AI-Powered Nutrition Analyzer for Fitness Enthusiasts

PROJECT REPORT

Team Id   : PNT2022TMID44563

Department   : Computer Science and Engineering

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submitted by

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1. INTRODUCTION

1.1 Project Overview

Food is essential for human life and has been the concern of many healthcare conventions. Nowadays new dietary assessment and nutrition analysis tools enable more opportunities to help people understand their daily eating habits, exploring nutrition patterns and maintain a healthy diet. Nutritional analysis is the process of determining the nutritional content of food. It is a vital part of analytical chemistry that provides information about the chemical composition, processing, quality control and contamination of food.

The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).

1.2 Purpose

Nutrition Analyzer helps in the detailed and perfect determination of the component nutrients present in any food item. Food components have vast bio metabolic roles and could affect human health severely. Purpose of the AI powered Nutrition Analyzer is to help individuals who needs a proper nutrition assistant to achieve fitness, to cure diseases through foods or to lead a healthy lifestyle. With the help of Artificial Intelligence, it was possible to achieve a proper nutrition analyser which is capable of showing the nutrition content of the food when we give the picture of it**.**

This allows the users to keep track of their diet and exercise regime, take expert advice and connect to other fitness enthusiasts thus equipping them to maintain a healthy lifestyle. The system plans offer its customer and fitness enthusiasts many tips options that can help them reach their goals.

2. LITERATURE SURVEY

2.1 Existing problem

Controlled intake of nutrition is recommended as a condition forbeing a healthy individual. Knowing and monitoring how much food is consumed during the day, following the calorie and nutrition of these foods helps tocontrol healthy nutrition. However, there is no proper assistance to achieve it. Nutritional intake is fundamental to human growth and health, and the intake of different types of nutrients and micro-nutrients can affect health. The content of the diet affects the occurrence of disease, with the incidence of many diseases increasing each year while the age group at which they occur is gradually decreasing. The consumption of a wide variety of food items is necessary in order for the human body to obtain the right amounts of nutrients. Failing to follow such a well-balanced diet, in combination with a generally unhealthyway of living, has been shown to increase the risk for cardiovascular disease, type II diabetes and some forms of cancer.

2.2 References

Dr.Shanthini

2.3 Problem Statement Definition

Ideal situation:

Ideally, a Nutrition Analyzer is available which will help people in assisting the nutrition analysis and help them in maintaining good health.

Reality:

Currently there is no ideal nutrition analyzer is available. Those which are available, fails to satisfy the needs of the people. Some are not personalized while some are very complicated to be accessed by everyone. Hence, there is no Nutrition analyzer to guide and assist people.
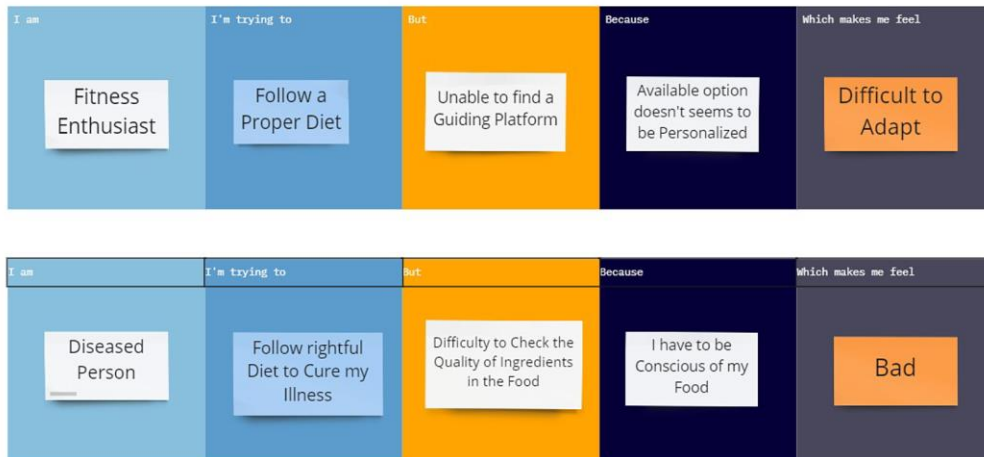
Consequences:

People tend to consume food without the knowledge of nutrition content of the food. This results in nutrition imbalance leading to nutrition deficiencies and diseases.

Proposal:

Our project of Nutrition Analyzer for Fitness Enthusiasts Focus on Developing a simple Nutrition Analyzer which is capable of analyze the nutrition in the food by giving the picture of the food. This is achieved by Artificial Intelligence with Python, Deep learning ,CNN etc..

