

# **AI-POWERED NUTRITION ANALYZER FOR** **FITNESS ENTHUSIASTS**

**TEAM ID : PNT2022TMID43434**

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## **1. INTRODUCTION:**

### **1.1 PROJECT OVERVIEW**

Food is a necessity for human life and has been a topic of discussion at numerous medical meetings. Modern dietary assessment and nutrition analysis technologies give people more possibilities to explore nutrition patterns, understand their daily eating habits, and maintain a balanced diet. Finding out a food's nutritional content is done through nutritional analysis. The project's primary goal is to develop a model that will be used to categorise fruits according to their various attributes, such as colour, shape, and texture. Here, the user can take pictures of various fruits, which will subsequently be sent to the trained model. The model analyses the image and determines the nutrition based on fruits such (Sugar, Fibre, Protein, Calories, etc).

### **1.2 PURPOSE**

This project offers a web application the user can use to load the image for which the user wishes to know the nutritional information. The loaded image is delivered to the server application, which utilises an AI-driven food recognition model to analyse it by identifying the food items included in it. It then uses the Nutritional API to offer nutritional information about the analysed image. The app will then receive the loaded image's nutritional data back for display.

## **2. LITERATURE SURVEY:**

### **2.1 EXISTING SYSTEM**

[1] Salonee Jambusaria et al, **Physical activity and fitness patterns among university students in Mumbai**. In this research, the author conducted a test to understand the physical activity patterns among university students and their perception towards the same. A sample of 122 was used where there were 63 women and 59 men. This study gathered quantitative data through structured questionnaires to understand

each of the objectives and also descriptive statistics were used to analyse data where the mean, median, mode and standard deviation was calculated, and many correlations were made using the same.

[2] Folkins, Carlyle H, Sime, Wesley E, **Physical fitness training and mental health**. In this research, the author suggests that except for self-concept, personality traits are not affected by improvements in physical fitness. Mentally retarded children demonstrate psychological improvement following physical fitness training, but no conclusion can be reached regarding the effects of physical fitness training with other clinical syndromes.

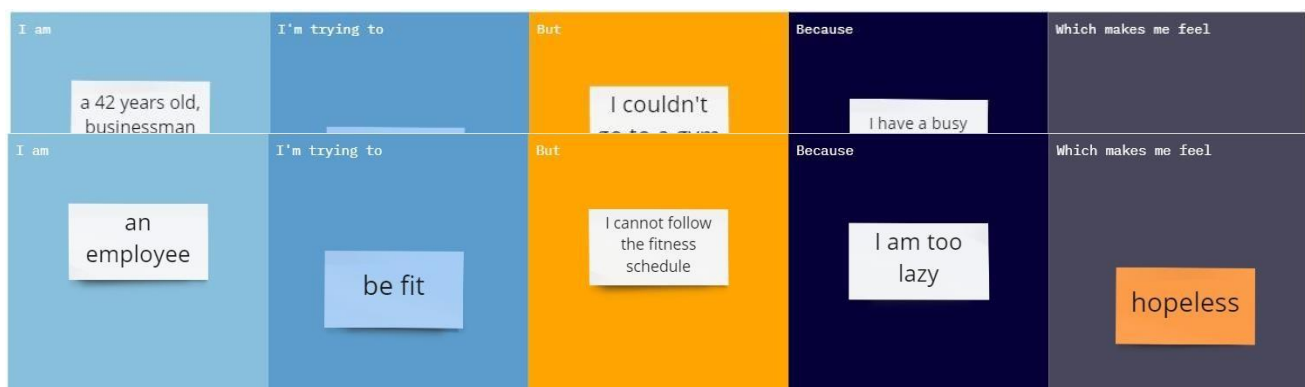
[3] Neela Badrie, Simone Foster, Chandra Benny - Olliviera, Harzel Roberts, **Exercise enthusiasts' perceptions and beliefs of functional foods in Trinidad, West Indies**. In this research, a structured questionnaire was administered to 120 randomly chosen exercise/fitness enthusiasts at six gyms located in East and Central regions. It is found that only 50.5 per cent had heard of at least one term either "functional" or "nutraceutical" or "designer" foods with the most familiar term being "functional". This study highlighted the need for public education on the health benefits and regulatory measures on functional foods.

[4] **Neutrino**: In this platform, it provides nutrition-based data services, analytics, and technologies to its consumers and wants to turn itself into a leading source of nutrition-related insight platform. To enable individualised compilation of data, the platform uses NLP and mathematical models from the optimisation theory and predictive analysis. But it cannot take an input image of a food from the user and analyse the nutritional content on that image.

