Project Development Phase

Sprint – 3

Date	10-11-2022
Team ID	PNT2022TMID18419
Project Title	Real-Time Communication System Powered by AI for Specially Abled

Creating flask app :

1. Main Flask app:

   a. Create a flask app.

   ```python
   i.  from flask import Flask ,render_template,Response,jsonify
   ```

   b. Adding required functions to render the templates.

   ```python
   @app.route("/label")  #for label
   def label_text():
       index=opencv.get_frame()[1]
       dataset=trainlist.dataset
       dataset.append("-")
       label=dataset[index]
       return jsonify(label)

   @app.route("/home") #for home page
   def index():
       opencv.cap.release()
       return render_template('index.html')

   @app.route("/translate") #for translation
   def translate():
       opencv.cap=opencv.cv.VideoCapture(0)
       txt=label_text()
       return render_template('video_out.html',txt=txt.json)

   def gen_vid():      # Video Stream
       global video_camera
       global global_frame
       while True:
           frame =opencv.get_frame()[0]

           if frame != None:
               global_frame = frame
               yield (b'--frame\r\n'
                       b'Content-Type: image/jpeg\r\n\r\n' + frame + b'\r\n\r\n')
           else:
               yield (b'--frame\r\n'
                        b'Content-Type: image/jpeg\r\n\r\n' + global_frame + b'\r\n\r\n')

   @app.route("/video")     # Video page
   def video():
       return Response(gen_vid(),
                   mimetype='multipart/x-mixed-replace; boundary=frame')
   ```
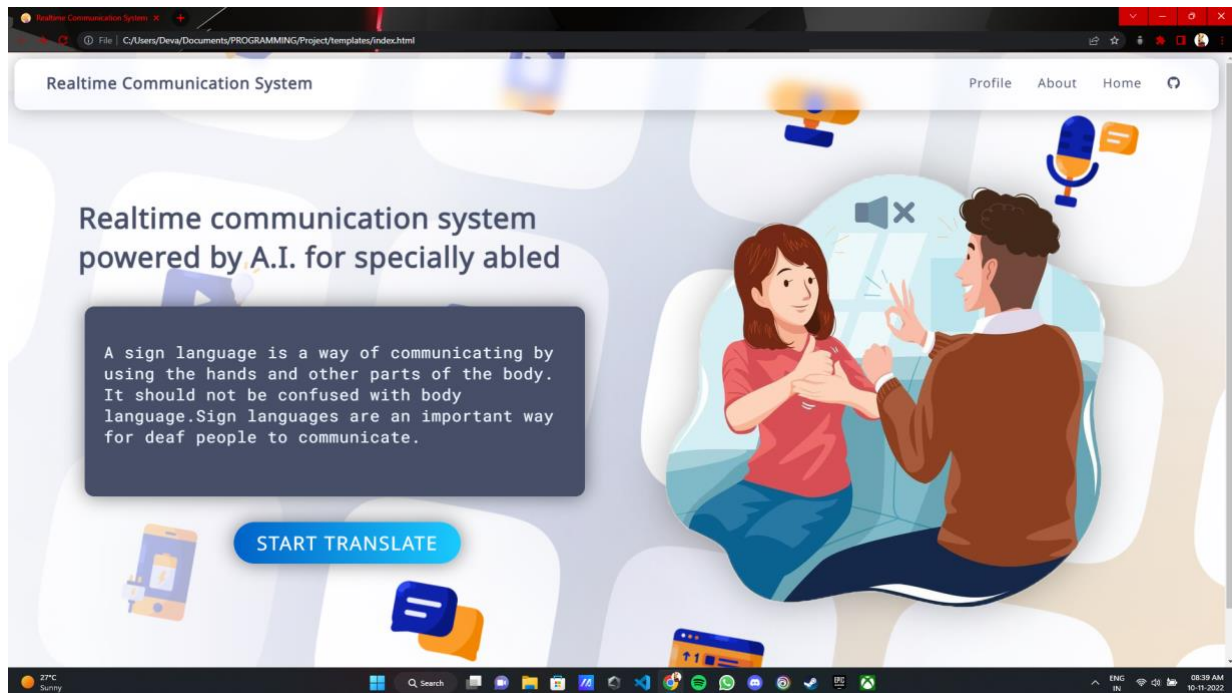
   c. Run the app.py (Flask App).
   (Project) PS C:\Users\Mani\Documents\PROGRAMMING\Project> &
   c:/Users/Mani/Documents/PROGRAMMING/Project/Scripts/python.exe
   c:/Users/Mani/Documents/PROGRAMMING/Project/app.py

OUTPUT :

Main Page :

Video translate Page (for Normal persons to understand Specially abled person) :