

Routing To The Html Page

Date	8 November 2022
Team Id	PNT2022TMID26694
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	4 MffiRKS

There, the declared constructor is used to route to the ThTMLpage createdearlier.

In the above example, the ‘/’ URL is bound with the home.html function. Thence, when the home page of the webserver is opened in the browser, the ThTML page is rendered. Whenever you enter the values from the ThTMLpage the values can beretrievedusing the POST Method.

There, “home.html” isrendered when thehome buttonisclickedonthe UI

```

@app.route('/')# route to display the home page
def home():
    return render_template('home.html')#rendering the home page

@app.route('/image1',methods=['GET','POST'])# routes to the index html
def image1():
    return render_template("image.html")

```

When “image is uploaded” on the UI, the launch function is executed

```

@app.route('/predict',methods=['GET','POST'])# route to show the predictions in a web UI
def launch():

```

It will take the image request and we will be storing that image in our local system then we will convert the image into our required size and finally, we will be predicting the results with the help of our model which we trained and depending upon the class identified we will

showcase the class name and its properties by rendering the respective html pages.

```

@app.route('/predict',methods=['GET','POST'])# route to show the predictions in a web UI
def launch():
    if request.method=='POST':
        f=request.files['file'] #requesting the file
        basepath=os.path.dirname('__file__')#storing the file directory
        filepath=os.path.join(basepath,"uploads",f.filename)#storing the file in uploads folder
        f.save(filepath)#saving the file

        img=image.load_img(filepath,target_size=(64,64)) #load and reshaping the image
        x=image.img_to_array(img)#converting image to an array
        x=np.expand_dims(x,axis=0)#changing the dimensions of the image

        pred=np.argmax(model.predict(x), axis=1)
        print("prediction",pred)#printing the prediction
        index=['APPLES','BANANA','ORANGE','PINEAPPLE','WATERMELON']

        result=str(index[pred[0]])

        x=result
        print(x)
        result=nutrition(result)
        print(result)

        return render_template("0.html",showcase=(result),showcase1=(x))

```

API Integration:

There we will be using Rapid ffiPI

Using RapidffiPI, developers can search and test the ffiPIs, subscribe, and connect to the ffiPIs — all with a single account, single ffiPI key and single SDK. Engineering teams also use RapidffiPI to share internal ffiPIs and microservice documentation.

[Reference link](#)

API used: [Link](#)

The link above will allow us to test the food item and will result in the nutrition content present in the food item.

NOTE: When we keep hitting the ffiPI the limit of it might expire. So making a smart use of it will be an efficient way.

How to access and use the ffiPI will be shown in this [video](#)

```
def nutrition(index):

    url = "https://calorieninjas.p.rapidapi.com/v1/nutrition"

    querystring = {"query":index}

    headers = {
        'x-rapidapi-key': "5d797ab107mshe668f26bd044e64p1ffd34jsnf47bfa9a8ee4",
        'x-rapidapi-host': "calorieninjas.p.rapidapi.com"
    }

    response = requests.request("GET", url, headers=headers, params=querystring)

    print(response.text)
    return response.json()['items']
```

Finally, Run the application

This is used to run the application in a localhost. The localhost runs on port number 5000. (We can give different port numbers)

```
if __name__ == "__main__":
    # running the app
    app.run(debug=False)
```