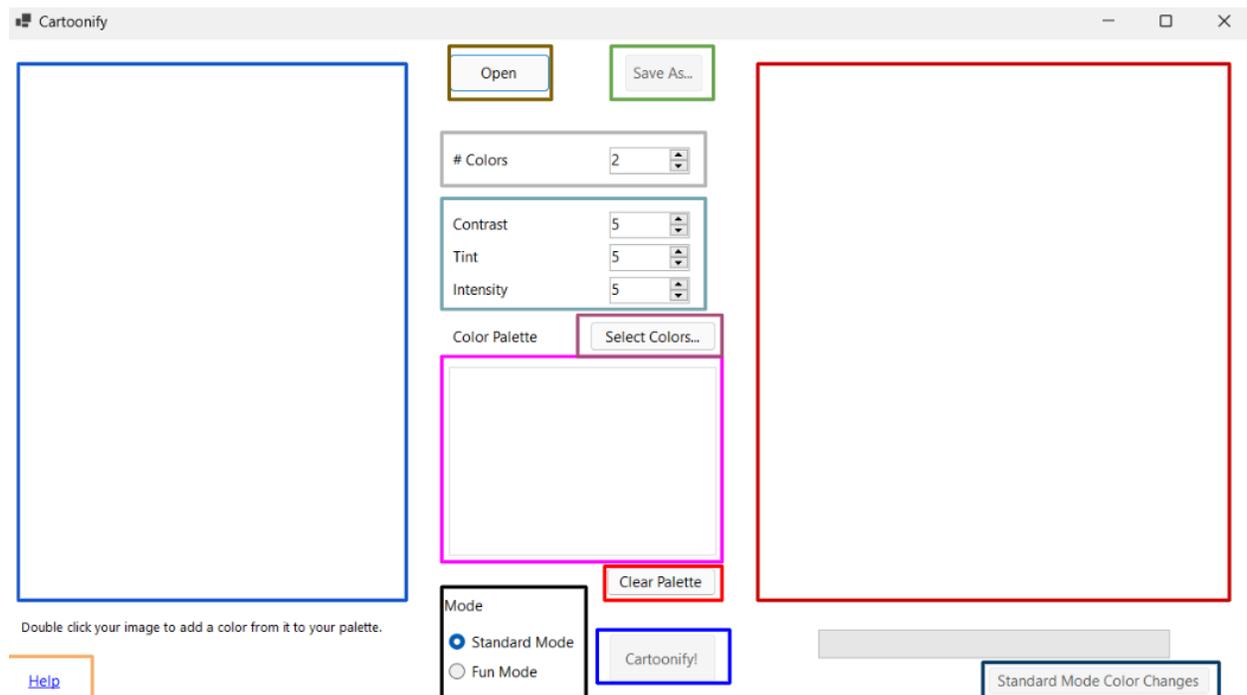


Hello, and welcome to Cartoonify! Cartoonify is an application that allows you to turn an image of your choosing into a more cartoon-like version of itself. Before you jump in, here are some basics on how to use the application. This guide is based on the Cartoonify.zip build available on my website.

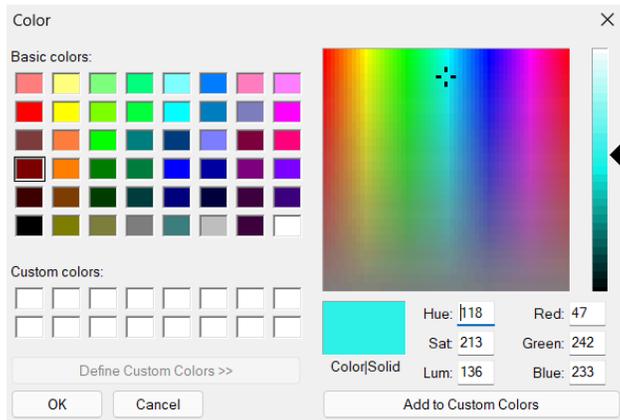
You do not need any specially named folders on your computer to use this application. The minimum requirements to run the application are .NET 6.0 framework and Windows 7.0 OS.

When you start the application, you will see this window. The colored outlines do not appear in the application, and are present for the purposes of this guide. Each part will be explained below.

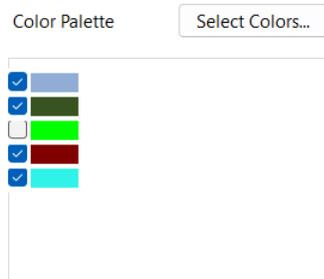


- Start by pressing the **Open** button to select an image. You can choose from JPG files, PNG files, or BMP files from any folder on your computer.
- Once you have chosen your image, it will appear in the **area on the left**. Depending on the size or orientation of your image, it may appear squashed. This is normal and does not affect how the application processes the image.
  - When you have an image chosen, you can add colors to your palette by double-clicking on this region. The color from the area you clicked will be added to your color palette, provided that your palette is not already full, or if the color is not already in the palette.
- You can adjust the number of colors that will appear in your cartoon with the **# Colors** setting. This value will automatically adjust whenever you add a color to your palette or when you clear the palette. However, it requires manual adjustment if you uncheck a color in your palette. This value cannot go above 16 and cannot go below 2.