PROBLEM STATEMENT

I am	I'm trying to	But	Because	Which makes me feel
Fitness Enthusiast	Follow a Proper Diet	Unable to find a Guiding Platform	Available option doesn't seems to be Personalized	Difficult to Adapt

| I am	I'm trying to	But	Because	Which makes me feel
Diseased Person	Follow rightful Diet to Cure my Illness	Difficulty to Check the Quality of Ingredients in the Food	I have to be Conscious of my Food	Bad

miro

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

Empathy mapping is a simple yet effective workshop that can be conducted with a variety of different users in mind, anywhere from stakeholders, individual use cases, or entire teams of people. It can be conducted by many different teams such as design teams, sales, product development or customer service. Essentially, it is an exercise that seeks to get inside the head of the customer as they interact with your product/service.

Nutrition Analyzer does the process of determining the nutritional contet of the food that provides information about chenical composition , processing, quality conntrol and containation of food .The following empathy map helped us to understand the customer needs and their expections and to develop our Nutrition Analyser.
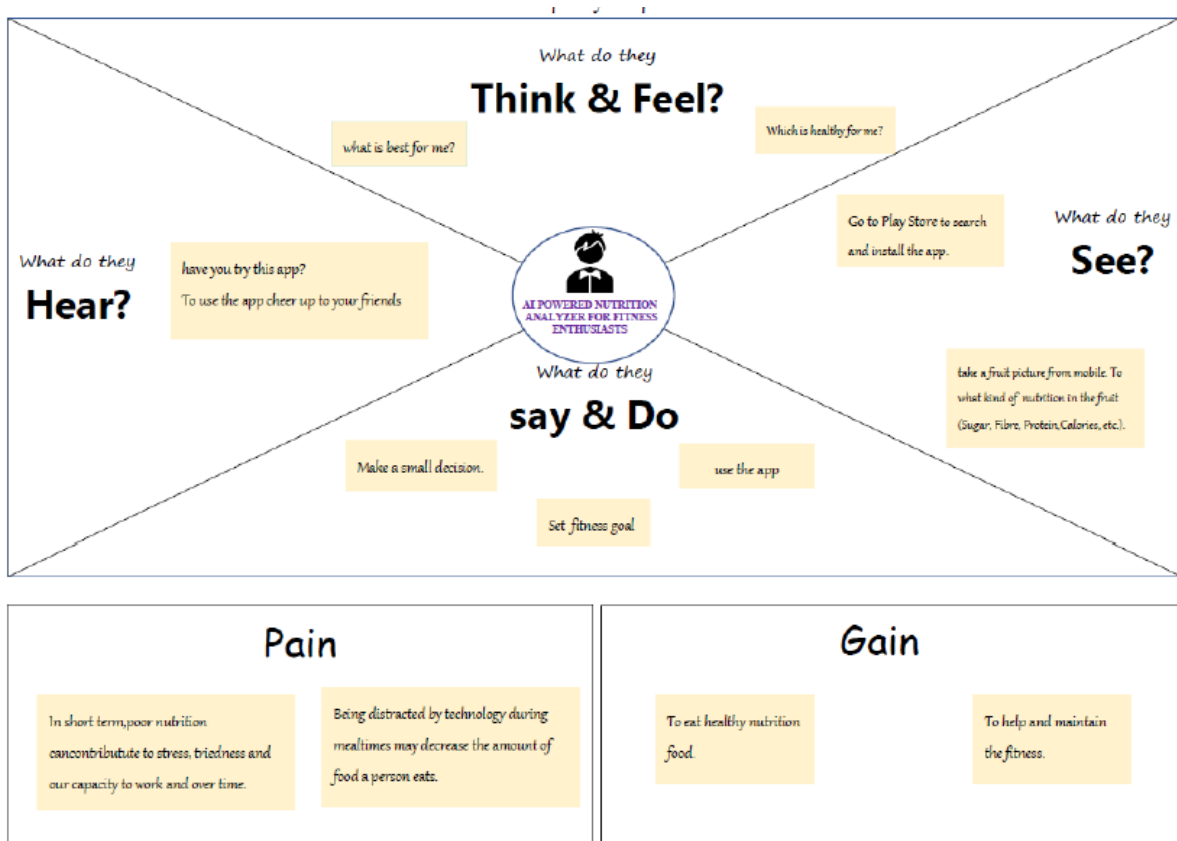
3.2 Ideation & Brainstorming

Template

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.
⏱ 10 minutes

A Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

Open article →

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.
⏱ 5 minutes

PROBLEM

Nutritional analysis is the process of determining the nutritional content of food. It is a vital part of analytical chemistry that provides information about the chemical composition, processing, quality control and contamination of food. The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).

