

FACE DETECTION

DAY 1

Morning :

Requirements Gathering :

Fixing the Problem Statement :

-> What we are doing and for what.

-> For Elections.

Browsing for basic installations

Searching for relevant codes in git

Installation of face_detection module :

Firstly dlib package...

git clone <https://github.com/davisking/dlib.git>

cd dlib

mkdir build

cd build

sudo apt install cmake

//to remove the locks: kill the previous process running in background

sudo kill proc_no

if not works---- sudo kill -9 proc_no

sudo apt install cmake

cmake ..

cmake --build .

cd ..

sudo python3 setup.py install

pip3 install face_recognition

sudo apt install python3-opencv

Afternoon :

Understanding the code.

Dlib library documentation : <http://dlib.net/>

Best reference Books for Learning :

<https://github.com/KLGLUG/awesome-deep-learning>

Intermediate Reference for Face Recognition :

<https://buildmedia.readthedocs.org/media/pdf/face-recognition/latest/face-recognition.pdf>

To know about any existing functions in python :

```
import packagename
```

```
dir(packagename)
```

```
help(packagename.function)
```

DAY 2

Morning :

Front End using Python :

Dlib – Also has GUI widgets

tkinter

kinter

pyQT

Flask – Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.

Ref : <http://flask.pocoo.org/docs/1.0/tutorial/>

Back End :

CSV

Mongo DB (DataBase is not Preferable)

Data Collection

DataBase preparation

PIL Imaging Library (abbreviated as **PIL**)

Afternoon :

Working with writing of data in Python : Mainly Example 2

<https://www.programiz.com/python-programming/working-csv-files#existing-files>

DAY 3

Morning :

Looping to receive multiple files as input

Afternoon :

Dividing the main file to 2 halves as Training and Checking.

Importing one Trained set to Checker python file :

<https://stackoverflow.com/questions/17255737/importing-variables-from-another-file>