## Paint By Number

## Manual $\not \subset \mathscr{C}$ Final Documentation

Jade Heliin
2018 Senior Capstone

## Table of Contents.

Introduction.
Definition - 2
Requirements - 2
Instructions.
Setup and Startup - 3
How to - 3 © 4
Exceptions-4

## Introduction.

## Project Definition.

Some are blessed with artistic abilities, but if you are like me, you need all the help you can get to even color inside the lines. Paint by Number is a desktop application that creates an image with regions outlined with specific colors to be painted in the image. The user can select any of their own images, choose a complexity from beginner to advanced, and paint the image by selecting colors and clicking on the appropriate region. When their paint by number is completed, they have the option to save their creation.

## Requirements.

$\star$ Open an existing image into your application.
$\star$ Save the image you create to file for later viewing/printing.
$\star$ Specify the number of colors to use in the painting
$\star$ Choose the colors to be used in the painting.
$\star$ Choose specific colors present in the image to be used in the painting.
$\star$ Produce the image as if painted using given the palette and outlines.
$\star$ Produce the image containing only the outlines of the regions to paint with the number of the paint to use in each region.
$\star$ Offer a "complexity" option that allows experienced and very young beginner artists to enjoy Paint-By-Number.

## Instructions.

## Setup and Startup.

$\star$ Using the zipped folder on website:
○ Download paintbynumber.zip.

- Extract all files.
- Go to PaintbyNumber $\backslash$ bin $\backslash$ Debug.
- Run the PaintByNumber Application.
$\star$ Using the executable on website:
- Download paintbynumber.exe.
- Allow it to be used from your pc and run it.

How-To.
$\star$ Open a new image:

- Go to Open. This should open an open file dialog that will allow you to go to any folder on your pc and choose any image you like.
$\star$ Save the new Paint By Number image:
- Go to Save. Once the save file dialog opens, you can go to any folder you like to save the current image. Enter a name to save the image as and save.
$\star$ Print the Paint By Number image:
- Go to Print. When the print dialog opens, you can print the current image however you like. Just select your printer and printer preferences and you can print.
$\star$ Create the Paint By Number image:
- Go to Create Paint By Number. This will open a dialog for you to choose what complexity you would like the new Paint by Number image to be.

You can select beginner, intermediate or advanced. Once chosen, the program will take some time to create your new image.
$\star$ Color in the new Paint by Number image:

- Select the numbered, colored button that you want to use. Find the corresponding number in the new image and click on it. This will color in the region you selected. The button you chose will stay highlighted, so you can continue to click the image with that same number.
- As you get the completed Paint by Number image and color it in, you have the choice to save/print whenever you would like. Once done, you can also choose to save/print or even open an image to create a new Paint by Number.


## Exceptions.

$\star \quad$ When labeling cells on the image with numbers, it does populate every cell with the same number, but if cells are right next to each other, there are multiple labels. They sometimes overlap and are bunched together, so on the harder complexities, it is difficult to tell what numbers they are and what cell each label corresponds to.
$\star$ When printing, if you do not blow up the image to a bigger size, it only fits on a fraction of the page. So it results in a very small printout of the Paint by Number image and you aren't able to see the smaller cells or color any of them in.
$\star \quad$ When selecting images to use, image resolution makes a huge difference on how the Paint by Number turns out. The edges are very big and pixelated. So it is much better quality with images of higher resolution.

After you are done coloring in all of the regions of the Paint by Number image, there is no message to tell you that you are done. So you must see that you are done and either save/print the image or open a new one.

