TOPIC : AI powered nutrition analyzer for fitness enthusiasts

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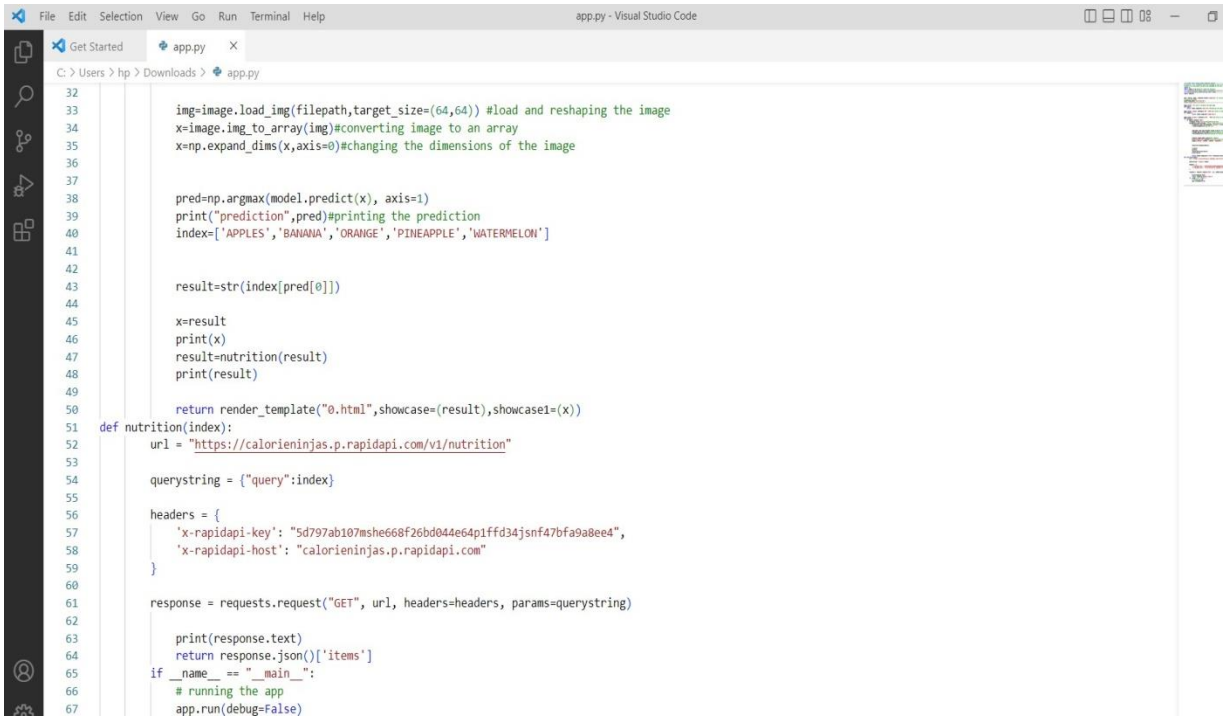
Application Building

Creating Our Flask Application And Loading Our Model By Using Load_model Method

Creating our flask application and loading our model by using the load_model method

```
app = Flask(__name__,template_folder="templates") # initializing a flask app
# Loading the model
model=load_model('nutrition.h5')
print("Loaded model from disk")

@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")

@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

```




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