

Project Development Phase

Sprint – 4

Date	15-11-2022
Team ID	PNT2022TMID18419
Project Title	Real-Time Communication System Powered by AI for Specially Abled

Interfacing all the component to flask app :

1. Main Flask app:

a. Create a flask app.

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

b. Imported the prediction program to flask app.

```
i. import opencv
```

c. Imported train list to the flask app.

```
i. import trainlist
```

d. Adding required functions to render the templates.

```
@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')

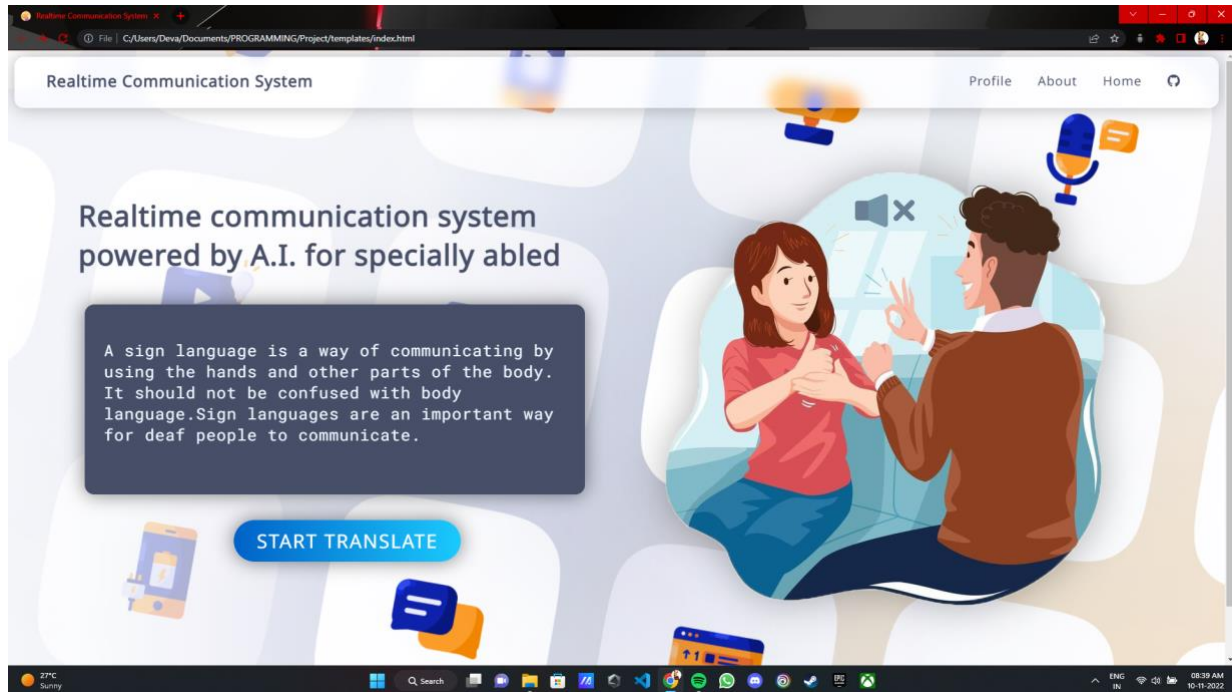
@app.route("/video") # Video page
def video():
    return Response(gen_vid(),
                    mimetype='multipart/x-mixed-replace; boundary=frame')
```

e. Run the app.py (Flask App).

