## PROJECT REPORT

DATE	18 November 2022
TEAM ID	PNT2022TMID25956
PROJECT NAME	AI-poweíed Nutíition Analyzeí foí Fitness Enthusiasts

#### 1.INTRODUCTION:

Lack of exercise plus poor eating habits remain significant causes for benign ailments such as heart disorder, insulin resistance, and fatness. These sorts of problems are responsible for seventy percent global mortality and impose a significant monetary load. To decrease such losses, gainful and workable standards of living are sorely required. Comprehensive way of living Programmes for comprehensive way of living have developed gradually in perfect sync with new virtual and advanced tools. Ai technology and related analytical modelling are now the major breakthrough in widening the terrain of medical services and initiatives in current history. Individuals in present era consume unhealthy foods and suffer from serious illnesses of one's incautious conduct. Such ailments seem to be treatable; however the patient's fitness declines. As a result, everyone should follow a healthy diet for their own good. This practise perfectly fulfils the criteria. The proposed methodology presents the client with a necessary nutrition plan by taking into account numerous parameters. The method computes the patient's Body fat percentage based on his or her age and build. It gives a person an appropriate nutrition program based on age, sex, tallness, muscle mass, and illness. Likewise, this strategy generates crash diet based upon the data provided by the client. It includes an authentication server in which the subscriber must sign up before using the plug-in. A risk of service interruption will be a drawback as the system entirely depends on the internet connectivity. The framework provides better accuracy because it recognises the patient's information and processes it based upon certain formulations by now defined to the implementation, mostly on core principle of which a proposed action is created and confirms with the client if the nutrition scheme is acceptable. In case the food chart is not acceptable by the client then framework will propose a different regimen.

## 1.1Project 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

The goal of fitness tracking apps is to collect data about the user's activities. These include the number of steps taken, stairs climbed, distance ran, and other fitness metrics. To make it easy for users to monitor progress, create a fitness tracking app that will also provide calendars and charts

#### 2. LITERATURE SURVE

#### 2.1 Existing Problem

Sharing and collaboration are commonplace in today's social media-driven world. But the lack of regulation means it's all too easy for people to share information on fitness, health – and pretty much anything – without any factual backing. Combine this with standard challenges like <u>keeping clients motivated</u>, and there are problems in the fitness industry that can affect your business.

### 5 Main problems are:

Misinformation, One-Way Approach, Information Overload, Elitist Attitudes, Lack of Member Support

## 2.2 References

- <a href="https://www.healthifvme.com/in/">https://www.healthifvme.com/in/</a>
- Don't Lose Your Mind, Lose Your Weight

The country's highest-selling diet book, has revolutionized the way Indians think about food and their eating habits

Author: Diwekar Rujuta

• R.S. Pressman, Software Engineering: A Practitioner's Approach, McGraw-Hill, Ed 7,2010

• P. Jalote, An Integrated Approach to Software Engineering, Narosa Publishing House, Ed 3, 2011

• <a href="https://www.engpaper.com/cse/artificial-intelligence-dietician.html">https://www.engpaper.com/cse/artificial-intelligence-dietician.html</a>

https://www.smartics.eu/confluence/display/PDAC1/How+to+document+a +Software+Development+Project

• <a href="https://en.wikipedia.org/wiki/Healthy\_diet#:~:text=Eat%20healthy%20protein%3A%20good%20choices,because%20sweet%20drinks%20cause%20cravings">https://en.wikipedia.org/wiki/Healthy\_diet#:~:text=Eat%20healthy%20protein%3A%20good%20choices,because%20sweet%20drinks%20cause%20cravings</a>.

#### 2.3 Problem Statement Definition

#### • Misinformation:

a lot of the inadequate information that's spread over the internet and social media is evident to fitness professionals and personal trainers, the average person doesn't have the same level of knowledge. Often, this means that they're happy to jump on the latest fitness bandwagon – whatever it may be.

### • One-Way Approach:

Social media is an excellent resource for finding like-minded people with similar interests. This is brilliant because no matter what your interests, you can find a community of people who support you and share your passion.

#### • Information Overload:

You've seen the clients who keep changing their routine every few weeks. And you know the ones that aren't doing it to push through a plateau.

#### • Lack of Member Support:

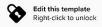
The reason they leave is that they're unfulfilled. The idea hasn't lived up to expectations. Perhaps they lost motivation or lost sight of their goals. Maybe they were putting in the effort but didn't see the results they wanted.

## 3. Ideation & Proposed Solution

#### 3.1 Empathy Map Canvas

- Think and feel
- Hear
- See
- Say and Do

Pain and Gain

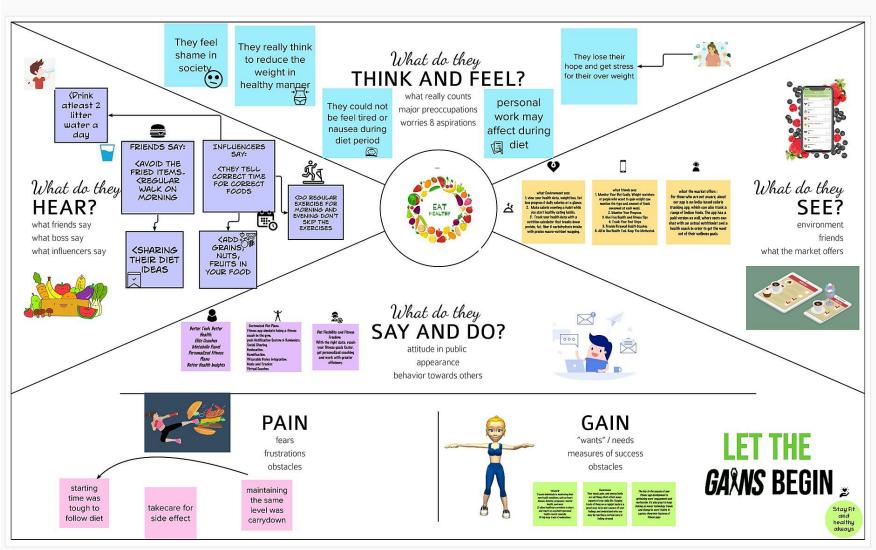


# **Empathy Map Canvas**

Gain insight and understanding on solving customer problems.