## 2.2 REFERENCES

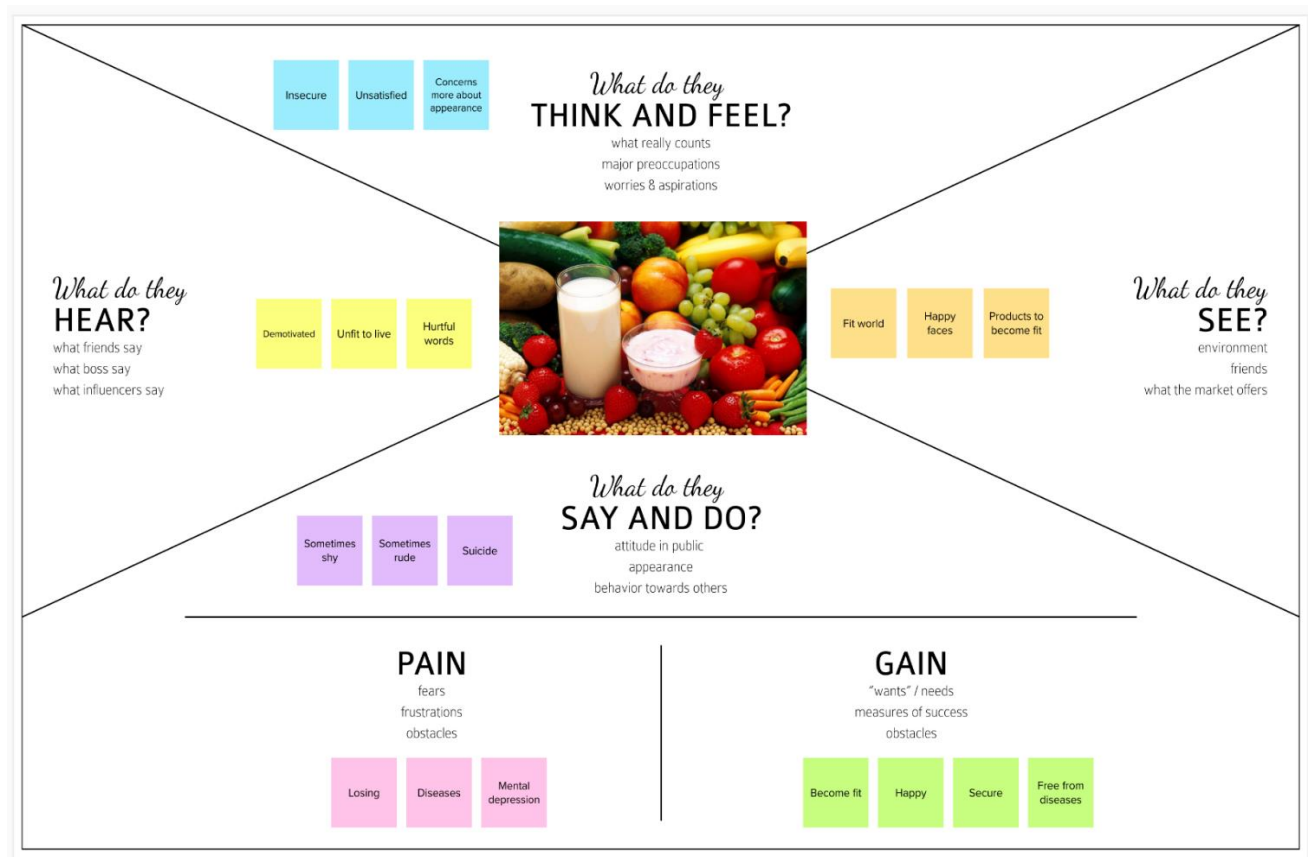
- [1]<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4042570/>
- [2]<https://www.researchgate.net/publication/343189429> Research paper on physical activity and fitness patterns among university students in Mumbai/
- [3]<https://www.healthifyme.com/in/>
- [4]<https://analyticsindiamag.com/5-ai-powered-nutrition-apps-that-help-fitness-enthusiasts-with-their-calorie-intake/>

## 2.3 PROBLEM STATEMENT DEFINITIO



### 3. IDEATION AND PROPOSED SOLUTION:

#### 3.1 EMPATHY MAP CANVAS



#### 3.2 IDEATION AND BRAINSTORMING:

##### Step-1: Team Gathering, Collaboration and Select the Problem Statement

### 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

- Team gathering**  
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.
- Set the goal**  
Think about the problem you'll be focusing on solving in the brainstorming session.
- Learn how to use the facilitation tools**  
Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#)

**1 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**  
How might we [your problem statement]?

**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.

## Step-2: Brainstorm, Idea Listing and Grouping

### 2 Brainstorm

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

10 minutes

**TIP**  
You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

**N. Kaviya**

- Nutrition may also increase muscle recovery
- Heath and fitness tips are given
- Nutrition reduces inflammation
- Helps to stop using supplements
- Natural growth can be attained

**D. Rokhaiya Sulthana**

- It acts as your personal assistant
- It is also perfect for a vegan
- It provides nutrition contents about every foods to know about you diet
- Acts as your dietitian

**K. Alagukrishnan**

- Makes us aware of what we are eating
- Can act as your reminder in eating healthy foods
- Encourages healthy lifestyle
- an know the nutrition values of particular food before intaking

**Nathir Ahamed**

- Better way to focus on your diet and nutrients intake
- Knows the persons allergy items and foods and avoids that items in recommendation
- If you did not meet your daily intake of nutrition, it remains you
- Provides some alternatives to some unhealth foods

### 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 can break it up into smaller sub-groups.

20 minutes

**TIP**  
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

#### Based on nutrients

- Heath and fitness tips are given
- Encourages healthy lifestyle
- Makes us aware of what we are eating

#### Based on intakes

- If you did not meet your daily intake of nutrition, it remains you
- an know the nutrition values of particular food before intaking
- Better way to focus on your diet and nutrients intake

#### Based on supplements

- Provides some alternatives to some unhealth foods
- Helps to stop using supplements

## Step-3: Idea Prioritization

### 4 Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

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

**TIP**  
Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the H key on the keyboard.

### 3.3 PROPOSED SOLUTION

S.NO	PARAMETER	DESCRIPTION
1	Problem Statement (Problem to be solved)	How to intake suitable nutrition with correct guidance and how weight level should be managed through tracking our day to day fitness.
2	Idea / Solution Description	To track fitness level and Analyze the nutrition level of foods like fruits, vegetables, cereals, pulses, etc. It helps to identify the proportion of vitamins.
3	Novelty/Uniqueness	Giving an individual food/health schedule according to their body conditions.
4	Social impact/Customer Satisfaction	Low expenditure, easy to use, easy to follow without affecting their personal time.
5	Business model (Revenue Model)	Free platform for all users. For specific guidance users want to pay
6	Scalability of the solution	Notifying motivational quotes to lead a healthy routine.

