## **ENCODING SOURCE CODE**

## Title: Face Recognition for Access to Public Services

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## **Import Library**

```
In []: from datetime import datetime

import face_recognition
import numpy as np
import pandas as pd
import os
```

## **Process Encoding**

```
In [ ]: image_list_elektro = os.listdir("data - foto/")
        print(image_list_elektro)
        elektro_itk = []
        for nama_saja in image_list_elektro:
            a = nama_saja.split(".")[0]
            # print(a)
            elektro_itk.append(a)
        df = pd.DataFrame(elektro_itk)
        print(df)
        df.to_csv("data/elektro-nomor", index=False, header=None)
        waktu_mulai = datetime.now()
        all_face_encodings= []
        for image in image_list_elektro:
            load_image = face_recognition.load_image_file(f"data - foto/{image}")
            face_encode = face_recognition.face_encodings(load_image, num_jitters=10, )[0]
            all_face_encodings.append(face_encode)
            print(all_face_encodings)
        np.savetxt("data/elektro_face_encodings.csv", all_face_encodings, delimiter=",")
        print("\nEncoding All Faces Done...\n")
        waktu_selesai = datetime.now()
        total_waktu = waktu_selesai - waktu_mulai
        print(total_waktu)
```