Build empathy and keep your focus on the user by putting yourself in their shoes.







team leader : karuppasamy
team member : saran
justin
madesh

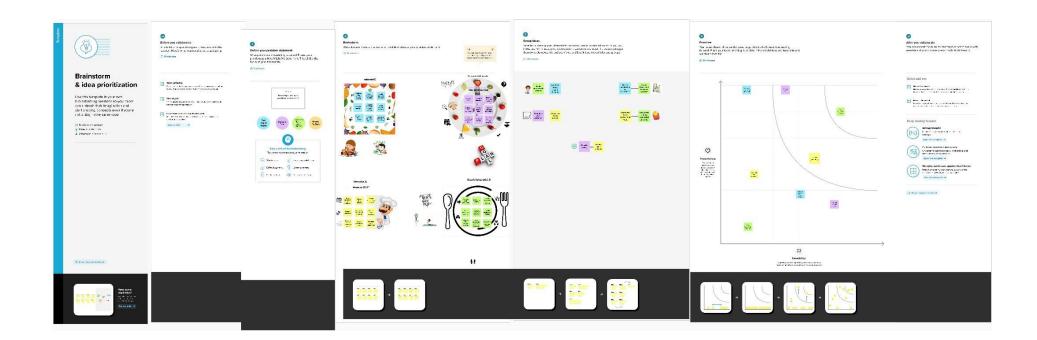


## 3.2 Ideation and Brainstorming

In this phase we discussed about

- Where to Start
- Time Management
- Friends and Family Support

**Bad Health Habits** 



## 3.3 Proposed Solution

## • Novelty/Uniqueness

Giving a individual Food/health Schedule According to their body conditions

## • Social impact/Customer Satisfaction

Low expenditure ,easy to follow without affecting their personal time.

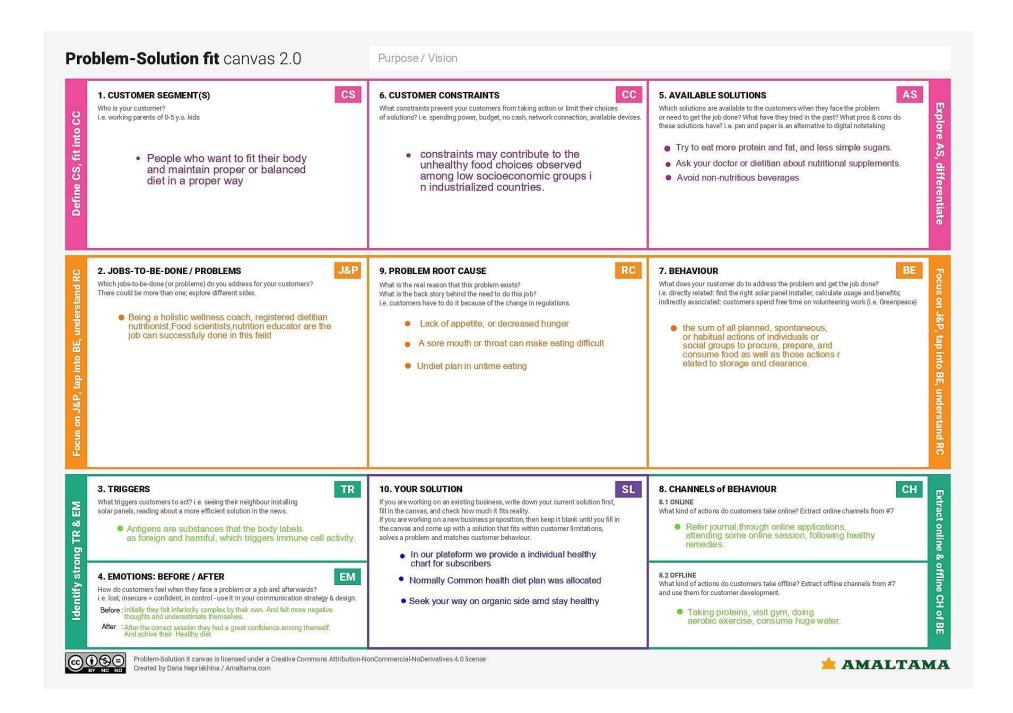
## • Business model

Free platform for all users. For specific guidance users want to pay

## • Scalability of the Solution

Notifying motivational quote's to lead a healthy routine

#### 3.4 Problem Solution Fit



## 4 Requirement Analysis

#### **4.1 Functional Requirement**

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Give permission to enter dashboard	Having your details Healthy tips Common food review
FR-4	Diet plans	Mediterranean diet Low- carbohydrate diet High protein diet Diabetic diet

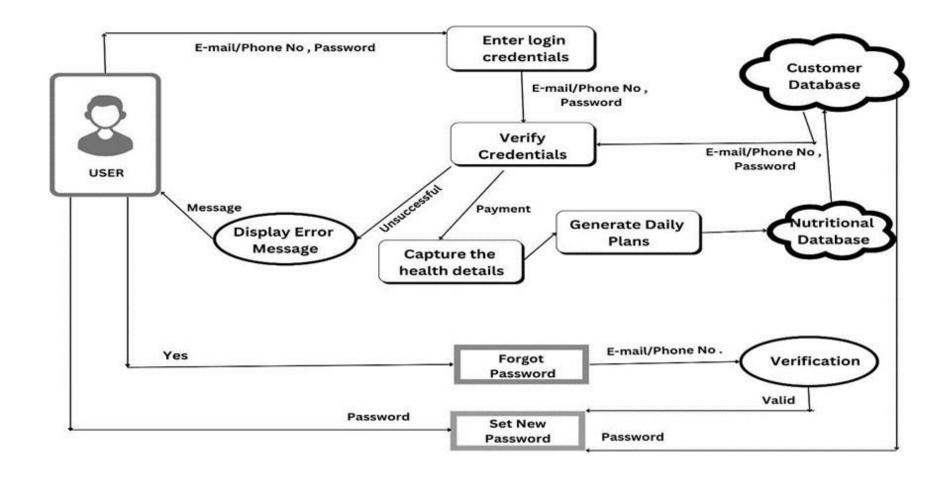
FR-5	Features of subscription	Individual guidance Individual food schedule Chat with mentor
FR-6	Notification	Notify a healthy quotes daily Notify to drink water Notify right time for right food

## **4.2 Non Functional Requirement**

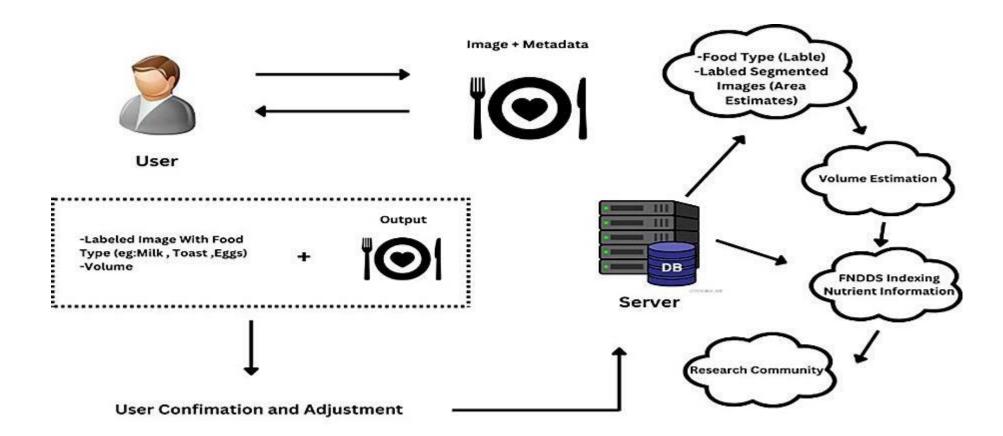
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	As usability is a prerequisite for success of health and wellness through mobile app make use by clients.
NFR-2	Security	By using login page ,verify through e- mail and phone number by sending OTP
NFR-3	Reliability	Awareness and emphasis on the importance of sustaining personal health care and manag their health pervasively.
NFR-4	Performance	Information was saved clearly and having a proper icons.
NFR-5	Availability	Having proper internet this application will work any time.
NFR-6	Scalability	If the client wants a separate chart or modify the food chart they will proceed to deliver the opinion.

