can learn over time by deepening your knowledge of graphics and of the program.

As already said, this is just an example. Moreover, you can choose the tool you want to realize the infographic. Indeed, there are several tools that can be used to realize an infographic. Some have been presented in the previous lesson, but there are many others, according to different needs. By the way, you can use some proprietary graphics softwares, but also free open programs, like that

explained here. For example, if you are more inclined to use a program to make vector illustrations, you can use [Inkscape](#), instead of Gimp, to make static images. Alternatively, you can work with online tools, such as [Genial.ly](#) or [H5P](#), to create interactive infographics. Lastly, some tools help you in creating diagrams and charts to insert in your infographic, such as [diagrams.net](#).

Conclusions

This lesson allows students to acquire knowledge and skills useful to create an infographic that can be printed or published on different kinds of platforms, including the O-City World platform.