**Historical Style Generator:**

**Idea:**

When given two documents (images):

* Image with text we want to apply historical style.
* Historical style image.

We want to apply the style to the text image to create a synthetic historical text image.

**Questions:**

1. Style images are input, or we have a set of historical styles?
2. Text image can be any type of text image? Is there a Restriction on number of words? Language? Or any restrictions we want to apply?
3. Result do we want it as a site? Desktop application? Mobile app? Cross platform?

**Approach:**

* First, we want to look at existing types of projects like this to check performance on our problem.
* Second, we want to try to improve and test different options.
* Third create a system for the user to choose the applied method to get results.
* Lastly, we want to create an easy system accessible to users.

**Reading material:**

* [Style Transfer - Styling Images with Convolutional Neural Networks](https://towardsdatascience.com/style-transfer-styling-images-with-convolutional-neural-networks-7d215b58f461)
* [Neural Style Transfer: Creating Art with Deep Learning using tf.keras and eager execution](https://medium.com/tensorflow/neural-style-transfer-creating-art-with-deep-learning-using-tf-keras-and-eager-execution-7d541ac31398)
* [Neural style transfer (tensorflow)](https://www.tensorflow.org/tutorials/generative/style_transfer)
* [Image Style Transfer Using Convolutional Neural Networks (concept and math article)](https://www.cv-foundation.org/openaccess/content_cvpr_2016/papers/Gatys_Image_Style_Transfer_CVPR_2016_paper.pdf)
* [Painting like Van Gogh with Convolutional Neural Networks](https://www.subsubroutine.com/sub-subroutine/2016/11/12/painting-like-van-gogh-with-convolutional-neural-networks)