Mini-Image Processing
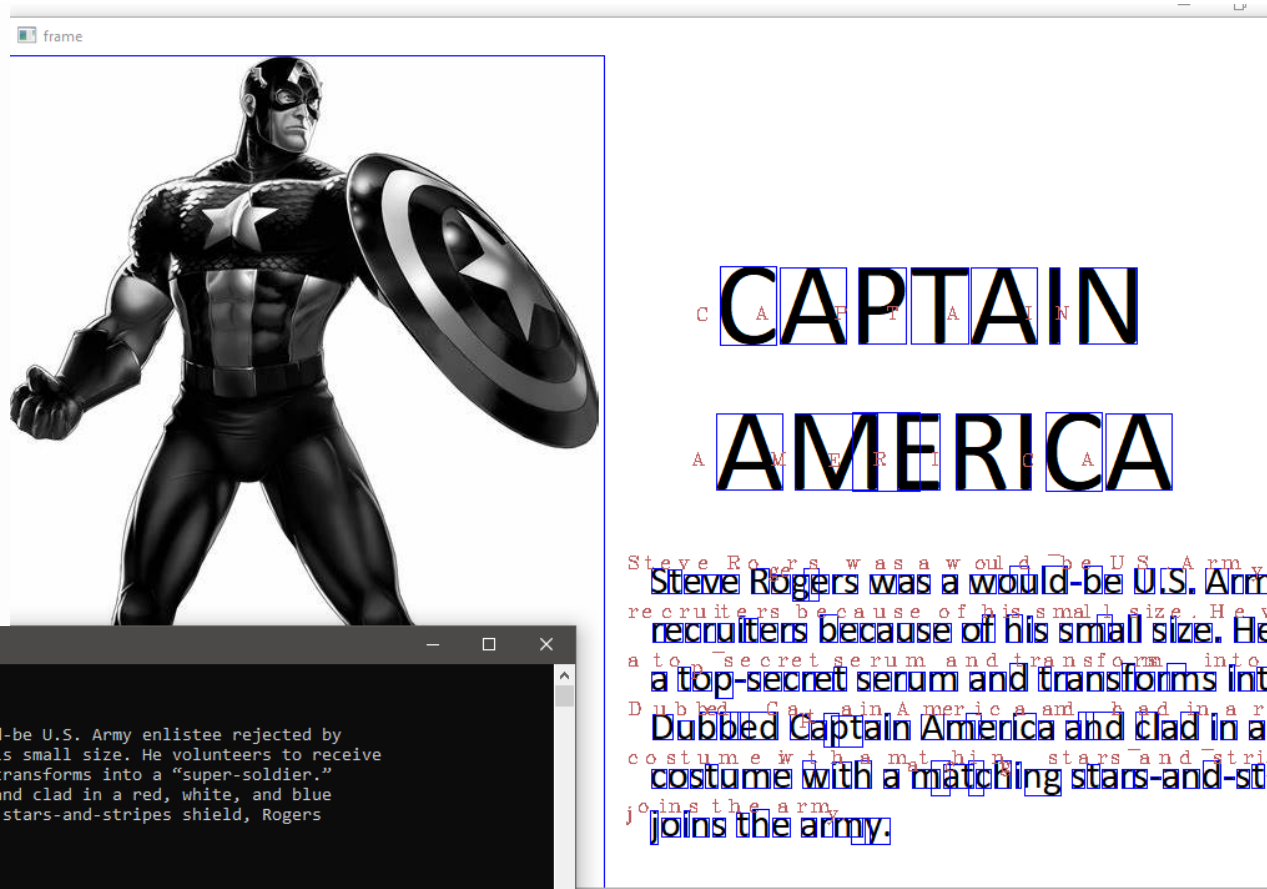
TEXT DETECTION,EXTRACTION AND SPEECH

What is Image Processing?

It's a method to perform an operation on an image in order to get an enhanced image or get some useful information from it.

This is a signal processing in which input is actually an image and output can also be an image,feature or characteristics associated with image

Model: is a file uses algorithms to learn patterns in data and make predictions and insights

Image procession Model : It will have multiple images and based on training and data, it recognises the object in order to perform .

What is Objective of the Project?