## 3.4 PROBLEM SOLUTION FIT

Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> Who is your customer? i.e. working parents of 0-5 y.o. kids	<b>6. CUSTOMER CONSTRAINTS</b> What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices	<b>5. AVAILABLE SOLUTIONS</b> Which solutions are available to the customers when they face the problem, or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking	Explore AS, differentiate
	<ul style="list-style-type: none"> <li>People who want to fit their body and maintain proper or balanced diet in a proper way</li> </ul>	<ul style="list-style-type: none"> <li>constraints may contribute to the unhealthy food choices observed among low socioeconomic groups in industrialized countries.</li> </ul>	<ul style="list-style-type: none"> <li>Try to eat more protein and fat, and less simple sugars.</li> <li>Ask your doctor or dietitian about nutritional supplements.</li> <li>Avoid non-nutritious beverages</li> </ul>	
Focus on J&P, tap into BE, understand RC	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> Which jobs to be done (or problems) do you address for your customers? There could be more than one; explore different sides.	<b>9. PROBLEM ROOT CAUSE</b> What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.	<b>7. BEHAVIOUR</b> What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)	Focus on J&P, tap into BE, understand RC
	<ul style="list-style-type: none"> <li>Being a holistic wellness coach, registered dietitian, nutritionist, food scientist, nutrition educator are the job can successfully done in this field</li> </ul>	<ul style="list-style-type: none"> <li>Lack of appetite, or decreased hunger</li> <li>A sore mouth or throat can make eating difficult</li> <li>Undiet plan in untimely eating</li> </ul>	<ul style="list-style-type: none"> <li>the sum of all planned, spontaneous, or habitual actions of individuals or social groups to procure, prepare, and consume food as well as those actions related to storage and clearance.</li> </ul>	
Identify strong TR & EM	<b>3. TRIGGERS</b> What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.	<b>10. YOUR SOLUTION</b> If you are working on an existing business, write down your current solution first, fit in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.	<b>8. CHANNELS of BEHAVIOUR</b> 8.1 ONLINE What kind of actions do customers take online? Extract online channels from #7	Extract online & offline CH of BE
	<ul style="list-style-type: none"> <li>Antigens are substances that the body labels as foreign and harmful, which triggers immune cell activity.</li> </ul>	<ul style="list-style-type: none"> <li>In our platform we provide a individual healthy chart for subscribers</li> <li>Normally Common health diet plan was allocated</li> <li>Seek your way on organic side and stay healthy</li> </ul>	8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.	
	<b>4. EMOTIONS: BEFORE / AFTER</b> How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.		8.2 OFFLINE What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.	
	Before: Initially they felt inferiorly complex by their own. And felt more negative thoughts and underestimate themselves. After: After the correct session they had a great confidence among themselves. And achieve their Healthy diet		<ul style="list-style-type: none"> <li>Refer journal through online applications, attending some online session, following healthy remedies</li> <li>Taking proteins, visit gym, doing aerobic exercise, consume huge water.</li> </ul>	

## 4. REQUIREMENT ANALYSIS:

### 4.1 FUNCTIONAL REQUIREMENT

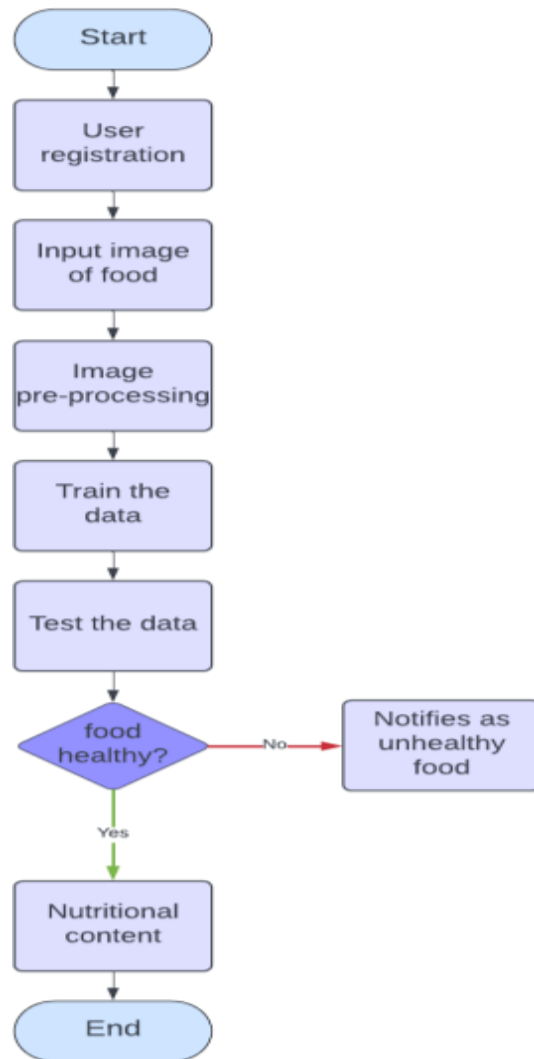
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	Input Image	User uploads the image of any food item
FR-3	Image pre-processing	After uploading the image from the user, the image is pre-processed, trained and tested
FR-4	Image identification	When the train and test are over, the input image is identified
FR-5	Image Description	When the image is identification, description and nutritional values are identified.

## 4.2 NON-FUNCTIONAL REQUIREMENTS

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Datasets of all the food items can be used.
NFR-2	Security	Input image from the user will be more secure
NFR-3	Reliability	Input image quality is more important for the prediction of the image
NFR-4	Performance	When the image is more clear, the performance will also be more accurate
NFR-5	Availability	It is available for all the user after registering, but some features are only for subscribers
NFR-6	Scalability	Increasing the identification of the input image