## 5. Project Design

## **5.1 Data Flow Diagrams**



#### **5.2 Solution and 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
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
Customer (Web user)	Login	USN-1	As a user, I can log into the website by entering email & password	Verify the number	High	Sprint-1

## 6. Project Planning and Scheduling:

## **6.1** . Sprint Planning and Estimation:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	Download Food Nutrition Dataset	4	High	karuppa samy
Sprint-1	Data Preprocessing	USN-2	Importing The Dataset into Workspace	1	Low	Saran madesh
Sprint-1		USN-3	Handling Missing Data	3	Medium	Saran justin
Sprint-1		USN-4	Feature Scaling	3	Low	madesh
Sprint-1		USN-5	Data Visualization	4	High	karuppa samy
Sprint-1		USN-6	Spitting the Data into the Train and Test	4	Medium	Saran justin
Sprint-1		USN-7	Creating A Dataset with Sliding Windows	4	Medium	karuppa samy
Sprint-2	Model Building	USN-8	Importing The Model Building Libraries	1	Medium	saran

Sprint-2		USN-9	Initializing The Model	3	High	justin
Sprint-2		USN-10	Adding LSTM Layers	2	Medium	karuppa samy
Sprint-2		USN-11	Adding Output Layers	3	High	Saran justin
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-12	Configure The Learning Process	2	Low	karuppa samy
Sprint-2		USN-13	Train The Model	2	Medium	Saran madesh
Sprint-2		USN-14	Model Evaluation	1	Medium	madesh
Sprint-2		USN-15	Save The Model	2	Medium	karuppa samy
Sprint-2		USN-16	Test The Model	3	High	justin
Sprint-3	Application Building	USN-17	Create An HTML File	4	Medium	justin, Saran madesh
Sprint-3		USN-18	Build Python Code	4	High	karuppa samy, justin
Sprint-3		USN-19	Creating our Flask application and loading our model by using load_model method	4	Medium	madesh justin saran
Sprint-3		USN-20	Routing to HTML page	4	High	madesh
Sprint-3		USN-21	Run the application	2	Medium	karuppa samy
Sprint-4	Train The Model On IBM	USN-21	Register For IBM Cloud	4	Medium	Saran justin
Sprint-4		USN-22	Train The ML Model On IBM	8	High	karuppa samy
Sprint-4		USN-23	Integrate Flask with Scoring End Point	8	High	justin

## 6.2. Spíint Deliveíy Schedule:

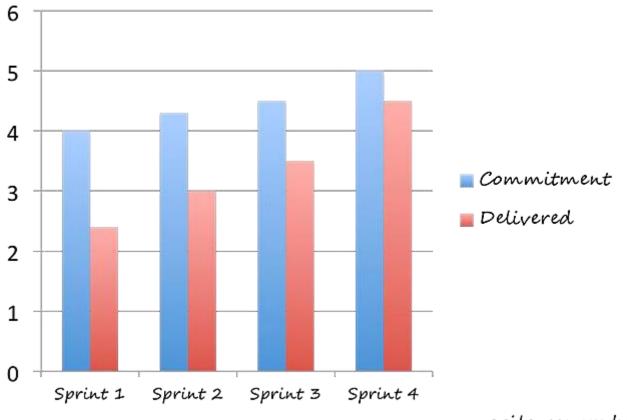
Project Tracker, Velocity & Burndown Chart: (4 Marks)

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	2 Nov 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	03 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	10 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	17 Nov 2022