Key rules of brainstorming
To run a smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

2 Brainstorm

Write down any ideas that come to mind that address your problem statement.
⏱ 10 minutes

Varatha Arjun | Lokesh | Vengadesh | Yuvaraj

3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.
⏱ 20 minutes

- Avoid parties with Friends
- Avoid too Many Liquid Calories
- Make a commitment to YOURSELF
- Create Space and focus on yourself
- Schedule your workouts.
- Design your fitness program
- Stay away from Eating Junk Food
- Avoid over eating compelled by family
- Check in weekly.
- Monitor your progress

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

Nutrition Facts

Remember the diet plans and BMI of the body

Suggests regular physical activities for good health

Tracking calories in the food by uploading images

3.3 Proposed Solution

s.no	Parameter	Description
1.	Problem Statement (Problem to be solved)	Food is essential for human life and has been the concern of many healthcare conventions. Nowadays new dietary assessment and nutrition analysis tools enable more opportunities to help people understand their daily eating habits, exploring nutrition patterns and maintain a healthy diet. Nutritional analysis is the process of determining the nutritional content of food**.**
2.	Idea / Solution Description	To track fitness level and Analyze the nutrition level of foods like fruits ,vegetables. It helps to identify the proportion of vitamins.
3.	Novelty/Uniqueness	The user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).
4.	Business model (Revenue Model)	Low expenditure ,easy to follow without affecting their personal time
5.	Social impact/Customer Satisfaction	By using this system, the users can predict and analyze the picture of the fruits and foods. In which it results to the visualizing the description of the foods taken as input
6.	Scalability of the solution	By implementing this system, the people can efficiently and effectively to gain knowledge about the fitness.They want and they wish to use at anytime. This system can also be integrated with the future technologies

3.4 Problem Solution fit

Define CS, fit into CL	**1. CUSTOMER SEGMENT(S)** CS ❖ HealthyEaters ❖ Patient	**6. CUSTOMER LIMITATIONS** EG. BUDGET, DEVICES CL ❖ Internet Facility ❖ Spending Time	**5. AVAILABLE SOLUTIONS** PROS & CONS AS Find the nutrition based on fruits like Sugar, Fibre, Protein, etc. to make the users conscious about their foods
Focus on PR, tap into BE, understand RC	**2. PROBLEMS / PAINS** + ITS FREQUENCY PR Low quality image leads to wrong prediction of nutrients.	**9. PROBLEM ROOT / CAUSE** RC ❖ Laziness ❖	**7. BEHAVIOR** + ITS INTENSITY BE ❖ Consulting Doctors ❖ Maintaining their own diet
Identify strong TR & EM	**3. TRIGGERS TO ACT** TR Through advertisements, neighbors or through social media **4. EMOTIONS** BEFORE / AFTER EM Before: Unhealthy,Confused After:Healthy,Confident	**10. YOUR SOLUTION** SL To track the health care plan of an individual.To track the calories in the food by uploading images.To suggests food based on their health conditions.	**8. CHANNELS of BEHAVIOR** CH ONLINE ❖ Through Social Media ❖ Channel Advertisements OFFLINE ❖ Suggests neighbors ❖ Through pamplets

4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Following are the functional requirements for the proposed solution.

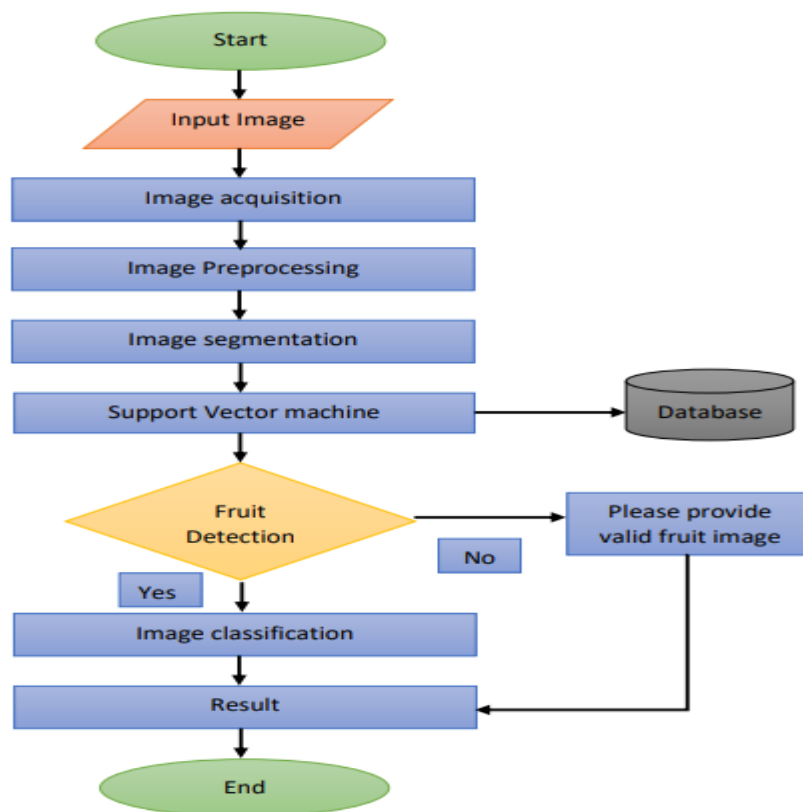| FR NO.	FUNCTIONAL REQUIREMENTS(EPIC)	SUB REQUIREMENT(STORY/SUBTASK)
FR-1	USER REGISTRATION	1.Registration through Gmail 2.Registration through Mobile Number 3.Registration through Face-book
FR-2	USER CONFIRMATION	1.Confirmation via Email 2.Confirmation via OTP
FR-3	USER DETAILS	PERSONAL DETAILS FOOD DETAILS <table><tr><td>Age</td><td>Food</td></tr><tr><td>Height</td><td>Recipe</td></tr><tr><td>Weight</td><td>Added ingredients</td></tr><tr><td>Diseases if any</td><td>Age</td></tr><tr><td>Conditions is any</td><td></td></tr></table>
FR-4	USER REQUIREMENTS	1.The user simply inputs your recipe ingredients and amounts. The software will instantly produce an accurate readout of your dish in terms of nutritional analysis in a readable format that consumers are familiar with. 2.With already given details the system can alert the consumer if any content of their allergies ,it can alert the consumer