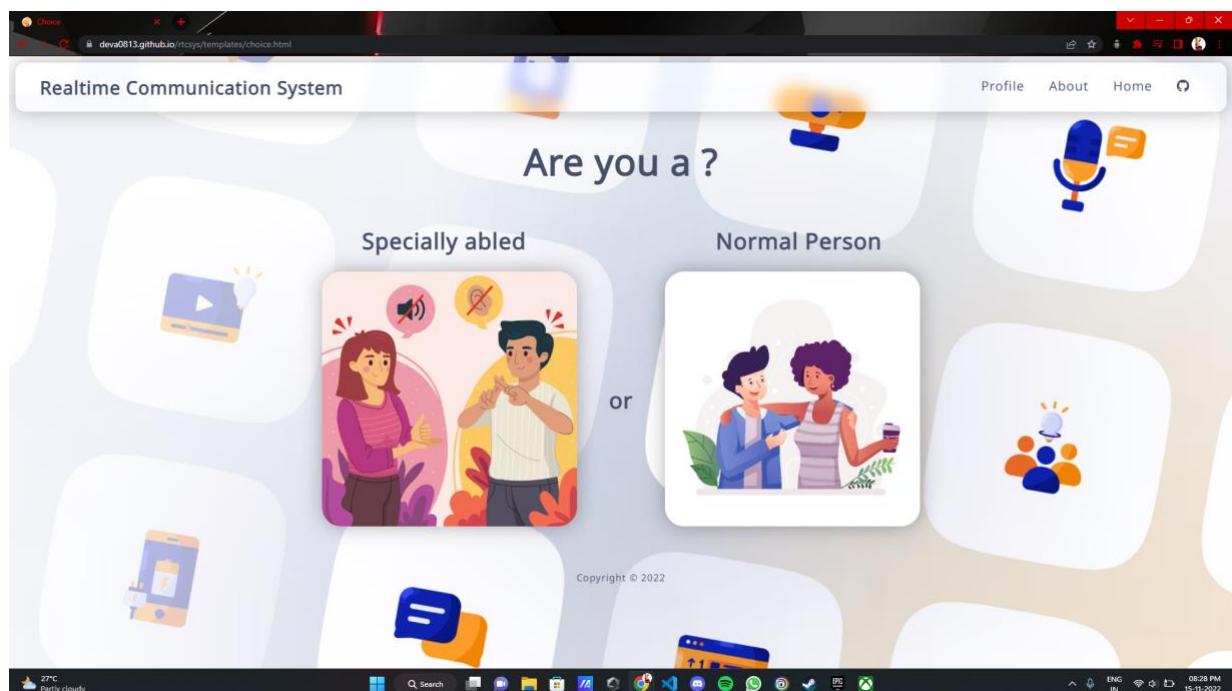
```
(Project) PS C:\Users\Mani\Documents\PROGRAMMING\Project> &  
c:/Users/Mani/Documents/PROGRAMMING/Project/Scripts/python.exe  
c:/Users/Mani/Documents/PROGRAMMING/Project/app.py
```

OUTPUT :

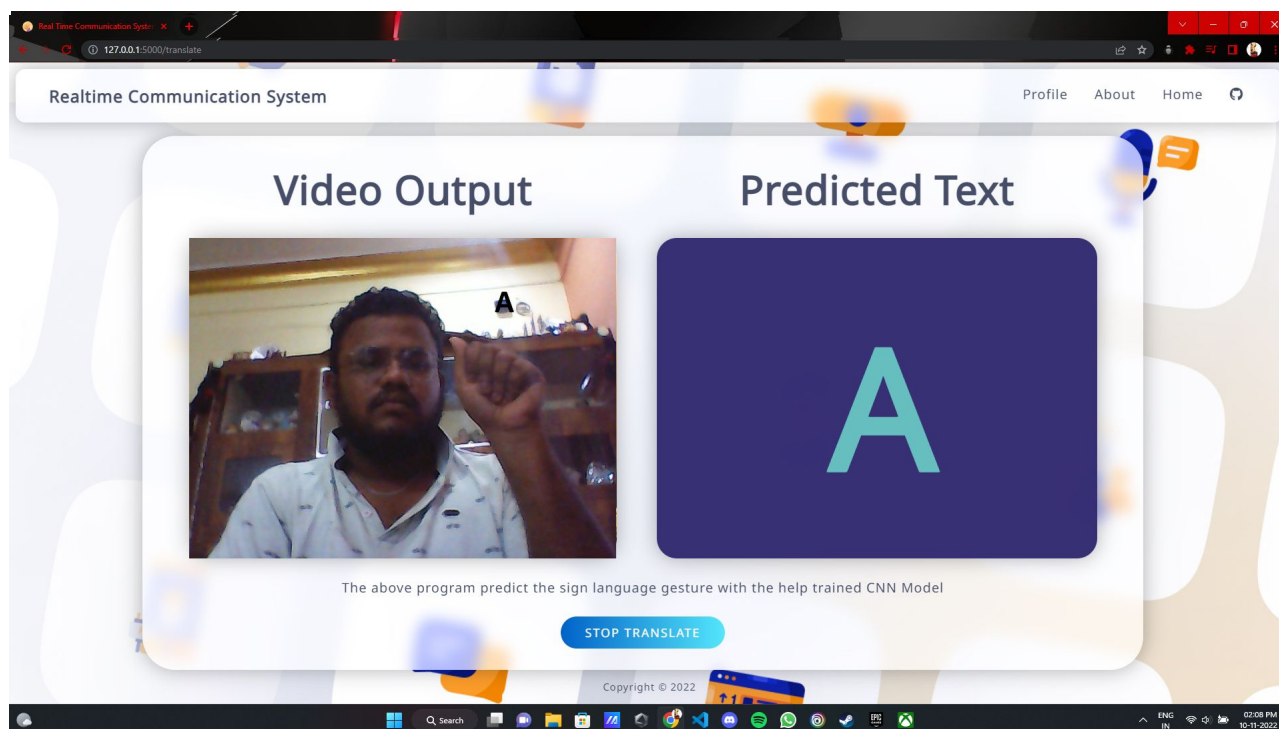
Main Page :