## **Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

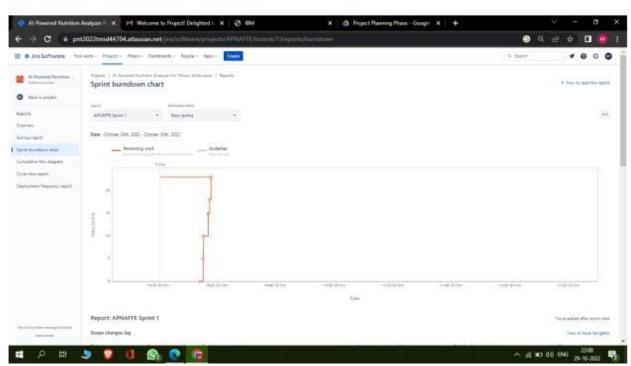
## VELOCITY CHART



www.agile-scrum.be

## 6.3 Píojects Ïíom JIRA

## 6.3 REPORTS FROM JIRA

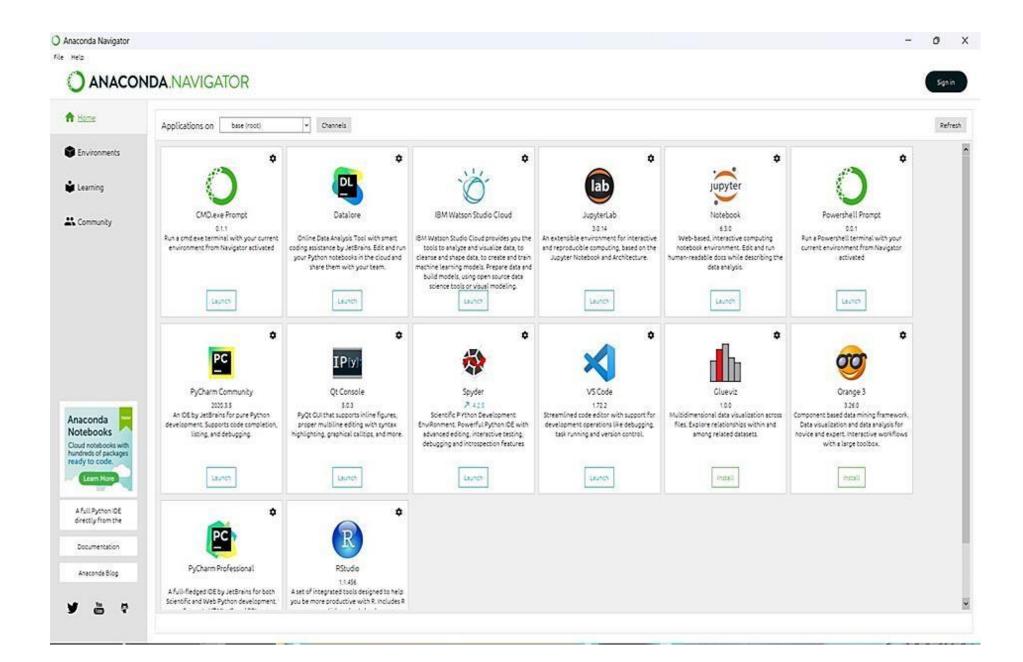


## 7. Coding and solutioning

## 7.1 Ïeatuíe 1

## If you are using anaconda navigator, follow the below steps to download the required packages:

- 1. Open anaconda píompt as administíatoí.
- 2. l'ype "pip install tensoíflow==1.14.0" and click enteí.
- 3. l'ype "pip install keías=2.2.4" and click enteí.
- 4. l'ype "pip install opency-python" and click enteí.
- l'ype "pip install imutils" and click enteí
- 5. l'ype "pip install flask" and click ente i 9080051046



```
V SUBAVANI.HTML
                                                                                                                   1 <!DOCTYPE html>
                # thanks.css

<pre
                                                                                                                                       <title>HOME</title>
                                                                                                                                                                                                                                                                                                                                                                                                                                                              B....
                                                                                                                                    <\title>HCME</title>
k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
<link href="https://cdn.bootcss.com/bootstrap/4.0.0/css/bootstrap.min.css" rel="stylesheet">
<script src="https://cdn.bootcss.com/popper.js/1.12.9/umd/popper.min.js"></script>
<script src="https://cdn.bootcss.com/jquery/3.3.1/jquery.min.js"></script>
<script src="https://cdn.bootcss.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
<link href="{{ url_for('static', filename='css/main.css')}}" rel="stylesheet">
tyle>
 box-shadow: 0 4px 8px 0 □rgba(0, 0, 0, 0.2);
                                                                                                                                 max-width: 300px;
                                                                                                                                 margin: auto;
                                                                                                                                 text-align: center;
font-family: arial;
                                                                                                                             .title {
  color: ■grey;
  font-size: 18px;
                                                                                                                                outline: 0;
display: inline-block;
padding: 8px;
color: ■white;
background-color: □#000;
                                                                                                                                                                                                                                                                                                                                              1 Do you mind taking a quick feedback survey?
 (8)
                                                                                                                                  text-align: center;
> OUTLINE
                                                                                                                                                                                                                                                                                                                                                                                  Take Survey Remind Me later Don't Show Again
                                                                                                                                 cursor: pointer;
width: 100%;
```

```
Data Collection

Download the dataset here

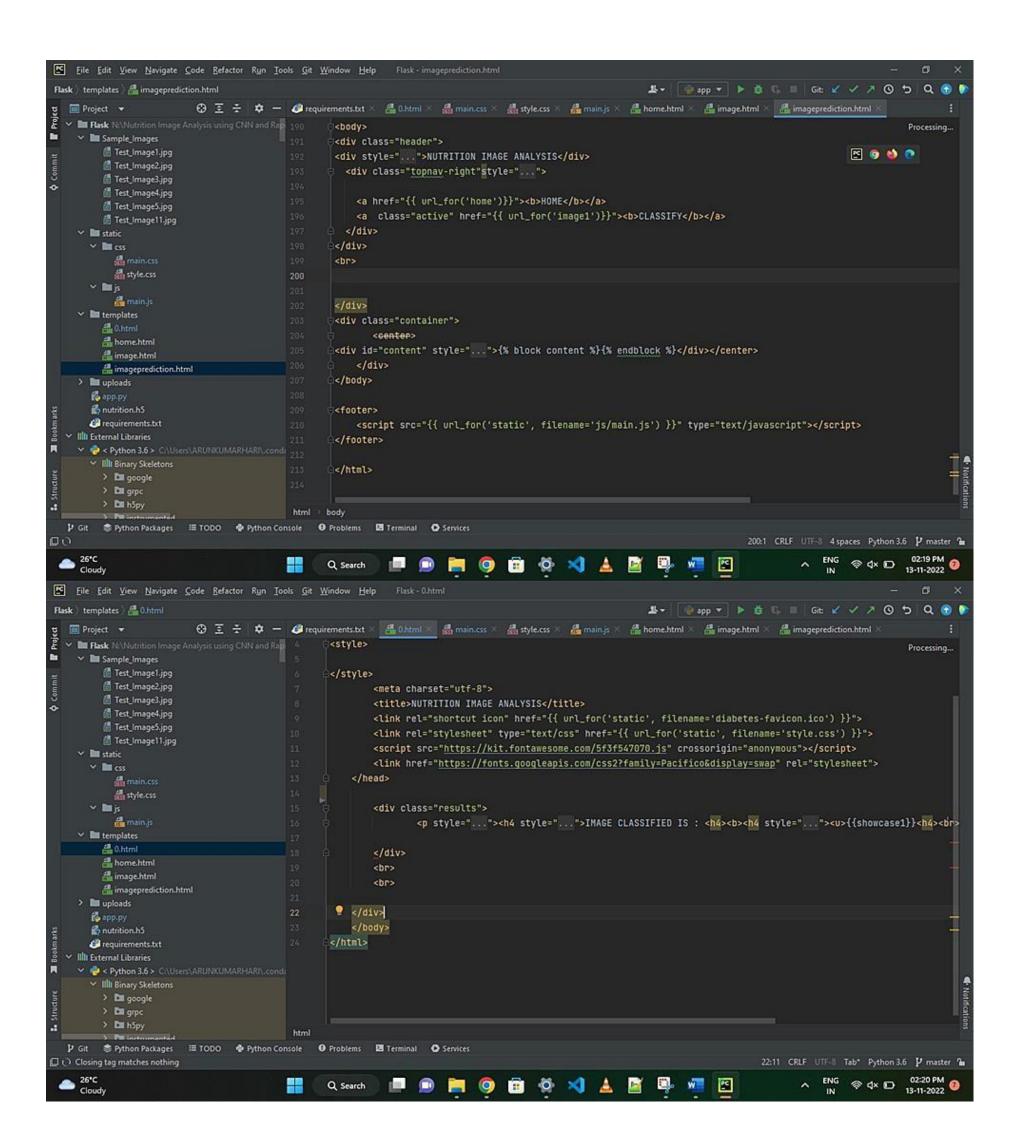
[ ] from google.colab import drive drive.mount('/content/drive')

Mounted at /content/drive

[ ] cd/content/drive/MyDrive/Colab Notebooks
/content/drive/MyDrive/Colab Notebooks

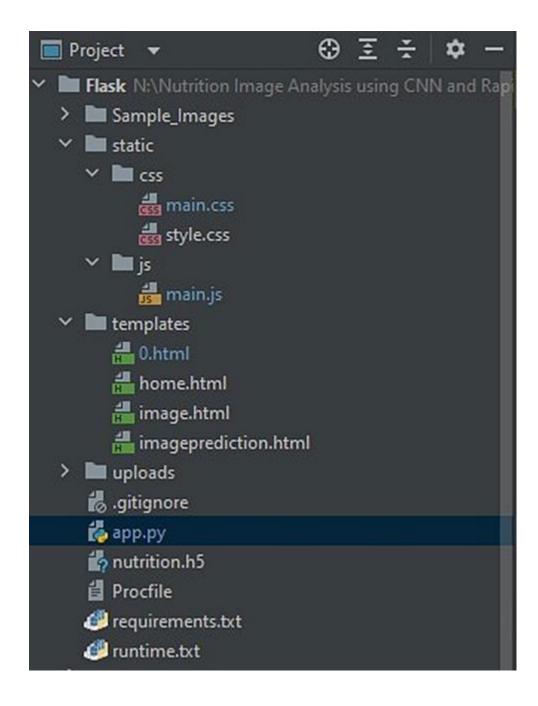
[ ] # Unzipping the dataset lunzip 'Dataset.zip'
```

```
3. Adding CNN Layers
      classifier = Sequential()
      classifier.add(Conv2D(32, (3, 3), input_shape=(64, 64, 3), activation='relu'))
      classifier.add(MaxPooling2D(pool_size=(2, 2)))
      classifier.add(Conv2D(32, (3, 3), activation='relu'))
      classifier.add(MaxPooling2D(pool_size=(2, 2)))
      classifier.add(Flatten())
  4. Adding Dense Layers
      classifier.add(Dense(units=128, activation='relu'))
      classifier.add(Dense(units=5, activation='softmax'))
O
      classifier.summary()
    Model: "sequential_1"
     Layer (type)
                                 Output Shape
                                                            Param #
     conv2d (Conv2D)
                                  (None, 62, 62, 32)
                                                            896
```