4.2 Non-Functional requirements

Following are the functional requirements for the proposed solution.

| FR.NO	NON-FUNCTIONAL REQUIREMENTS	DESCIPTION
NFR-1	USABILITY	1.No training is required to access the Nutrition Analyzer. 2.The results should be loaded within 30 seconds. 3.It should be user friendly and comfortable. 4.It should be simple and easy to use. 5.The results should be self explanatory so that it can be understood by common people.
NFR-2	SECURITY	AI powered nutrition analyzer for fitness should contain more security in which our data 2.which entered or maintained should be more security. 3.With the help of the username and password it provides more security in which it can access more securable and the data are private. 4.It should be social-economic which should access to sufficient and safe to use.
NFR-3	RELIABILITY	1.It is Important that the AI powered nutrition analyzer for fitness provides should Must reliable. 2.How a person can find it is reliable? It is easy to find that is he/she can compare the nutrition based food with other nutrition related application so, it can easily rectify whether it is reliable or not. 3.But it take too much time, to avoid this a reliable application should made in which it itself produces whether we can get correct solution or not. So, it is necessary that the AI powered nutrition analyzer for fitness should have proper data and information in which we can get a correct information about it and also get a proper guidance about it. 4.With the proper guideness and proper information in which we can get a nutrition properly and we can have get a proper fitness plan.

		5.It should also provides the information on nutrition and health which it should prevent from health information on diseases, health risks and prevention guidelines. It should also provides an extension a research based online learning network with several resource areas, so it provides more reliability in that area. For more reliable it can also contains the calorie information, balanced diet plans, what type food can consumed at what time etc..... So, by this way it can reliable.
NFR-4	PERFORMANCE	1.It should provide more number of users to consume at any time and at any place. 2.It should provide Reliability, Scalability, Security and Usability. 3.It should contain minimum data while over-paging the websites or application and it is necessary that it should not exceed more than 20mb. 4.While consuming the page it should provide the response as much as possible without any delay or time traffic. 5.The connection should e properly maintained so that it can use while travelling or in remote places.
NFR-5	AVAILABILITY	1.Easy to access Data. 2.Avoids Data redundancy and inconsistency. 3.Fast and Efficient. 4.User Friendly.
NFR-6	SCALABILITY	1.The architecture for AI powered Nutrition Analyzer for fitness provides the clear procedure daily consumption of food and helps the user to maintain a healthy diet. 2.According to their tracking system implemented in architecture provide the proper mechanism to the every individual of their nutrients intake which can be increased or decreased.The premium amount for analyzer is very much optimum.

5. PROJECT DESIGN

5.1 Data Flow Diagrams

5.2 Solution & Technical Architecture
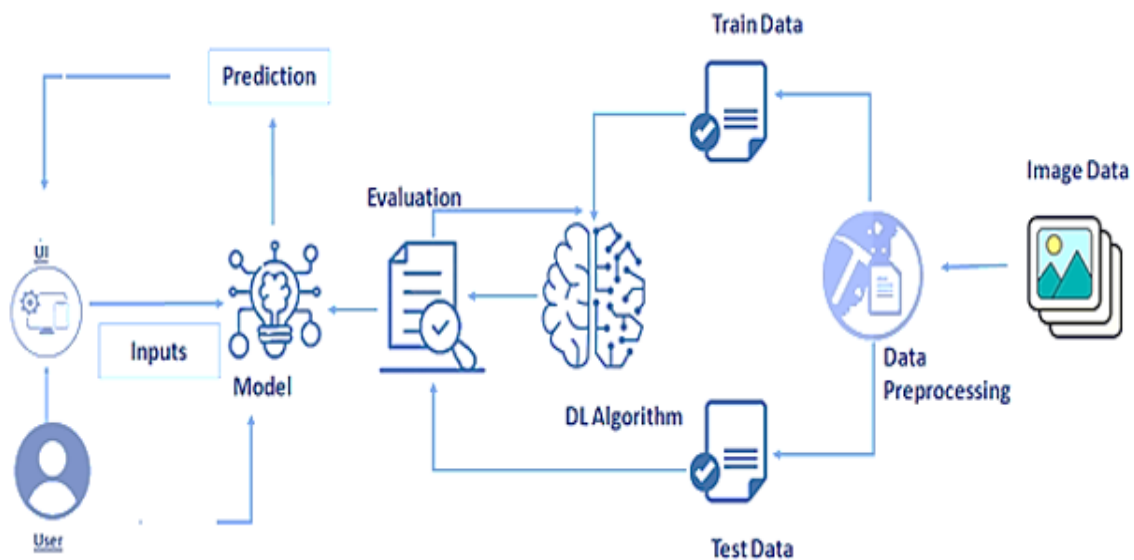
5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
	Login	USN-2	As a user, I can log into the application by entering email & password	I can access my account / dashboard	High	Sprint-1
	Dashboard		As a user, I can access all option in this page.	I can access all option in this page.		
	Search	USN-3	As a user, I can search the nutrition in the fruit by capture the fruit.	I can search details		
	Log out	USN-4	As a user, I can out.	I can log out.	High	Sprint-1
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
	Login	USN-2	As a user, I can log into the application by entering email & password		High	Sprint-1

