

Readme for reproducibility submission of paper “TotalDefMeme: A Multi-Attribute Meme dataset on Total Defence in Singapore”

A) Source code info

Repository: [https://gitlab.com/bottle\\_shop/meme/TotalDefMemes](https://gitlab.com/bottle_shop/meme/TotalDefMemes)

Programming Language: Python

Additional programming language info: python 3.8

Packages/Libraries needed:

python -m pip install 'git+https://github.com/facebookresearch/detectron2.git

transformers==4.27.3

json

torch==1.9.0

sklearn

PIL

torchvision==0.9.0

numpy

glob

open-cv

B) Dataset Info

[https://drive.google.com/file/d/1oJlh4QQS3ldff2g6bZORstS5uBROjUUz/view?usp=share\\_link](https://drive.google.com/file/d/1oJlh4QQS3ldff2g6bZORstS5uBROjUUz/view?usp=share_link)

C) Hardware info

The experiment code is tested on linux environment.

D) Experimentation info

To run clustering, follow these steps:

1. Download the dataset and place in the root folder. Folder structure should look like this:

```
.
|-TD_memes
|-code
|-images
|-postprocessing
|-report
```

2. Run python code/visual\_embedding.py

3. Run python code/clustering.py

For classification experiments, follow the strps in the notebook – code/classification.ipynb