Animation Canvas

Technical Manual

**Index**

**Introduction**

This manual includes how the canvas element functions, its tools, what the buttons do, files included and how to interact with it.

**Objectives**

Provide an easy to access tool for creating GIF animations through a webpage. It should be lightweight for most devices using it and it should work with most pointing devices.

Anyone should be capable of using it with easy to understand tools and functions.

**Tools used**

**Git:** Used for Version Control.

**JavaScript:** Programming Language used for defining elements behavior.

**CSS:** Style tables used for defining how the elements look like.

**HTML:** Marking Language for defining which elements are going to appear.

**Firebase:** Its hosting service is used for the webpage, but it can be any other hosting service too.

**Folders and files**

**Root**

index.css: Contains style information for the webpage.

index.html: Contains what is going to appear in the webpage.

**src**

Folder used for holding media resources.

**src/*images***

Contains all the images that are going to be included.

**src/*js***

Folder that contains anything related to JavaScript files.

**-elementsData.js:** Holds the variables linked to the elements that form part of the HTML file used by the webpage. It includes their behavior to certain events too.

**-index.js:** JavaScript file that holds an including function in charge of adding new JavaScript files to the webpage and it has written which JavaScript files are going to be included.

**-resources.js:** It includes variables related to Media Files, it has functions for loading them too. Add your Media Files here.

-**colours.js:** Includes hexcolour codes and a function returning a color object containing its RGB components.

**src/*js*/canvas**

Folder including JavaScript files related to the canvas being used.

**-animation.js**: Contains the list of the frames being included, functions and methods used by them. In summary, the animation data.

**-canvasComponents.js:** File that initializes the canvas that is going to be used, the starting configuration for it and the first frame is created in the list. It also contains the variable used for containing the canvas.

Use it to initialize properties for the canvas.

**-canvasData.js:** Contains the methods used for the canvas and tools used by it. It holds the properties unique to the Animation Canvas.

It also has the methods used by the tools.

**src/*js*/elements**

Contains functions and declarations related to elements seen, this includes the sidebar, buttons and menus.

**-buttons.js:** Has the functions used by the buttons shown in the main screen.

**-settingsMenu:** Includes the functions used by the Settings Menu.

**src/*js*/gifjs**

This folder has the encoder used by the program to create a new gif file that can be downloaded.

**myCanvasArea**

The canvas is where you draw everything you want. This object contains the tools currently used for drawing and the size for the brush.

This uses keys for storing its variables.

**Files:**

* **CanvasComponents.js**
* **CanvasData.js**

**Keys:**

* **canvas:** Canvas element currently used for drawing.
* **bottomCanvas:** Canvas element that displays the previous frame.

**Functions:**

* **start():** Initializes both canvas elements (canvas & bottomCanvas).

**Animation**