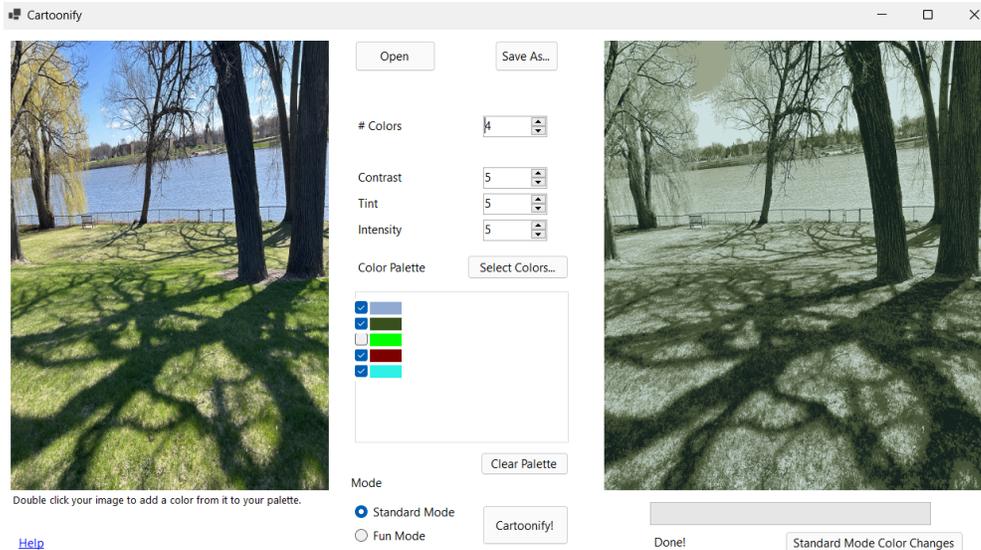
- The **Contrast / Tint / Intensity** setting allows you to adjust the respective values in the cartoon. Each setting starts at 5, and has a minimum value of 0 and a maximum value of 10. These settings can be adjusted before opening an image. More information on what these terms mean and how they will affect your cartoon can be found under the **Help** button.
- You can click the **Select Colors...** button to add custom colors to your palette. It will bring up a color dialog window that has preset colors. You can also choose a custom color by clicking “Define Custom Colors” inside the dialog. Once you are satisfied with your color, click “OK” to return to the form. The color will be added to your palette provided it isn’t already full and if the color is not already present in your palette.



- The region indicated in pink is your **Color Palette**. Colors you have added using one of the two methods will appear here. Palette colors appear as checkboxes, so you can uncheck colors if you end up not wanting them in your cartoon. You are able to adjust your palette before opening an image. Your palette will remain in case you decide to change images and upload a new one.



- Right below the color palette is the **Clear Palette** button. This button removes every color in your palette and resets the # Colors counter to 2.
- **Mode Toggle** - Each mode has different effects when Cartoonify! is clicked.
  - Standard Mode
  - Fun Mode
- Once you are satisfied with your settings, click the **Cartoonify!** button. This is what starts the process of your cartoon. You cannot click Cartoonify! if you do not have an image opened. Once complete, your cartoon will appear on the **right side of the screen**. The cartoon will remain in this region until Cartoonify! is clicked again.



- When using Standard Mode, your palette colors *in the cartoon only* may shift to look more similar to the original image's colors. Your palette will not be affected.
  - You can view how each of your palette colors shifted with the **Standard Mode Color Changes** button, which opens a window displaying this data. This window also displays the percentages of how much each color group appears in your cartoon. You can return to the application while this window is open to use as reference.
- When using Fun Mode, the colors associated with each group are randomly swapped. Unlike Standard Mode, the colors do not shift and the original palette colors are preserved in the cartoon.
- Regardless of mode, the core method of processing the image is the same. It will take much longer to process larger images, so keep that in mind. If you adjusted contrast, tint, and/or intensity settings, these will also take additional processing time. **It is important to leave the application open in these cases, or it will become unresponsive!**
- When there is a cartoon present on the right side of the screen, the **Save As...** button becomes usable. You will be able to save your cartoon as a BMP file to any directory of your choosing. **Please note that larger cartoons may take up 20-40 MB based on their original size.** The cartoon may appear squashed in the window, but this is for display only, and it will have proper proportions when saved.
- Below the region for your chosen image is the **Help** button. It will open a window providing an explanation of each part of the application if you need quick assistance. You can operate the main window while this window is open.