

**Kelompok 4:**

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**Contribution:**

- Dataset Choosing:
  - Arieldhipta Tarliman & Vincenzo Jason Carter
- Exploratory Data Analysis & Preprocessing:
  - Geraldus Jeremy Chandra & Sherly Vaneza
- Vanilla GAN model:
  - Cornelia Nathania Pramudita & Arieldhipta Tarliman
- DC GAN model :
  - Vincenzo Jason Carter & Cornelia Nathania Pramudita
- Stable Diffusion model:
  - Arieldhipta Tarliman
- Poster Creation:
  - Cornelia Nathania Pramudita
- Model Deployment:
  - Arieldhipta Tarliman
- Slide Presentation Creation:
  - All members

**Deployment:**

- We decided to deploy only the Vanilla GAN & DC GAN model. The stable diffusion model is too large to process even using API from directly huggingface.com for deployment in streamlit because it has a maximum capacity of 2 GB.
- Deployment link: <https://aoldkelompokkamianjay.streamlit.app/>

**Requirements:**

- Link Dataset: <https://www.kaggle.com/datasets/xhlulu/140k-real-and-fake-faces/data>
- Download `v1-5-pruned-emaonly.ckpt` from
  - <https://huggingface.co/stable-diffusion-v1-5/stable-diffusion-v1-5/tree/main> and save it in the `data` folder
- Don't forget to install the requirements to run Stable Diffusion & DCGAN/ Vanilla GAN on a separate environment
  - The environment for DCGAN & Vanilla GAN are the same as the Model Deployment folder

**References:**

- Thank You to Umar Jamil for giving the youtube tutorial for a stable diffusion method clearly for 5 hours.
- Link: [https://youtu.be/ZBKpAp\\_6TGI?si=Ec3-FdMPBgMHkwU6](https://youtu.be/ZBKpAp_6TGI?si=Ec3-FdMPBgMHkwU6)
- Github:
  - <https://github.com/hkproj/pytorch-stable-diffusion>
  - <https://huggingface.co/stable-diffusion-v1-5/stable-diffusion-v1-5>