41_Presentation

FCI

Assiut University

Eng . Amjad Dife

Team member

Name	ID
Muhammad Hussein Fayek Hassan	162020506
Muhammad Hussein Muhammad Hussein	162020507
Yacoub Zaghloul Samaan Rizk	162020738

Task description

- we work on Sign Language Detection
- Application that converts sign language to Text in Real time

Demo

Contribution

- Import necessary Libraries cvzone , numpy , opencv , tensflow
- Collect data (make dataset)
- Training model on (teachablemachine.withgoogle.com)
- Download model that have trained
- Use the model in the program
- Testing the model on three Signs
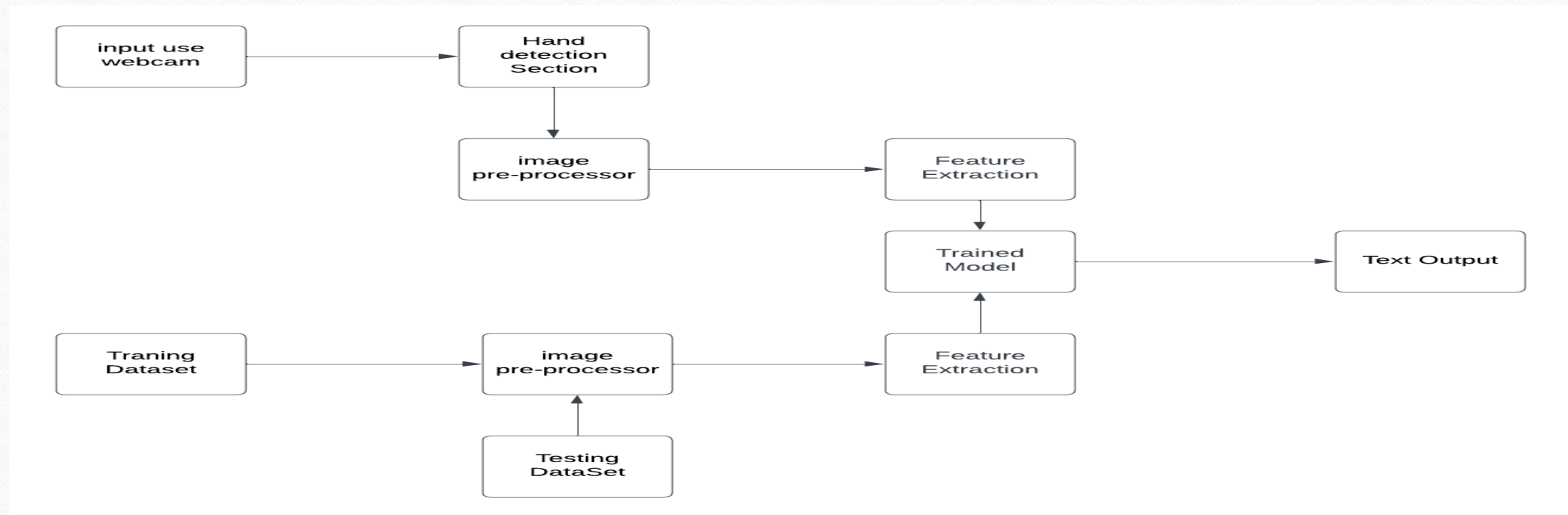- Improve the model to shows sentences, not letters

Data

- We have train a model on 360 image on three sign
- We collect the data and put it in folder with name Data

Project architecture

Flowchart how the model work

Methods

- OpenCV library (import cv2)

- Tensorflow

- HandDetector and Classifier, from the cvzone package

- It also imports numpy and math libraries.

- we design dataset that include 360 image

- We trained the model on this dataset and test it

result

- Our model achieves a 95.4% classification accuracy (+3% relative improvement)
- The percentage of loss 0.35%