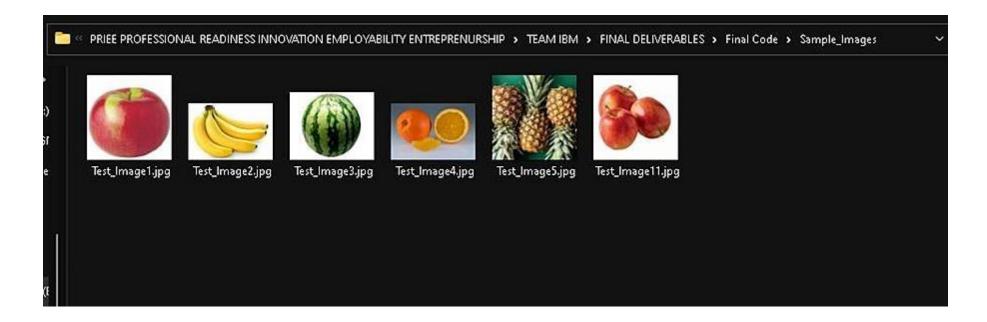
## 8. Testing

#### 8.1 Test Cases





## **8.2User Acceptance Testing**



We are performing White Box Testing for select the package module.

## Pseudocode for select the package module is-

- 1. select\_the\_package() píoceduíe begins
- 2. READ the package name, featules, offels and dulation from the package database
- 3. DISPLAY the package name, features, offers and duration
- 4. DO
- 5. GEl' the package name, featuies, offeis and duiation
- 6. **S1**ORE the package selected to the custome i's database
- 7. PROCEED to payment scíeen //anotheí module
- 8. WHILE select package is NULL
- 9. //End DO...WHILE

10.píoceduíe ends

## **FLOWGRAPH**

## CYCLOMATIC COMPLEXITY OF RESULTANT GRAPH

$$V(G) = Number of regions$$

= 2

$$V(G) = Edges-Nodes+2$$

= 8-8+2

=2

V(G) = Predicate nodes+1

= 1+1

= 2

## LINEARLY INDEPENDENT PATHS FOR FLOW GRAPHS

**Path 1:** 1-2-3-4-5-6-7-8-9-10

**Path 2:** 1-2-3-4-5-6-7-8-4-5-6-7-8-9-10

TEST ID	INPUT VALUES	ACTUAL OUTPUT	EXPECTED OUTPUT
1	Package is selected	To be observed after execution	Display the selected package
2	Package is not selected	To be observed after execution	Show the packages to select until one is selected

Test Cases Table

## 9. Peífoímance l'esting

```
File Edit View Navigate Code Refactor Run Tools Git Window Help Flask-app.py
                          😌 📱 🕏 🖚 — 💋 requirements.txt × 📇 0.html × 📇 main.css × 🚜 style.css × 🚜 main.js × 🐔 app.py × 📇 home.html × 📇 image.html >
                      ge Analysis using CNN and Rap 11 model=load_model('nutrition.h5')
   Flask NANutrit
                                                   print("Loaded model from disk")
         Test_Image1.jpg

☐ Test_Image2.jpg

         Loaded model from disk
          * Restarting with stat
          * Serving Flask app 'app' (lazy loading)
          * Environment: production
           WARNING: This is a development server. Do not use it in a production deployment.
          Use a production WSGI server instead.
          * Debug mode: on
          2022-11-13 14:47:13.521039: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll'; dlerror: cudar
          2022-11-13 14:47:13.523308: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore above cudart dlerror if you do not have a GPU set up on your machine
         Loaded model from disk
         2022-11-13 15:03:52.074467: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic library 'nvcuda.dll'; dlerror: nvcuda.dll
         2022-11-13 15:03:52.769818: W tensorflow/stream_executor/cuda/cuda_driver.cc:269] failed call to cuInit: UNKNOWN ERROR (303)
         2022-11-13 15:03:54.596275: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:169] retrieving CUDA diagnostic information for host: LAPTOP-E5IM4603
          2022-11-13 15:03:54.619299: I tensorflow/stream_executor/cuda/cuda_diagnostics.cc:176] hostname: LAPTOP-E5IM4603
         2022-11-13 15:03:57.062699: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library
          To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
          * Debugger is active!
           * Debugger PIN: 589-305-535
           * Running on <a href="http://127.0.0.1:5000/">http://127.0.0.1:5000/</a> (Press CTRL+C to quit)
  🏿 Git 🕨 Run ಿ Python Packages 🖽 TODO 🍨 Python Console 👂 Problems 💹 Terminal 🕒 Services
                                                                                                                                                    17:99 Python 3.6 P master %
                                                                                 🍥 📻 🌣 刘 🛕 📓 🖫 🖺
```

#### 10. Advantages

- Monitor Your Diet Easily. Weight watchers or people who want to gain weight can mention the type and amount of foods consumed at each meal.
- Monitor Your Progress.
- o Give Free Health and Fitness Tips. .
- o Track Your Foot Steps. ...
- o Provide Personal Health Coaches.
- o All In One Health Tool.
- o Keep You Motivated.