	Dashboard		As a user, I can access all option in this page.	I can access all option in this page.		
	Search	USN-3	As a user, I can search the nutrition in the fruit by capture the fruit.	I can search details		
	Log out	USN-4	As a user, I can out.	I can log out.	High	Sprint-1

# 6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

The delivery plan of project deliverables is a strategic element for every Project Manager. The goal of every project is, in fact, to produce a result that serves a specific purpose. With the word "purpose ", we can mean the most disparate goals: a software program, a chair, a building, a translation, etc.... In project sprint delivery, planning is one of the processes of completing the project and show casing the time line of the project planning. This delivery plan can help to understand the process and work flow of the project working by the team mates. Every single modules are assigned to the team mates to show case their work and contribution of developing the project.

6.2 Sprint Delivery Schedule

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20(In process)	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20(In-process)	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20(In-process)	19 Nov 2022

6.3 Reports from JIRA
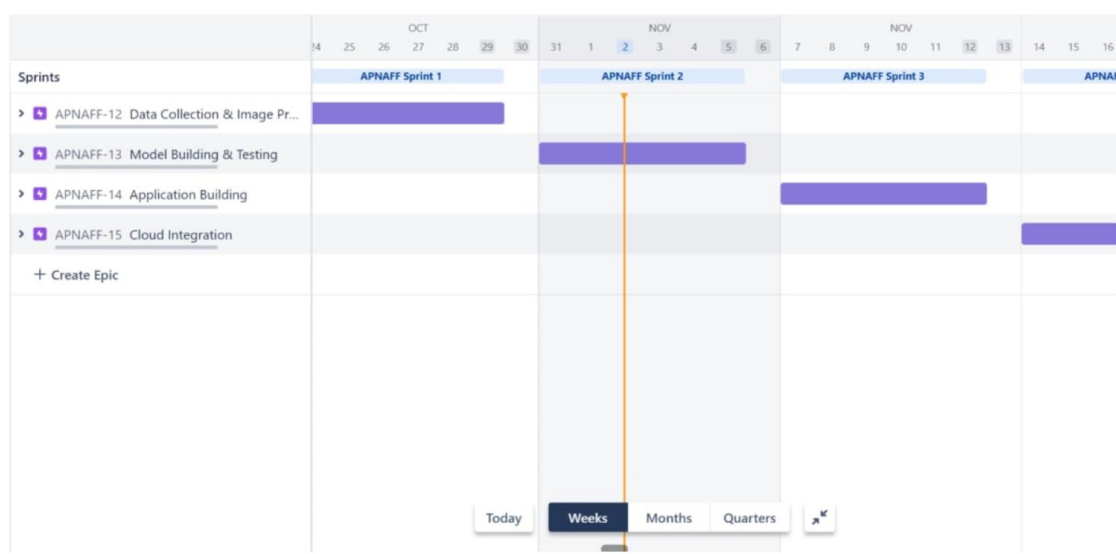
<h1 style="text-align: center;">7. CODING & SOLUTIONING</h1>

<h2 style="text-align: center;">(Explain the features added in the project along with code)</h2>

7.1 Feature 1

AI-powered Nutrition Analyzer for Fitness Enthusiasts

The main aim of the project is to building a model which is used for classifying the fruit depends on the different characteristics like colour, shape, texture etc. Here the user can capture the images of different fruits and then the image will be sent the trained model. The model analyses the image and detect the nutrition based on the fruits like (Sugar, Fibre, Protein, Calories, etc.).

