Case Study Rubric

General Description: Replicate this case study by using the paper resources provided and the link to the original project GitHub. Reflect on your experience reproducing this study.

Why am I doing this?

This is your opportunity to walk through a project done in a previous semester and think about what you would like to include and/or change in your projects.

What am I going to do?

You will reproduce the original project, upload your code to a new GitHub repository, and reflect on your reproduction experience.

Tips for success:

- Read carefully through the resources provided
- Recognize what aspects of the project were difficult for you to replicate and why this might be the case
- Remember your experience and incorporate helpful aspects of this case study in your projects going forward

How will I know I have succeeded?

You will meet expectations on this Case Study when you follow the criteria in the rubric below.

Spec Category	**Spec Details**

Formatting	- **Topic**: the topic of this Case Study
	- **Repository**: a GitHub repository including your code and short reflection
	  - Contents:
	  - Code
	  - Short reflection on case study reproduction

Code	Goal: Following the instructions provided in the README file of the original project GitHub repository, you should reproduce the code from the original case study. - Run the Jupyter notebook using Google Colab - Study output from EDA to understand dataset and preprocess data (create train and test split) - Use the Keras layers resource from the original project to learn about the layers in the CNN-based autoencoder - Compile and train autoencoder on train images - Generate embeddings for the test images - Find indices of similar images based on embeddings - Display the original and similar images - Calculate average SSIM scores between image matches
Short Reflection	Goal: In this document, you should keep track of your process of replication. Consider these questions: - Were you able to replicate the workflow outlined in the original project? - Did you encounter any challenges during the reproduction process? - Were there any problem solving skills you used in this process? - Were there any areas where additional documentation would have been helpful for completing the project? - Do you have any other constructive feedback for the original project creator?

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