

**TOPIC :** AI powered nutrition analyzer for fitness enthusiasts

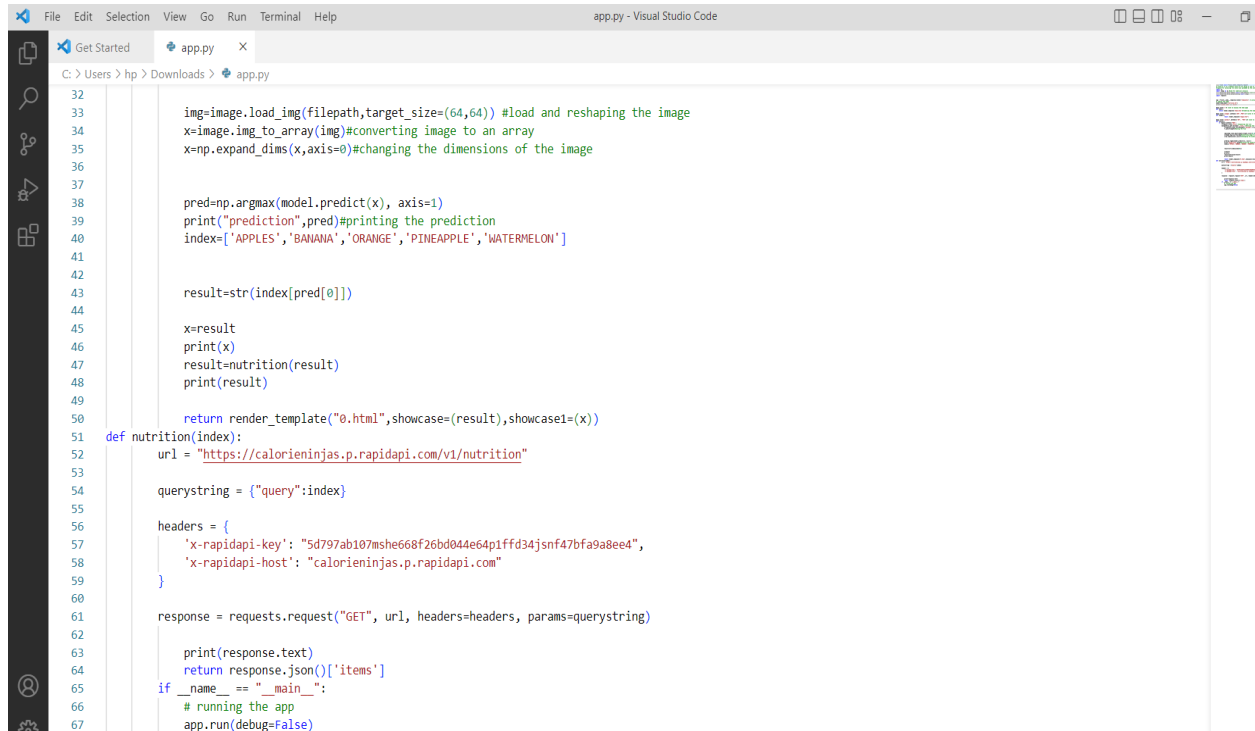
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## Application Building

### 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**

```
9
10
11 app = Flask(__name__, template_folder="templates") # initializing a flask app
12 # Loading the model
13 model=load_model('nutrition.h5')
14 print("Loaded model from disk")
15
16 @app.route('/')# route to display the home page
17 def home():
18     return render_template('home.html')#rendering the home page
19
20 @app.route('/image1',methods=['GET','POST'])# routes to the index html
21 def image1():
22     return render_template("image.html")
23
24 @app.route('/predict',methods=['GET', 'POST'])# route to show the predictions in a web UI
25 def launch():
26     if request.method=='POST':
27         f=request.files['file'] #requesting the file
28         basepath=os.path.dirname('__file__')#storing the file directory
29         filepath=os.path.join(basepath,"uploads",f.filename)#storing the file in uploads folder
30         f.save(filepath)#saving the file
31
32
33         img=image.load_img(filepath,target_size=(64,64)) #load and reshaping the image
34         x=image.img_to_array(img)#converting image to an array
35         x=np.expand_dims(x,axis=0)#changing the dimensions of the image
36
37
```



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36
37
38     pred=np.argmax(model.predict(x), axis=1)
39     print("prediction",pred)#printing the prediction
40     index=['APPLES','BANANA','ORANGE','PINEAPPLE','WATERMELON']
41
42
43     result=str(index[pred[0]])
44
45     x=result
46     print(x)
47     result=nutrition(result)
48     print(result)
49
50     return render_template("0.html",showcase=(result),showcase1=(x))
51 def nutrition(index):
52     url = "https://calorieninjas.p.rapidapi.com/v1/nutrition"
53
54     querystring = {"query":index}
55
56     headers = {
57         'x-rapidapi-key': "5d797ab107mshe668f26bd044e64p1ffd34jsnf47bfa9a8ee4",
58         'x-rapidapi-host': "calorieninjas.p.rapidapi.com"
59     }
60
61     response = requests.request("GET", url, headers=headers, params=querystring)
62
63     print(response.text)
64     return response.json()['items']
65 if __name__ == "__main__":
66     # running the app
67     app.run(debug=False)
```