

## **BUILDING A FLASK APPLICATION**

**Language used** : Python

### **Required Packages :**

Import numpy as np

Import cv2

Import os

From keras.models import load\_model

From flask import flask, render\_template, response

Import tensorflow as tf

From gtts import gtts #to convert text to speech

Global graph

Global writer

From skimage.transform import resize

### **App.py**

```
from flask import Flask, Response, render_template
from camera import Video
```

```
app = Flask(__name__)
```

```
@app.route('/')
def index():
```

```
    return render_template('index.html')
```

```
def gen(camera):
```

```
    while True:
```

```
        frame = camera.get_frame()
```

```
        yield(b'--frame\r\n'
```

```
              b'Content-Type: image/jpeg\r\n\r\n' + frame +
```

```
              b'\r\n\r\n')
```

```
@app.route('/video_feed')
```

```
def video_feed():
```

```
    video = Video()
```

```
    return Response(gen(video), mimetype='multipart/x-mixed-replace; boundary = frame')
```

```
if __name__ == '__main__':  
    app.run()
```

## **main.py**

```
import cv2  
  
video = cv2.VideoCapture(0)  
  
while True:  
    ret, frame = video.read()  
    cv2.imshow("Frame", frame)  
    k = cv2.waitKey(1)  
    if k == ord('q'):  
        break  
  
video.release()  
cv2.destroyAllWindows()
```