Build A Flask Application

Duration: 0.5 Hrs

Skill Tags:

Step 1: Load the required packages

```python
1 import numpy as np
2 import cv2
3 import os
4 from keras.models import load_model
5 from flask import Flask, render_template, Response
6 import tensorflow as tf
7 from gtts import gTTS #to convert text to speech
8 global graph
9 global writer
10 from skimage.transform import resize
```

Step 2: Initialize graph, load the model, initialize the flask app and load the video

Graph element is required to work with tensorflow. So, graph element is created explicitly.

```python
12 graph = tf.get_default_graph()
13 writer = None
14
15 model = load_model('aslpng1.h5')
16
17 vals = ['A', 'B','C','D','E','F','G','H','I']
18
19 app = Flask(__name__)
20
21 print("[INFO] accessing video stream...")
22 vs = cv2.VideoCapture(0) #triggers the local camera
23
24 pred=""
```

Step 3: Configure the home page

```python
40 @app.route('/')
41 def index():
42     return render_template('index.html')
43
```

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