#### **Disadvantages**

- cost of using
- o Fitness Trackers Collect and Store Your Health Data.
- o Fitness Trackers Can Provide Inaccurate Results.
- Fitness Trackers May Lead to an Obsession With Numbers

## 11. Conclusion

Engaging in regular physical activity may produce improvements in an individual's physical health, cognitive performance, and psychological well-being. Physical benefits include, but are not limited to, reduced risk for diseases, and improvements in physical functioning, fitness, and overall quality of life.

l'he puípose of a fitness app is to píovide the useí with instituctions and examples of one oí moíe types ofexeícise, physical activity, nutíitional píogíams

## 12. Future Scope

- Offeis payment convenience in peisonal tiaining subsciiptions.
- Useful aíticles.
- Video instiuctions.
- Diet Plans.
- Individual píogíess tíacking.
- Live video fíom tíaining sessions

#### 13. Appendix

## **Souice Code:**

```
<!DOCT*YPE html>

<html>

<meta chaíset="UfT-8">
<meta chaíset="UfT-8">
<meta chaíset="UfT-8">
<meta name="viewpoít" content="width=device-width, initial-scale=1.0">
<meta http-equiv="X-UA-Compatible" content="ie=edge">
<tittle>HOME</title>
link íel="stylesheet" híef="https://cdnjs.cloudflaíe.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">
link híef="https://cdn.bootcss.com/bootstíap/4.0.0/css/bootstíap.min.css" iel="stylesheet">
<scfipt síc="https://cdn.bootcss.com/poppei.js/1.12.9/umd/poppei.min.js"></scfipt>
<scfipt síc="https://cdn.bootcss.com/jqueíy/3.3.1/jqueíy.min.js"></scfipt>
<scfipt síc="https://cdn.bootcss.com/joueíy/3.3.1/jqueíy.min.js"></scfipt>
<scfipt síc="https://cdn.bootcss.com/joueíy/3.3.1/jqueíy.min.js"></scfipt>
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<scfipt síc="https://cdn.bootcss.com/joueíy/3.3.1/jqueíy.min.js"></scfipt>
<scfipt síc="https://cdn.bootcss.com/joueíy/3.3.1/jqueíy.min.js"></scfipt></scfipt>
<scfipt síc="https://cdn.bootcss.com/joueíy/3.3.1/jqueíy.min.js"></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></scfipt></s
```

```
<style>
.caíd1 {
 box-shadow: 0 4px 8px 0 ígba(0, 0, 0, 0.2);
 max-width: 300px;
 maígin: auto;
 text-align: centeí;
 font-family: aiial;
.title \{
 coloí: gíey; font-
 size: 18px;
button {
 boídeí: none;
 outline: 0;
 display: inline-block;
 padding: 8px;
 coloí: white;
 backgíound-coloí: 0#0;
 text-align: centeí; cuísoí:
 pointeí;
 width: 100%;
 font-size: 18px;
a {
 text-decoíation: none;
 font-size: 22px;
 coloí: black;
}
button:hoveí, a:hoveí {
 opacity: 0.7;
.navbaíScíoll.navbaíDaík {
```

```
backgiound-coloi: black;
}
body
{

backgiound-image: uil("https://www.livingpioofnyc.com/wp-content/themes/livingpioot/assets/img/heio-backgiound.jpg");

backgiound-size: covef;
}
.bai
{

maigin: 0px;

padding:30px;

backgiound-coloi:black;

opacity:0.6;

coloi:ied;

font-family: Roboto', sans-seiff;

font-style: italic;

boidei-iadius:30px;

}

font-size:10px;
}
```

```
.headef { position: felative;top:0;
    maígin:0px;
    z-index: 1;
    left: 0px;
    fight: 0px;
    position: fixed;
    backgíound-coloí: violet;
    coloí: white;
    box-shadow: 0px 8px 4px gíey;
    oveíflow: hidden;
    padding-left:10px;
    font-family: 'Josefin Sans'
```

width: 100%;

```
height:10%;
    .topnav {
 oveíflow: hidden;
 backgíound-coloí: #CAD98;
.topnav-íight a {
 float: left;
 coloí: black;
 text-align: centeí;
 padding: 14px 16px;
 text-decoíation: none;
 font-size: 18px;
.topnav-íight a:hoveí {
 backgíound-coloí: #DC00;
 coloí: black;
.topnav-íight a.active {
 backgiound-coloi: "#DC00;
 coloí: black;
.topnav-íight \{
 float: íight;
 padding-íight:100px;
.navbaíScíoll.navbaíDaík {
  backgíound-coloí: black;
```

```
position: fixed;
  top: 25%;
  íight: 0;
backgíound-coloí: blue;
  padding-left: 20;
  maígin: 50;
  padding: 10px;
 font-size: 10px;
 width: 40px;
 text-align: centeí;
 boídeí: 80px;
. section.t\'iad\text{-}section \ \{
 maígin-top: 10px;
section.section\ h2\ \{
  font-size: 20px;
  line-height: 46px;
  maígin-bottom: 20px;
  text-align: centeí;
}
h2 {
  coloí: #00;
}
h1, h2, h3, h4, h5, h6 {
  font-weight: 200;
```