Languages: Python

Tools/IDE: Google collaboratory , Spyder

Libraries: Recommendation

app.py

```python
# -*- coding: utf-8 -*-
"""
Created on Sun Nov  6 11:55:47 2022

@author: HP
"""
from flask import Flask,render_template,request
# Flask-It is our framework which we are going to use to run/serve our
application.
#request-for accessing file which was uploaded by the user on our application.
import os
import numpy as np #used for numerical analysis
from tensorflow.keras.models import load_model#to load our trained model
from tensorflow.keras.preprocessing import image
import requests

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")
```

```python
@ app.route('/predict' ,methods=['GET','POST']) # route to show the
predictions in a Web UI
def lanuch():
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=['APPLE','BANANA','ORANGE','PINEAPPLE','WATERMELON']

result=str(index[pred[0]])
print(result)
x=result
result=nutrition(result)
print(result)

return render_template("0.html",showcase=(result),showcase1=(x))
def nutrition(index):

import requests

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

querystring = {"query":index}

headers = {
"X-RapidAPI-Key": "226fdb7ca6mshc43f1bfd5e9705dp164933jsn6809eaf3d5e3",
"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)
```

7.2 Feature 2

home.html

```
<!DOCTYPE html>
<head>
<meta charset="utf-8">
<title>Nutrition Image Analysis</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" type="text/css" href="{{ url_for('static',
filename='css/main.css') }}">
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
</head>
<style>p{margin: 0px;padding:25px;background-color:#a4d356;width:
630px;opacity:0.8;color:#000000;font-family:Georgia, 'Times New Roman', Times,
serif;font-style:initial;border-radius:20px;font-size:17px;}
a{}a:hover{background-color:#00ffe5;border-radius: 10px;padding: 5px 15px; }
</style>
<body >
  <nav class="navbar navbar-light" style="background-color: #48a9fda5;">
    <span class="navbar-brand mb-0 h1" style="float: right; padding-left:
80px;">Nutrition Image Analysis</span>
  <div style="padding-right:100px ;">
    <a class="navbar-brand" style="float: right; " href="{{
url_for('image1')}}">Classify</a>
    <a class="navbar-brand" style="float: right; " href="{{
url_for('home')}}">Home</a>
  </div>
</nav>
<div class="home1">
<center>
  <div>
  <br><br><br><br><br>
  <p>Food is essential for human life and has been the concern of many
healthcare conventions. Nowadays new dietary assessment and nutrition analysis
tools enable more opportunities to help people understand their daily eating
habits, exploring nutrition patterns and maintain a healthy diet.Nutritional
analysis is the process of determining the nutritional content of food. It is
a vital part of analytical chemistry that provides information about the
chemical composition, processing, quality control and contamination of food.
It ensures compliance with trade and food laws.</p>
</div></center>
</div>
</div>
</body></html>
```
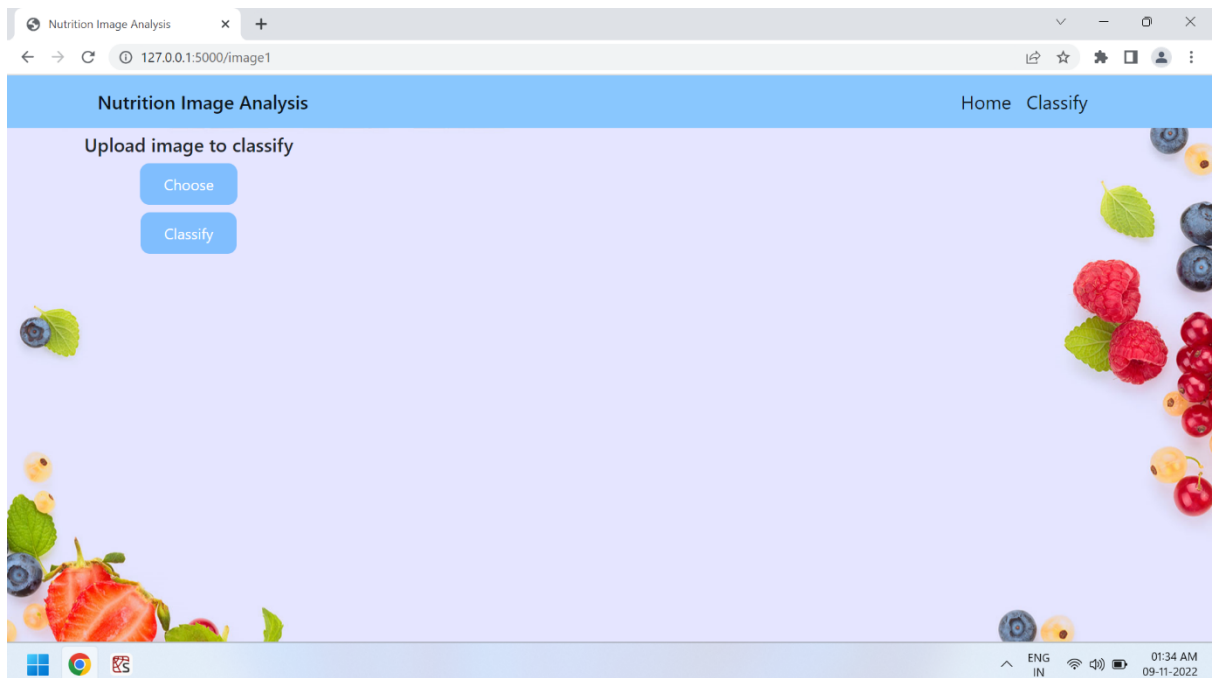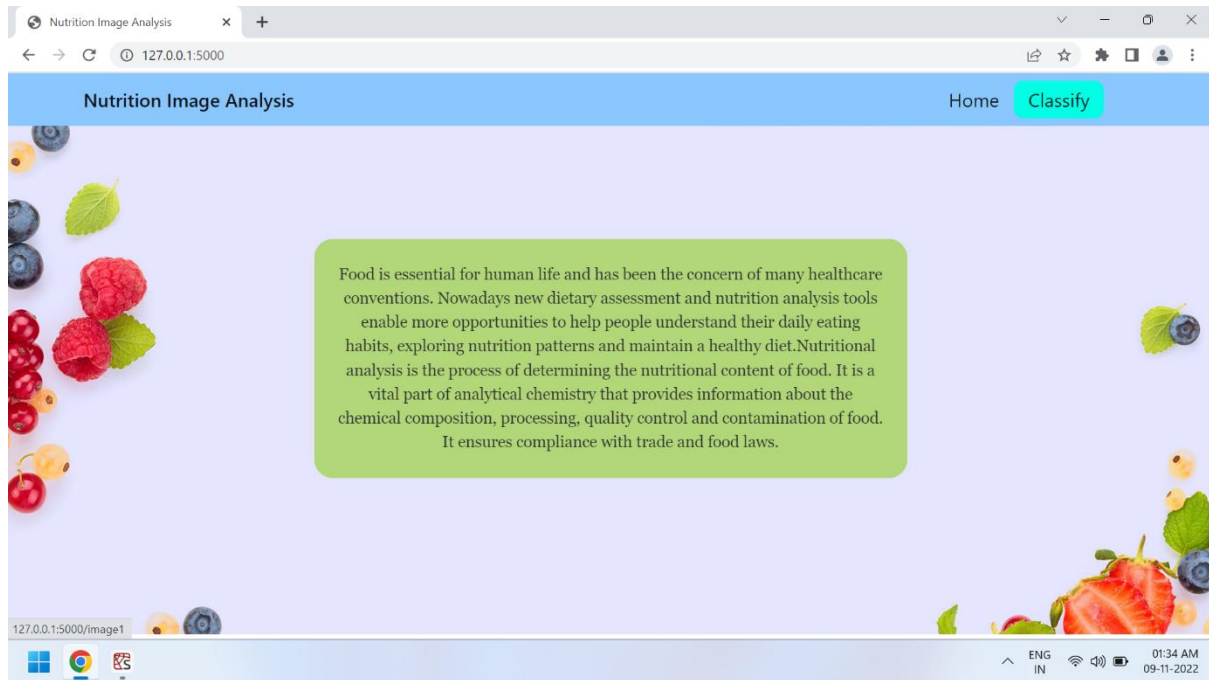
9. RESULTS