Capture the image from Camera/Input Image File containing Text

$\downarrow$

Extract the Text
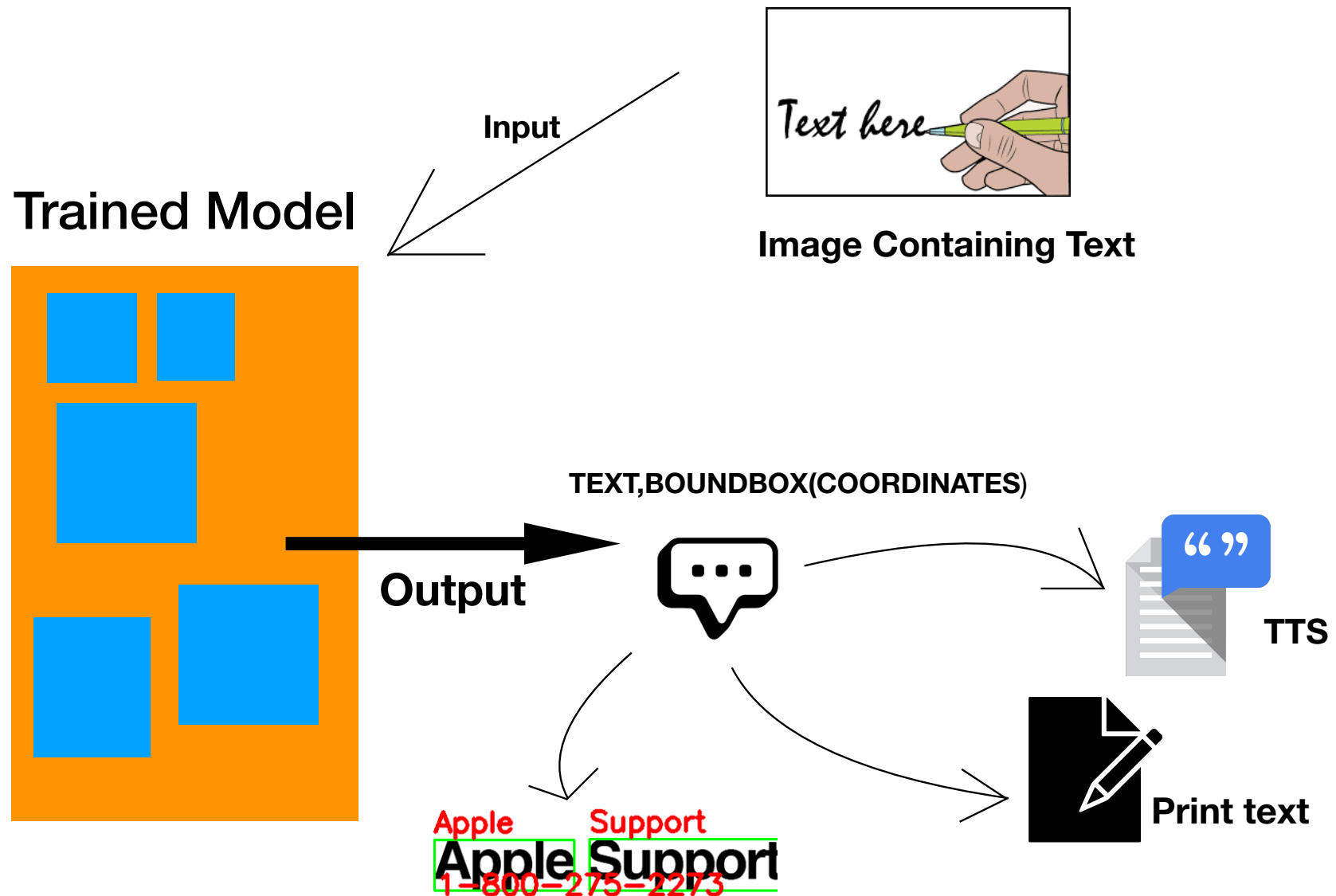
$\downarrow$

Display is on screen $\longleftrightarrow$ **Bound box and Put the text on the Image and Show** $\longleftrightarrow$ **Text to speech**

How do we do it?

Trained Model

Input

Image Containing Text

Output

TEXT,BOUNDBOX(COORDINATES)

TTS

Print text

Apple Support
Apple Support
1-800-275-2273

Requirements /Used/Needed

Opencv Library

Play sound Library

SSL Library

GTTS Library

Tesseract OCR Library

Pyttsx3

#Read image

#Instance text Detector

#Detect Text on Image

#Draw BBOX <u>AND</u> TEXT

Acknowledgement

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Master Rajan Madi Shukla.

Mr. Saurabh Shukla

Murtaza Hassan

Primarily Required subjectives for this project:

Python(**Sources**: **Mr. Saurabh Shukla**)

Computer Vision(**Sources**:ProgrammingKnowledge(website:**www.codebind.com**),Murtaza Hassan,Computer Vision Engineer (GitHub))