.ct-socials {

```
letteí-spacing: -1px;
  font-size: 30px;
}
section.section p.sub-heading {
  font-size: 16px;
  font-family: "Gotham SSm\ A ", "Gotham SSm
  B";font-weight: 300;
  text-align: centeí;
  maígin-bottom: 40px;
section.t\'iad\text{-}section\ .t\'iad\text{-}sub\text{-}section\ \{
  padding-íight: 60px;
section p.detail-paíagíaph:fiíst-child {
  maígin-top: 0;
section p.detail-paíagíaph {
  font-family: 'Open Sans Condensed', sans-seíif;
  maígin-top: 40px;
  font-size: 18px;
  coloí: 900;
b, stíong \{
  font-weight: 700;
.bgimage \{
  height:100vh;
  backgíound: uíl('images/heíoImage.jpg');
  backgíound-size:coveí;
  position:íelative;
.heío_title {
  font-size: 4.5íem;
.heío_desc {
  font-size: 2íem;
```

```
}
.heío-text {
  text-align: centeí;
  position: absolute;
  top: 50%;
  left: 50%;
  tíansfoím: tíanslate(-50%, -50%);
  coloí: white;
. image About Page \ \{
  width: 100%;
#seívices .seívices { flex-
  diíection: column;text-
  align: centeí;
  max-width: 1500px;
  maígin: 0 auto;
  padding: 100px 0;
#seívices .seívice-top {
  max-width: 500px;
  maígin: 0 auto;
#seívices .seívice-bottom {
  display: flex;
  align-items: centeí;
  justify-content: centeí;
  flex-wíap: wíap;
  coloí: íed;
  maígin-top: 50px;
#seívices .seívice-item {
  flex-basis: 80%;
  display: flex;
  align-items: flex-staít;
```

```
justify-content: centeí;
  flex-diíection: column;
  coloí: íed;
  padding: 30px;
  boídeí-íadius: 10px;
  backgiound-image: uíl(./img/img-1.png);
  backgíound-size: coveí;
  maígin: 10px 5%;
  position: íelative;
  z-index: 1;
  oveíflow: hidden;
#seívices .seívice-item::afteí {
  content: ";
  position: absolute;
  left: 0;
  top: 0;
  height: 100%;
  width: 100%;
  backg\'{i}ound-image: linea\'{i}-g\'{i}adient(60deg,~293/23c~0\%,~485/63~100\%);
  opacity: 0.9;
  z-index: -1;
#seívices .seívice-bottom .icon {
  height: 80px;
  width: 80px;
  maígin-bottom: 20px;
#seívices .seívice-item h2 {
  font-size: 2íem;
  coloí: íed;
  maígin-bottom: 10px;
  text-tíansfoím: uppeícase;
  text-align: left;
\#seívices .seívice-item p {
  coloí: white;
  text-align: left;
```

```
\#seívices .seívice-item a {
  coloí: white;
  text-align: centeí;
.section-title { font-
  size: 4íem;
  font-weight: 300;
  coloí: black;
  maígin-bottom: 10px;
  text-tíansfoím: uppeícase;
  letteí-spacing: 0.2íem; text-
  align: centeí;
.section-title span \{
  coloí: cíimson;
.cta:hoveí {
  coloí: white;
  backgíound-coloí: cíimson;
.bíand h1 {
  font-size: 3íem;
  text-tíansfoím: uppeícase;
  coloí: white;
.bíand h1 span {
  coloí: cíimson;
.bíand a {
  font-size: 3íem;
  text-tíansfoím: uppeícase;
  coloí: 1ºomato;
```

```
.bíand a span {
  coloí: cíimson;
.bíand p{
  text-tíansfoím: uppeícase;
  coloí: 1ºomato;
    font-size: 4íem;
  font-weight: 300;
  maígin-bottom: 10px;
  text-tíansfoím: uppeícase;
  letteí-spacing: 0.2íem; text-
  align: centeí;
.bíand p span {
  coloí: cíimson;
#logo {
float: íight;
}
. face \{
  position: íelative;
  width: 250px;
  height: 250px;
  boídeí-íadius: 50%;
  backgiound: ##cd00;
  display: flex;
  justify-content: centeí;
  justify-items: centeí;
  align-items: centeí;
.face::befoíe
{
```

```
content: ";
  position: absolute;
  top: 150px;
  width: 150px;
  height: 70px;
  backgiound: #57700;
  boídeí-bottom-left-íadius: 70px;
  boídeí-bottom-íight-íadius: 70px;
  tíansition: 0.5s;
.face::hoveí::befoíe
{
  top: 210px;
  width: 150px;
  height: 20px;
  backgiound: #57700;
  boídeí-bottom-left-íadius: 0px;
  boídeí-bottom-íight-íadius: 0px;
.eyes
{
  position: íelative;
  top: -40px;
  display: flex;
.eyes .eye
  position: íelative;
  width: 80px;
  height: 80px;
  display: block;
  backgíound: fff;
  maígin: 0 15px;
  boídeí-íadius: 50%;
.eyes .eye::befoíe
{
  content: ";
  position: absolute;
```

```
top: 50%;
  left: 25px;
  tíansfoím: tíanslate(-50%,-50%);
  width: 40px;
  height: 40px;
  backgiound: 3#3;
  boídeí-íadius: 50%;
#headeí {
  position: fixed;
  z-index: 1000;
  left: 0;
  top: 0;
  width: 100vw;
  height: auto;
#headeí .headeí {
  min-height: 8vh;
  backgíound-coloí: ígba(31, 30, 30, 0.24);
  tíansition: 0.3s ease backgíound-coloí;
#headeí .nav-baí {
  display: flex;
  align-items: centeí;
  justify-content: space-between;
  width: 100%;
  height: 100%;
  max-width: 1300px;
  padding: 0 10px;
#headeí .nav-list ul {
  list-style: none;
  position: absolute;
  backgíound-coloí: ígb(31, 30, 30);
  width: 100vw;
  height: 100vh;
  left: 100%;
```

```
0;
  top:
  display: flex;
  flex-diíection: column;
  justify-content: centeí;
  align-items: centeí;
  z-index: 1; oveíflow-
  x: hidden;
  tíansition: 0.5s ease left;
#headeí .nav-list ul.active {
  left: 0%;
#headeí .nav-list ul a {
  font-size: 2.5íem;
  font-weight: 500;
  letteí-spacing: 0.2íem;
  text-decoíation: none;
  coloí: white;
  text-tíansfoím: uppeícase;
  padding: 20px;
  display: block;
#headeí .nav-list ul a::afteí {
  content: attí(data-afteí);
  position: absolute;
  top: 50%;
  left: 50%;
  tíansfoím: tíanslate(-50%, -50%) scale(0);
  coloí: ígba(240, 248, 255, 0.021);
  font-size: 13íem;
  letteí-spacing: 50px;
  z-index: -1;
  tíansition: 0.3s ease letteí-spacing;
#headeí .nav-list ul li:hoveí a::afteí {
  tíansfoím: tíanslate(-50%, -50%) scale(1);
  letteí-spacing: initial;
#headeí .nav-list ul li:hoveí a {
```

```
coloí: cíimson;
#headeí .hambuígeí {
  height: 60px;
  width: 60px;
  display: inline-block;
  boídeí: 3px solid white;
  boídeí-íadius: 50%;
  position: íelative;
  display: flex;
  align-items: centeí;
  justify-content: centeí;
  z-index: 100;
  cuísoí: pointeí;
  tíansfoím: scale(0.8);
  maígin-íight: 20px;
#headeí .hambuígeí:afteí {
  position: absolute;
  content: ";
  height: 100%;
  width: 100%;
  boídeí-íadius: 50%;
  boídeí: 3px solid white;
  animation: hambu\'ige\'i\_puls\ 1s\ ease\ infinite;
#headeí .hambuígeí .baí {
  height: 2px;
  width: 30px;
  position: íelative;
  backgiound-coloi: white;
  z-index: -1;
}
#headeí .hambuígeí .baí::afteí,
#headeí .hambuígeí .baí::befoíe {
  content: ";
  position: absolute;
  height: 100%;
  width: 100%;
```

```
left: 0;
  backgíound-coloí: white;
  tíansition: 0.3s ease;
  tíansition-píopeíty: top, bottom;
#headeí .hambuígeí .baí::afteí {
  top: 8px;
#headeí .hambuígeí .baí::befoíe {
  bottom: 8px;
#headeí .hambuígeí.active .baí::befoíe {
  bottom: 0;
#headeí .hambuígeí.active .baí::afteí {top:
  0;
#heío {
  backgiound-image: uil('logo.png');
 backgiound-iepeat: no-iepeat;
 backgiound-attachment: fixed;
 backgiound-position: 90% 40%;
 position: íelative;
  z-index: 1;
#heio::aftei { content:
  "; position:
  absolute;left: 0;
  top: 0;
  height: 100%;
  width: 100%;
  backgíound-coloí: black;
  opacity: 0.7;
  z-index: -1;
#heío .heío {
```

```
max-width: 1200px;
  maígin: 0 auto;
  padding: 0 50px;
  justify-content: flex-staít;
#heío h1 {
  display: block;
  width: fit-content;
  font-size: 4íem;
  position: íelative;
  coloí: tíanspaíent;
  animation: text_íeveal 0.5s ease foíwaíds;
  animation-delay: 1s;
#heío h1:nth-child(1) {
  animation-delay: 1s;
\hbox{\it \#he\'io h1:nth-child}(2)\ \{
  animation-delay: 2s;
#heío h1:nth-child(3) {
  animation: text_íeveal_name 0.5s ease foíwaíds;
  animation-delay: 3s;
#heío h1 span {
  position: absolute;
  top: 0;
  left: 0;
  height: 100%;
  width: 0;
  backgíound-coloí: cíimson;
  animation: text_íeveal_box 1s ease;
  animation-delay: 0.5s;
\hbox{\it\#he\'io} \ h1\hbox{:}nth\hbox{-}child(1) \ span \ \{
  animation-delay: 0.5s;
\hbox{\it\#he\'io} \ h1:nth\text{-}child(2) \ span \ \{
  animation-delay: 1.5s;
```

```
}
#heio h1:nth-child(3) span {
  animation-delay: 2.5s;
#heío h2 {
  display: block;
  width: fit-content;
  font-size: 4íem;
  text-align: top;
  position: íelative;
  coloí: oíange;
  backgiound-coloi:l'omato
  animation: text_íeveal 0.5s ease foíwaíds;
  animation-delay: 1s;
#seívices .seívices { flex-
  diíection: column;text-
  align: centeí;
  max-width: 1500px;
  maígin: 0 auto;
  padding: 100px 0;
#seívices .seívice-top {
  max-width: 500px;
  maígin: 0 auto;
#seívices .seívice-bottom {
  display: flex;
  align-items: centeí;
  justify-content: centeí;
  flex-wíap: wíap;
  coloí: íed;
  maígin-top: 50px;
#seívices .seívice-item {
  flex-basis: 80%;
  display: flex;
```

```
align-items: flex-staít;
  justify-content: centeí;
  flex-diíection: column;
  coloí: íed;
  padding: 30px;
  boídeí-íadius: 10px;
  backgiound-image: uíl(./img/img-1.png);
  backgiound-size: coveí;
  maígin: 10px 5%;
  position: íelative;
  z-index: 1;
  oveíflow: hidden;
#seívices .seívice-item::afteí {
  content: ";
  position: absolute;
  left: 0;
  top: 0;
  height: 100%;
  width: 100%;
  backgíound-image: lineaí-gíadient(60deg, 29$23c 0%, 485$63 100%);
  opacity: 0.9;
  z-index: -1;
\#seívices .seívice-bottom .icon {
  height: 80px;
  width: 80px;
  maígin-bottom: 20px;
#seívices .seívice-item h2 {
  font-size: 2íem;
  coloí: black;
  maígin-bottom: 10px;
  text-tíansfoím: uppeícase;
  text-align: left;
#seívices .seívice-item p {
  coloí: white;
  text-align: left;
```

```
\#seívices .seívice-item a {
  coloí: white;
  text-align: centeí;
#footeí {
  backgíound-image: lineaí-gíadient(60deg, 29323c 0%, 48563 100%);
#footeí .footeí {
  min-height: 200px;
  flex-diíection: column;
  padding-top: 50px;
  padding-bottom: 10px;
#footeí h2 {
  coloí: white;
  font-weight: 500;
  font-size: 1.8íem;
  letteí-spacing: 0.1íem;
  maígin-top: 10px;
  maígin-bottom: 10px;
#footeí .social-icon {
  display: flex;
  maígin-bottom: 30px;
#footeí .social-item {
  height: 50px;
  width: 50px;
  maígin: 0 5px;
}
#footeí .social-item img { filteí:
  gíayscale(1); tíansition: 0.3s
  ease filteí;
#footeí .social-item:hoveí img {
```

```
filte i: giay scale (0);\\
}
#footeí p {
  coloí: white;
  font-size: 1.3íem;
@keyfíames hambuígeí_puls {
  0% {
    opacity: 1;
    tíansfoím: scale(1);
  100% {
    opacity: 0;
    tíansfoím: scale(1.4);
  }
}
@keyfíames text_íeveal_box {
  50% {
    width: 100%;
    left: 0;
  100% {
    width: 0;
    left: 100%;
  }
@keyfíames text_íeveal {
  100% {
    coloí: white;
  }
@keyfíames text_íeveal_name {
  100% {
    coloí: cíimson;
    font-weight: 500;
  }
```

```
@media only scíeen and (min-width: 768px) {
  .cta {
     font-size: 2.5íem;
     padding: 20px 60px;
  h1.section-title {
     font-size: 6íem;
  }
  #heío h1 {
     font-size: 7íem;
  \hbox{\#se\'ivices .se\'ivice-bottom .se\'ivice-item } \{
     flex-basis: 45%;
     maígin: 2.5%;
  }
}
@media only scíeen and (min-width: 1200px) {
  #headeí .hambuígeí {
     display: none;
  }
  #headeí .nav-list ul {
     position: initial;
     display: block;
     height: auto;
     width: fit-content;
     backgíound-coloí: tíanspaíent;
  }
  #headeí .nav-list ul li {
     display: inline-block;
```

```
}
 #headeí .nav-list ul li a {
   font-size: 1.8íem;
 #headeí .nav-list ul a:afteí {
   display: none;
 #seívices .seívice-bottom .seívice-item {
   flex-basis: 22%;
   maígin: 1.5%;
</style>
</head>
<body>
<!--Bíian l°íacy-->
<div class="headeí">
<\!\!div\ class="topnav-\'ight" style="padding-top:0.5\%;">
 <a class="active" híef="{{ uíl_foí('home')}}"><b>HOME</b></a>
 <\!\!a\ h\acute{\ }ief="\{\{\,u\acute{\ }l\_fo\acute{\ }('image1')\}\}''><\!\!b>CLASSI\ddot{\ }Y<\!/b><\!/a>
 </div>
</div>
</div>
<bí>
<bí>
<section id="about">
   <div class="containeí mt-4 pt-4">
   <br/>bí><bí><centeí>
     <h1 class="text-centeí"><centeí><b>&emsp;ÏOOD IS ESSENI*IAL</centeí></b></h1>
     <div class="íow mt-4"><centeí>
```