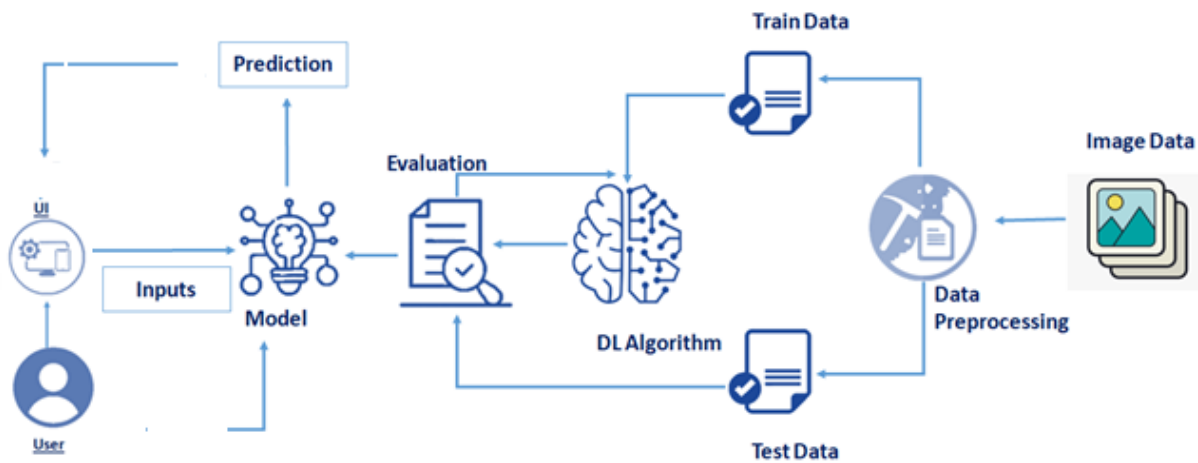
## 5. PROJECT DESIGN

### 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 can register for the application through Gmail		Medium	Sprint-1
	Login	USN-3	As a user, I can log into the application by entering email & password		High	Sprint-1
Customer (Webuser)	Registration	USN-1	As a web user, I will register for the application by entering my email & password and confirmation of my password.	confirmation of same password typed	High	
	Login	USN-2	As a user, I can login into the application by entering email and password.		High	

## 6. PROJECT PLANNING AND SCHEDULING:

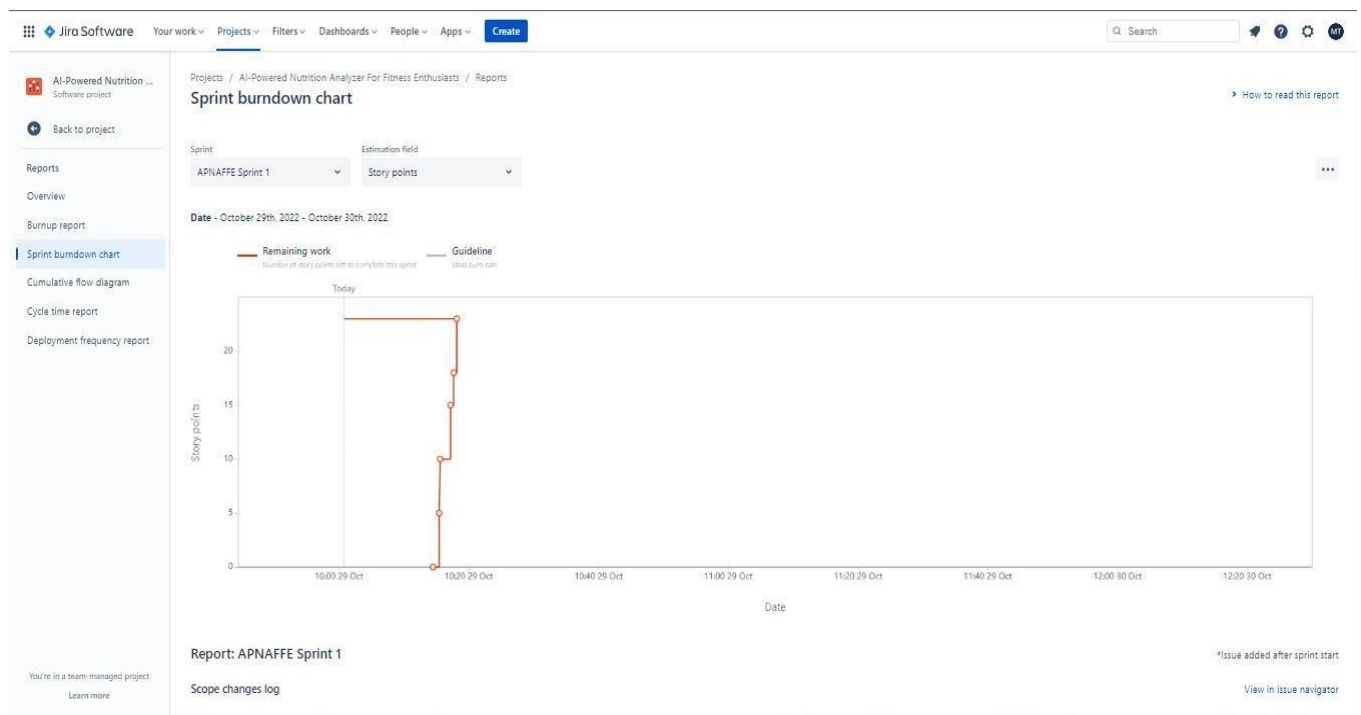
### 6.1 SPRINT PLANNING AND ESTIMATION

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Pre-requisites for Model Building	USN-0	As a developer I have to collect different type of data possible and other data supporting the model	5	High	N. Kaviya
Sprint-1		USN-1	As a user, I can register for the application by entering my email, password, and confirming my password	5	High	N. Kaviya, D. Rokhaiya Sulthana
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	N. Kaviya, K. Alagukrishnan
Sprint-1		USN-3	As a user, I can register for the application through Gmail	3	Medium	N.Kaviya, M.Nathir Ahamed
Sprint-1	Login	USN-4	As a user, I can log into the application by entering email & password	5	High	N. Kaviya
Sprint-2	Module building	USN-5	As a user, I can log into the application by entering email & password	5	High	D.Rokhaiya Sulthana, K. Alagukrishnan
Sprint-2	Main Interface	USN-6	As a user I can view my calorie intake by clicking photo of the food I eat	5	High	K.Alagukrishnan, M.Nathir Ahamed
Sprint-2	Package, Dashboard	USN-7	As a user I can choose variety of packages based on my requirement	4	Medium	D.Rokhaiya Sulthana

## 6.2 SPRINT DELIVERY SCHEDULING

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	23	28 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	26	04 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	11	11 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	18	17 Nov 2022