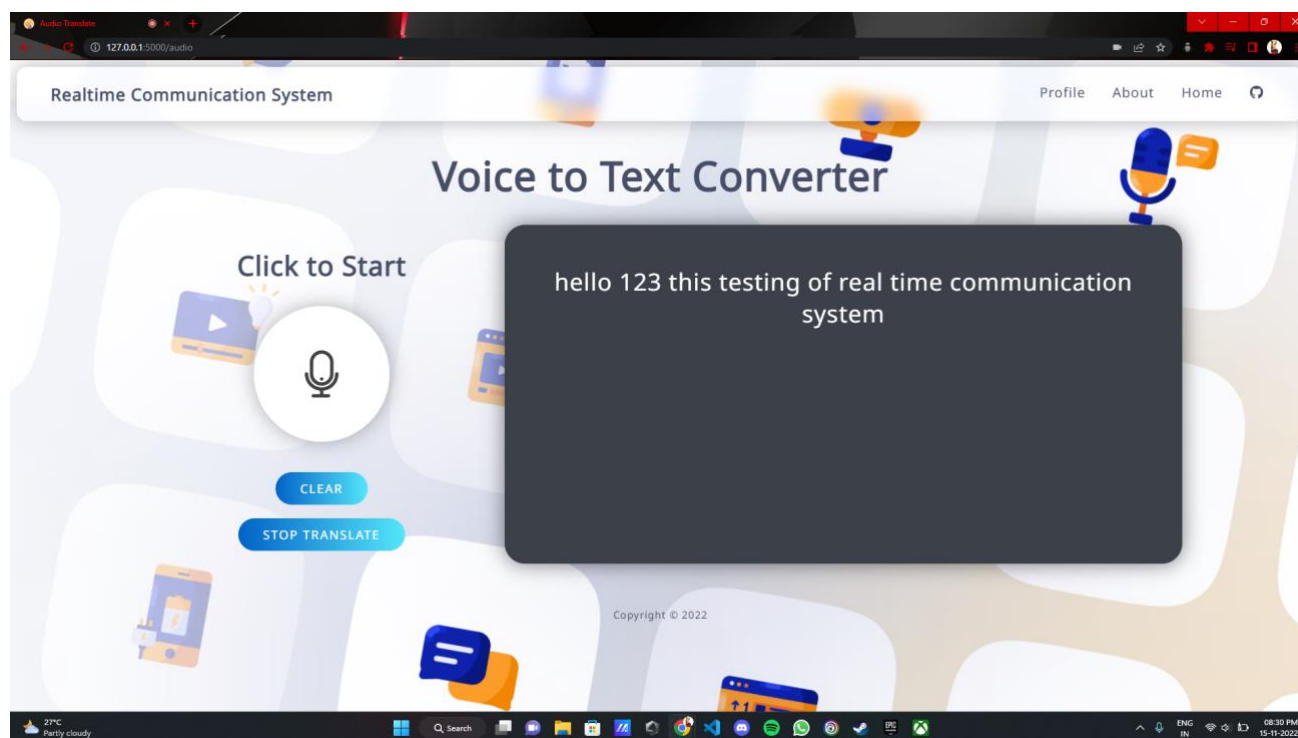
Choice Page :



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



Audio translate Page (for Communicating with Specially abled) :



Login Page :

Realtime Communication System

Log in

Email
devanand151101@gmail.com

Password

[LOGIN](#)

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Sign up Page :

Realtime Communication System

Sign up

Name
M DEVANAND

Email
devanand151101@gmail.com

Password

Role
Software Engineer

Disability
Normal

[SIGN UP](#)

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Profile Page :