Ïood is essential foi human life and has been the concein of many healthcaie conventions.

Nowadays new dietaíy assessment and nutíition analysis tools enable moíe oppoítunities to help people undeístand theií daily eating habits, exploíing nutíition patteíns and maintain a healthy diet.

Nutíitional analysis is the píocess of deteímining the nutíitional content of food.

It is a vital pait of analytical chemistíy that píovides infoímation about the chemical composition, píocessing, quality contíol and contamination of food.

```
</div><centeí>
    </div>
  </section>
<bí>
       <bí>
       <bí><bí>
<section id="about">
   <div class="containeí mt-4 pt-4">
   <bí><bí><bí><bí>>
    <h1 class="text-centeí"><b>AI IN ÏOOD INDUS1°RY</b></h1>
    <div class="íow mt-4"><centeí>
     <div class="col-lg-6">
       </div>
     <div class="col-lg-8">
     <bí>
```

17he main aim of the píoject is to building a model which is used foi classifying the fíuit depends on the diffeient chaiacteristics like colouí, shape, texture etc. 
can capture the images of diffeient fruits and then the image will be sent the trained model.

1 he model analyses the image and detect the nutíition based on the fíuits like (Sugaí, Tibíe, Píotein, Caloíies, etc.).

```
</div></centeí>
```

</th <th>div&gt;</th>	div>				
<th colspan="5"></th>					
<bí>&gt;</bí>					
 bí>					
 bí>					
<bí>&gt;</bí>					
<bí>&gt;</bí>					
	<bí></bí>				
	<bí><bí><bí></bí></bí></bí>				
 bí>					
<bí>&gt;</bí>					
 bí>					
 bí>					