9.1 Performance Metrics

Output link : https://drive.google.com/file/d/15QdTQsj0nQVpwWzY7-yMR3KrwgdkABZ9/view?usp=share_link

Application Screenshots

Nutrition Image Analysis   Home   Classify

Upload image to classify

Choose

Food Classified is:

BANANA

[{'sugar_g': 12.3, 'fiber_g': 2.6, 'serving_size_g': 100.0, 'sodium_mg': 1, 'name': 'banana', 'potassium_mg': 22, 'fat_saturated_g': 0.1, 'fat_total_g': 0.3, 'calories': 89.4, 'cholesterol_mg': 0, 'protein_g': 1.1, 'carbohydrates_total_g': 23.2}]
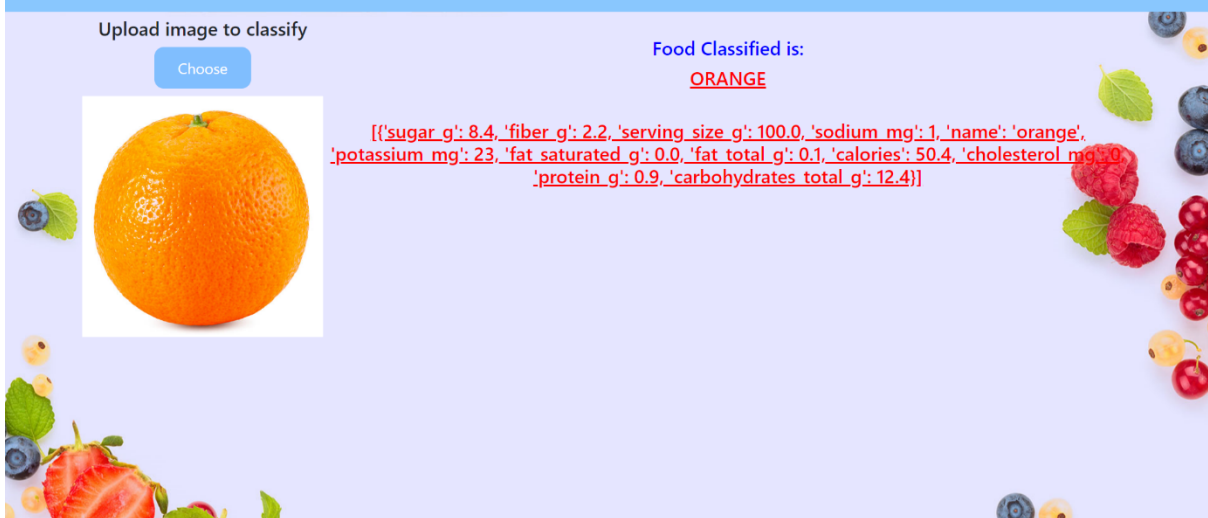

