TEAM ID: PNT2022TMID10671

PROJECT NAME: AI-powered Nutrition Analyzer for Fitness

Enthusiasts

Routing To The Html Page

Here, the declared constructor is used to route to the HTML page createdearlier.

In the above example, the '/' URL is bound with the home.html function. Hence, when the home page of the webserver is opened in the browser, the HTML page is rendered. Whenever you enter the values from the HTMLpage the values can be retrieved using the POST Method.

Here, "home.html" is rendered when the home button is clicked on the 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 localsystem 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))
```

```
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 local host runs on portnumber 5000. (We can give different port numbers)

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