## 6.3 REPORTS FROM JIRA



## 7. CODING AND SOLUTIONING:

### 7.1 FEATURE 1 – Signup and Login page:

```
<!DOCTYPE html>
```

```
<html>
```

```

<head>

<title>AI-Power Nutrition Analyzer</title>

<link rel="stylesheet" type="text/css" href="/static/style1.css" />

<link
  rel="stylesheet"
  href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css"
/>

<link
  href="https://fonts.googleapis.com/css?family=Josefin+Sans&display=swap"
  rel="stylesheet"
/>
</head>

<body>

<header>

  <nav>

    <div class="logo">

      <h1 style="font-size: 30px" style="color: #07ebb9">Diet Delight</h1>

    </div>

    <div class="menu">

      <a href="./Home.html">Home</a>

      <a href="./Gallary.html">gallery</a>

      <a href="./About.html" target="_blank">about</a>

      <a href="./Contact.html">contact</a>

    </div>

  </nav>

</header>

<br /><br />

<div class="container" id="container">

```

```

<div class="form-container sign-up-container">
  <form action="">
    <h1 style="font-family: times new roman">Create Account</h1>
    <div class="social-container">
      <a href="https://www.facebook.com/" class="social"
        ><i class="fa fa-facebook"></i>
      ></a>
      <a href="https://myaccount.google.com" class="social"
        ><i class="fa fa-google"></i>
      ></a>
      <a href="https://myaccount.google.com" class="social"
        ><i class="fa fa-linkedin"></i>
      ></a>
    </div>
    <span><b>or use your email for registration</b></span>
    <input type="text" name="name" placeholder="Name" />
    <input type="email" name="email" placeholder="Email" />
    <input type="password" name="password" placeholder="Password" />
    <button>Sign Up</button>
  </form>
</div>
<div class="form-container sign-in-container">
  <form action="#">
    <h1
      style="
        color: #000000;
        font-family: Georgia, 'Times New Roman', Times, serif;
        "

```

```

>
  Sign In
</h1>
<div class="social-container">
  <a href="https://www.facebook.com/" class="social"
    ><i class="fa fa-facebook"></i>
  ></a>
  <a href="https://myaccount.google.com/" class="social"
    ><i class="fa fa-google"></i>
  ></a>
  <a href="#" class="social"><i class="fa fa-linkedin"></i></a>
</div>
<span><b>Or Use Your Account</b></span>
<input type="email" name="email" placeholder="Email" />
<input type="password" name="password" placeholder="Password" />
<a href="#"><b>Forgot Password?</b></a>
<button>Sign In</button>
</form>
</div>
<div class="overlay-container">
  <div class="overlay">
    <div class="overlay-panel overlay-left">
      <h1 style="font-family: times new roman">Welcome Back!</h1>
      <p>
        To keep connected with us please login with your personal info
      </p>
      <button class="ghost" id="signIn">Sign In</button>
    </div>
  </div>

```

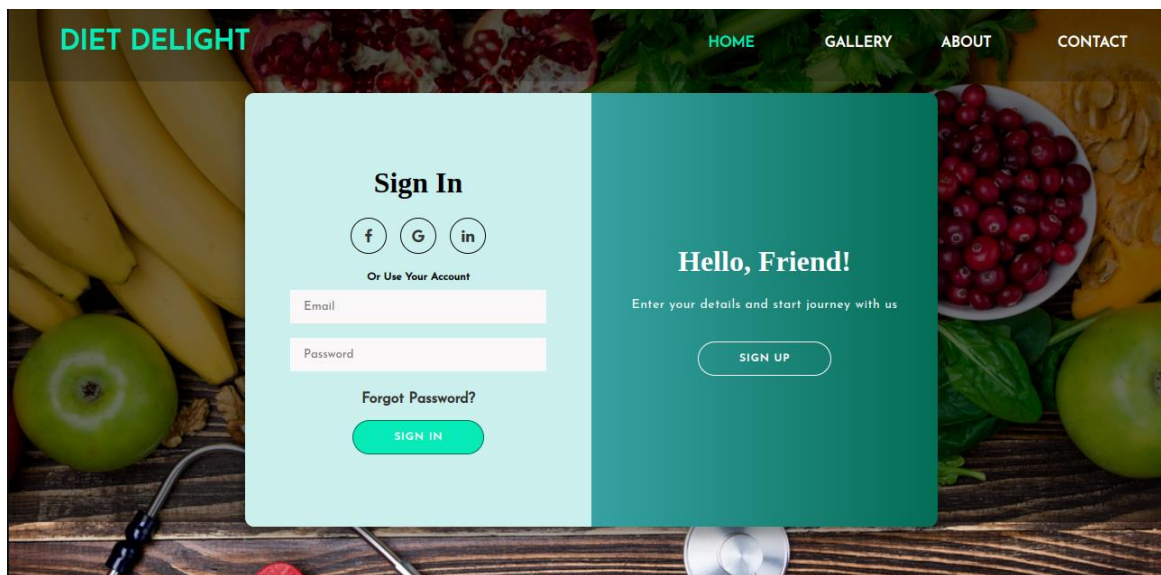
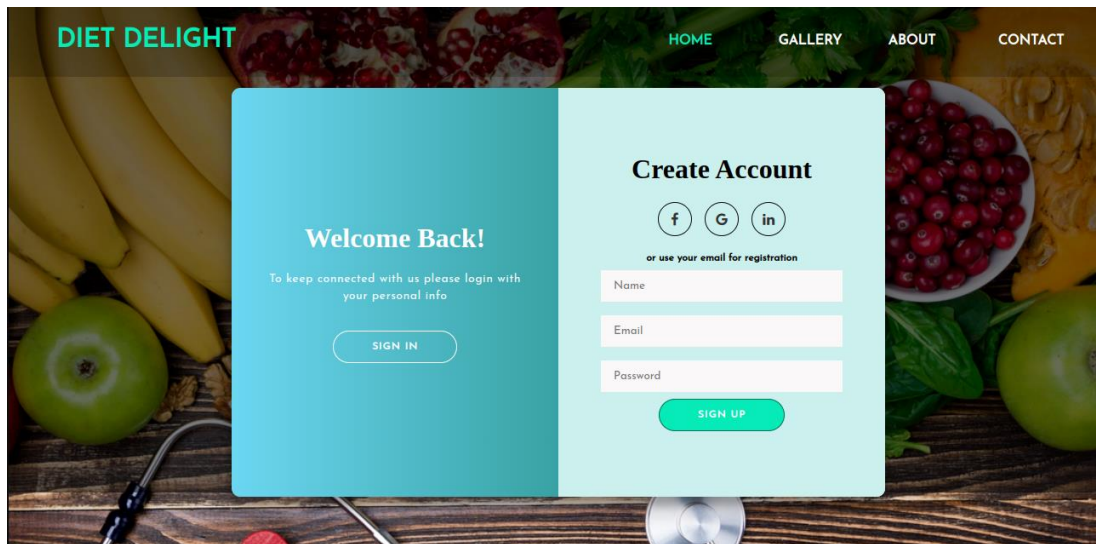
```

    <div class="overlay-panel overlay-right">
      <h1 style="font-family: times new roman">Hello, Friend!</h1>
      <p>Enter your details and start journey with us</p>
      <button class="ghost" id="signUp">Sign Up</button>
    </div>
  </div>
</div>
</div>

<script type="text/javascript">
  const signUpButton = document.getElementById("signUp");
  const signInButton = document.getElementById("signIn");
  const container = document.getElementById("container");

  signUpButton.addEventListener("click", () => {
    container.classList.add("right-panel-active");
  });
  signInButton.addEventListener("click", () => {
    container.classList.remove("right-panel-active");
  });
</script>
</body>
</html>