Nutrition Image Analysis   Home   Classify

Upload image to classify

Choose

Food Classified is:

ORANGE

[{'sugar_g': 8.4, 'fiber_g': 2.2, 'serving_size_g': 100.0, 'sodium_mg': 1, 'name': 'orange', 'potassium_mg': 23, 'fat_saturated_g': 0.0, 'fat_total_g': 0.1, 'calories': 50.4, 'cholesterol_mg': 0, 'protein_g': 0.9, 'carbohydrates_total_g': 12.4}]

Nutrition Image Analysis   Home   Classify

Upload image to classify

Choose

Food Classified is:

PINEAPPLE

[{'sugar_g': 9.9, 'fiber_g': 1.4, 'serving_size_g': 100.0, 'sodium_mg': 0, 'name': 'pineapple', 'potassium_mg': 8, 'fat_saturated_g': 0.0, 'fat_total_g': 0.1, 'calories': 50.8, 'cholesterol_mg': 0, 'protein_g': 0.5, 'carbohydrates_total_g': 13.0}]

10. ADVANTAGES & DISADVANTAGES

Advantages:

1.Food and food habits are ever-changing and evolving. People and professionals need to quickly adapt to new food products, diets, and changing preferences. The best way to instantly adapt to these changes is to have software that changes and adapts with you.

2.Using automated nutrition analysis software will allow you to free up more time to innovate or grow your business. If you find a nutrition analysis software that has all the features you need, you can create much more time to focus on improving your business.

3. Features such as a quick preview of nutrients while adding foods to diets, menus, and recipes give you the ability to save time when new recipes and food products are introduced.

4.Having quick and easy software to help them plan their meals will save you tons of time.

Disadvantages:

1.This methodology is still limited by its dependency on time-consuming and error-prone manual video annotations,with many studies resorting to the use of multiple human annotators.

2.Often suffers from reliability issues.

3.It is extremely expensive due to semantics analysis model andnutritional analysis model.

4.In order to make recommendations, the system needs tocollect nutritional needs from users. Most of the information is only provided through continuous interactions with users. However, in reality, recording nutritional intake from users cannot avoid faults because users usually forget or give wrong information about the foods they have consumed

11. CONCLUSION

In this paper, we aimed to develop a practical deep learning based on Ai-powered nutrition analyser for fitness enthusiasts. Despite the fact that AI technologies are dynamically developing, the problem in nutrients research is not currently obtaining more and more advanced algorithms, but the application of those that have already been developed and are standardly used in other fields of knowledge, and even in other areas of biomedicine. An important

challenge for nutrients research is also their integration with research on the use of medical robotics. Perhaps the development and application of AI in nutrients research requires modification of both mentality and professional competences, as is already postulated in relation to the food industry.

12. FUTURE SCOPE

The future scope of this project is very brod. Few of them are:

1.The model could be trained using vast database in order to increase the accuracy of results.

2.The Backend framework of the web application can be improved so that the uploaded images can be handled appropriately.

3.In addition to the nutrition analysis, the application can also be designed to provide recipes that can be prepared using the nutrient-rich foods

4.A database can also be implemented for the system so that users can save their data and relook into it later.

5.The Web application can be further developed and launched as an Android App so that anyone anywhere with or without internet connection can access it and get benefited from its use cases.

13. APPENDIX

```
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predictions in a Web UI
def lanuch():
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=['APPLE','BANANA','ORANGE','PINEAPPLE','WATERMELON']

result=str(index[pred[0]])
print(result)
x=result
result=nutrition(result)
print(result)

return render_template("0.html",showcase=(result),showcase1=(x))
def nutrition(index):
import requests

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

querystring = {"query":index}

headers = {
"X-RapidAPI-Key": "226fdb7ca6mshc43f1bfd5e9705dp164933jsn6809eaf3d5e3",
"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)
```

GitHub Link : https://github.com/IBM-EPBL/IBM-Project-39360-1660408426

Project Demo Link :
https://drive.google.com/file/d/15QdTQsj0nQVpwWzY7-yMR3KrwgdkABZ9/view?usp=share_link