```



## 7.2. FEATURE 2 – Image Prediction:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>AI-Powered Nutrition Analyzer for fitness enthusiasts</title>
```

```
<link rel="stylesheet" type="text/css" href="/static/style.css" />
```

```
<link
```

```
href="https://fonts.googleapis.com/css?family=Josefin+Sans&display=swap"
```



```

    rel="stylesheet"
  />

  <link
    rel="stylesheet"
    href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/3.7.2/animate.min.css"
  />
</head>

<body>
  <header>
    <nav>
      <div class="logo">
        <h1 style="font-size: 30px" style="color: #07ebb9">Diet Delight</h1>
      </div>
      <div class="menu">
        <a href="./Home.html">Home</a>
        <a href="./Gallary.html">gallery</a>
        <a href="./About.html" target="_blank">about</a>
        <a href="./Contact.html">contact</a><br /><br /></nav>
      <div class="container">
        <div class="wrapper">
          <div class="image">
            <img src="" alt="" />
          </div>
          <div class="content">
            <div class="icon">
              <i class="fas fa-cloud-upload-alt"></i>
            </div>

```

```

    <div class="text">No file chosen, yet!</div>

</div>

<div id="cancel-btn">

    <i class="fas fa-times"></i>

</div>

<div class="file-name">File name here</div>

</div>

<button onclick="defaultBtnActive()" id="custom-btn">

    Choose a file</button>

><a href="predict.html"><button onclick="" id="custom-btn">

    Classify</a>

</button>

<input id="default-btn" type="file" hidden />

</div>

<script>

const wrapper = document.querySelector(".wrapper");
const fileName = document.querySelector(".file-name");
const defaultBtn = document.querySelector("#default-btn");
const customBtn = document.querySelector("#custom-btn");
const cancelBtn = document.querySelector("#cancel-btn i");
const img = document.querySelector("img");

let regExp =

/[0-9a-zA-Z\^\&\@\{\}\[\]\,\$\=\!\-\#\(\)\.\%\+\~\_ ]+$/;

function defaultBtnActive() {

    defaultBtn.click();

}

defaultBtn.addEventListener("change", function () {

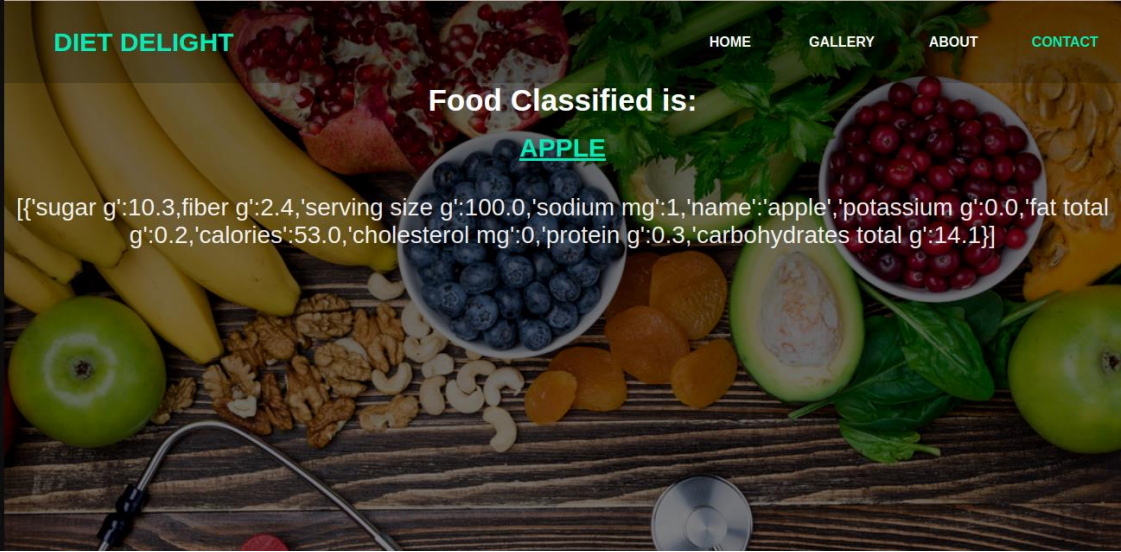
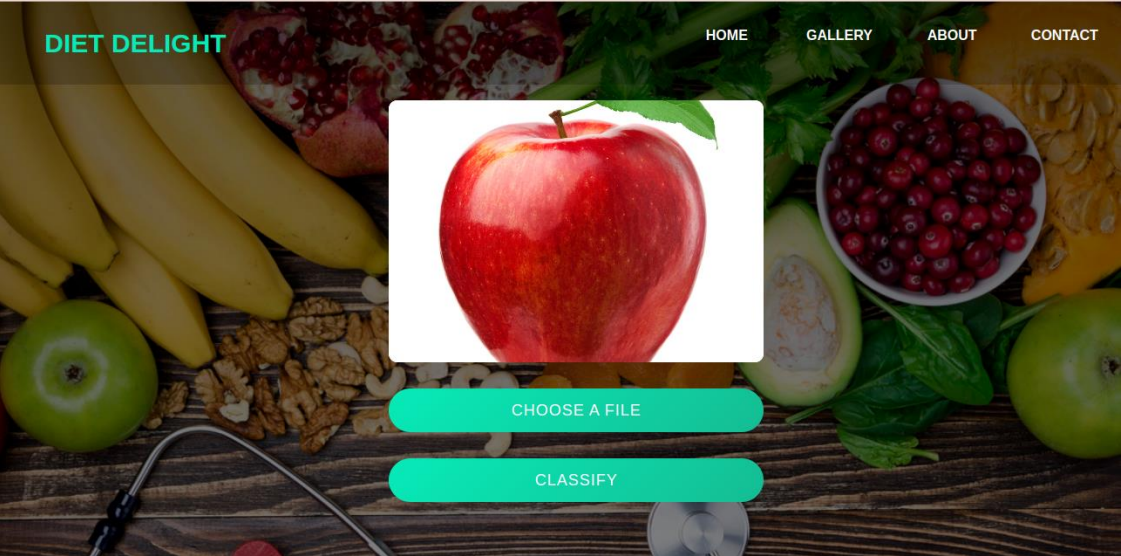
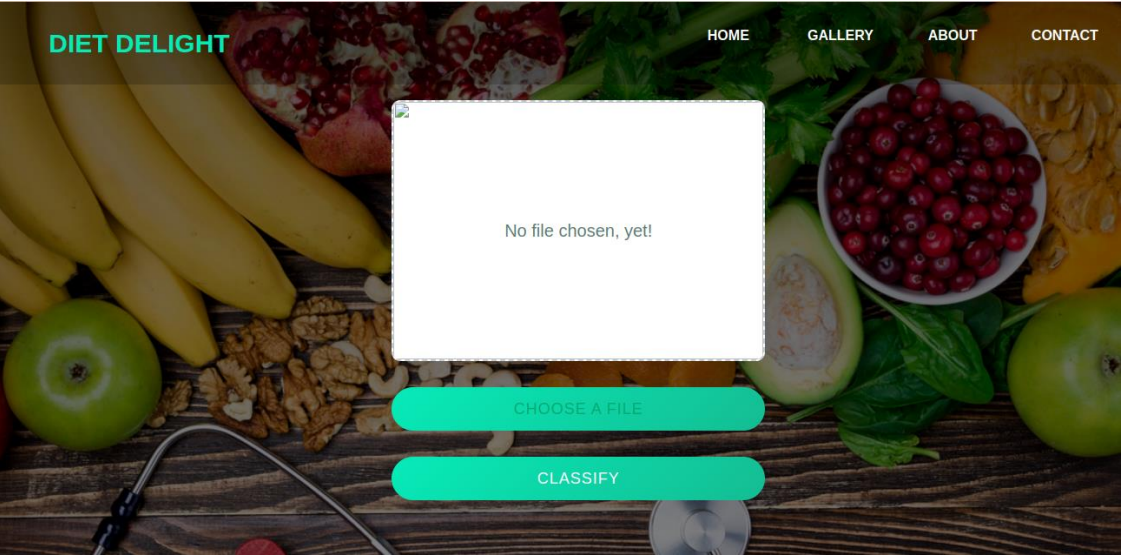
    const file = this.files[0];

```

```

if (file) {
    const reader = new FileReader();
    reader.onload = function () {
        const result = reader.result;
        img.src = result;
        wrapper.classList.add("active");
    };
    cancelBtn.addEventListener("click", function () {
        img.src = "";
        wrapper.classList.remove("active");
    });
    reader.readAsDataURL(file);
}
if (this.value) {
    let valueStore = this.value.match(regExp);
    fileName.textContent = valueStore;
}
});
</script>
</div>
</kbd>
</header>
</body>
</html>

```



## 8. TESTING:

### 8.1. TEST CASES:

Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By
LoginPage_TC_001	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button	Create a home page	1.Enter URL and click go 2.Verify login/Signup popup displayed or not		Login/Signup popup should display	Working as expected	Pass	-	-		N.Kaviya
LoginPage_TC_002	UI	Home Page	Verify the UI elements in Login/Signup popup	Create a signup and signin page	1.Enter URL and click go 2.Verify login/Signup popup with below UI elements: a.email text box b.password text box c.Login button d.New customer? Create account link e.Last password? Recovery password link		Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link e.Last password? Recovery password link	Working as expected	Pass	-	-		Rokhaiya Sulthana
LoginPage_TC_003	Functional	Home page	Verify user is able to log into application with Valid credentials		1.Enter URL and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chalam@gmail.com password: Testing123	User should navigate to user account homepage	Working as expected	Pass	-	-		M.Nathir Ahamed
UploadImage_TC_004	Functional		User uploads the image from his/her local file	Create an upload file option	1.2. Click on the Upload an image option. 3. Upload an image to be classified. 4. Click on classify option to	Image: Apple	When user clicks the classify option, the classified result should be displayed.	Working as expected	Pass	-	-		K. Alagukrishnan

### 8.2. USER ACCEPTANCE TESTING:

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	9	4	2	1	16
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	11	2	4	20	37
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	1	5	2	1	9
Totals	24	14	13	24	75

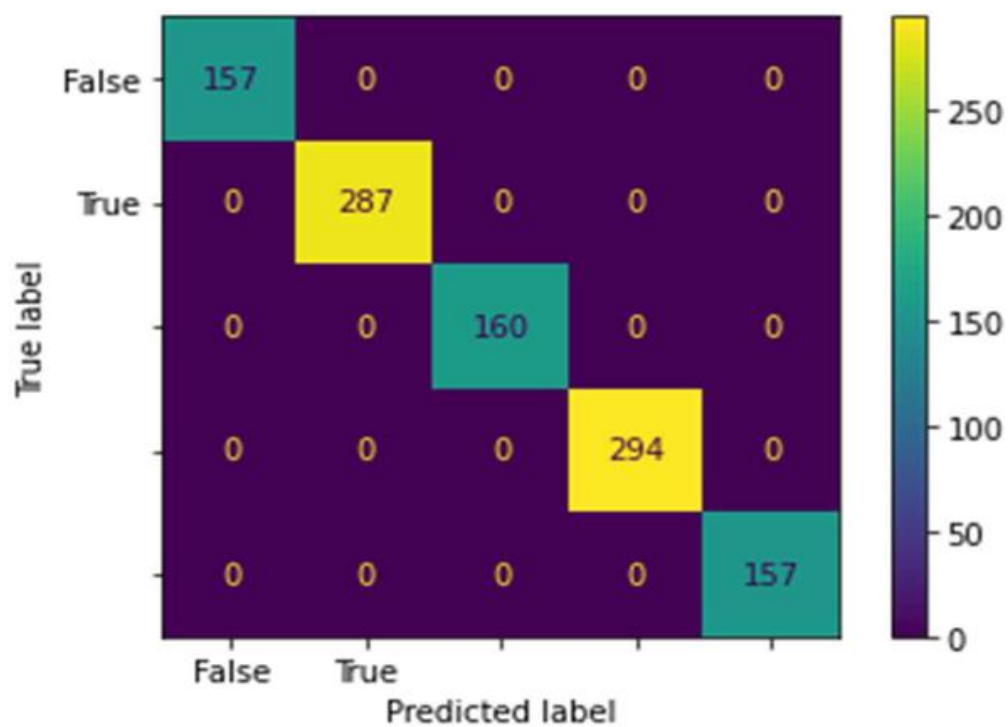
Section	Total Cases	Not Tested	Fail	Pass
Print Engine	6	0	0	6
Client Application	40	0	0	40
Security	2	0	0	2
Outsource Shipping	3	0	0	3

Exception Reporting	4	0	0	4
Final Report Output	1	0	0	1
Version Control	2	0	0	2

## 9. RESULTS:

### 9.1. PERFORMANCE METRICS:

1. Confusion Matrix



```
print(metrics.classification_report(test_data['label'].values, test_data['model_preds'].values))
```

	precision	recall	f1-score	support
0	1.00	1.00	1.00	157
1	1.00	1.00	1.00	287
2	1.00	1.00	1.00	160
3	1.00	1.00	1.00	294
4	1.00	1.00	1.00	157
accuracy			1.00	1055
macro avg	1.00	1.00	1.00	1055
weighted avg	1.00	1.00	1.00	1055

## 2. Accuracy – 100 %

```
[8] print(f"the accuracy is {metrics.accuracy_score(test_data['label'].values, test_data['model_preds'].values)})")
the accuracy is 1.0
```

## 3. Precision – 100 %

```
[11] print(f"the precision is {metrics.precision_score(test_data['label'].values, test_data['model_preds'].values, average = 'weighted')}")
the precision is 1.0
```

## 4. Recall – 100 %

```
[12] print(f"the recall is {metrics.recall_score(test_data['label'].values, test_data['model_preds'].values, average = 'weighted')}")
the recall is 1.0
```

## 5. Specificity – 100 %

```
print(f"the specificity is {metrics.recall_score(test_data['label'].values, test_data['model_preds'].values, pos_label=0, average = 'weighted')}")
the specificity is 1.0
```

## 6. F1-Score – 100 %

```
[13] print(f"the f1 score is {metrics.f1_score(test_data['label'].values, test_data['model_preds'].values, average = 'weighted')}")
the f1 score is 1.0
```

# 10. ADVANTAGES AND DISADVANTAGES:

## 10.1 ADVANTAGES

The primary benefit of this initiative is that it allows users to assess food's nutritional value before to consumption. This allows the user to decide whether to consume the item or not.. Now-a-days 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.

## 10.2 DISADVANTAGES

The main problem with this programme is that when a user uploads an image that hides an unreliable part, the image is regarded favourably and given nutritional value as a result. The uploaded image, however, has a flaw. The model is incapable of finding it.

## 11. CONCLUSION:

Good nutritional habits and balanced diet are not developed in one day nor are they destroyed in one unbalanced meal. Eating nutritious and healthy food while contribute to a better performance in classes, gym and dance floor. When there is no balance in the level of nutrients in the body, this could result to a lot of disease risk and thus poor nutrition. When everything is in balance, we should expect a normal body function. For us to be able avoid poor nutrition, and reduce our risk of developing disease, we have to be able to balance our diet and by doing this we are balancing the nutrients in the body, hence healthy living.

## 12. FUTURE SCOPE:

It is crucial to maintain a healthy diet in today's increasingly hectic society. A branch of study called nutrition and dietetics focuses on eating healthily, staying fit, and maintaining good health. In the future, the project can incorporate a diet plan for users who want to gain or lose weight. This can be a great opportunity for the user who wants to stay fit.

## 13. APPENDIX:

### 13.1. Source Code:

**app.py**

```
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")
@ 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": "85887549f4msh51e7315b280a87ep1f43e0jsn585c940f2ea6",
        "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)
```

## signin.html

```
<!DOCTYPE html>

<html>

  <head>

    <title>AI-Power Nutrition Analyzer</title>

    <link rel="stylesheet" type="text/css" href="/static/style1.css" />

    <link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css"
    />

    <link
      href="https://fonts.googleapis.com/css?family=Josefin+Sans&display=swap"
      rel="stylesheet"
    />

  </head>

  <body>

    <header>

      <nav>

        <div class="logo">

          <h1 style="font-size: 30px" style="color: #07ebb9">Diet Delight</h1>

        </div>

        <div class="menu">

          <a href="/Home.html">Home</a>

          <a href="/Gallary.html">gallery</a>

        </div>

      </nav>

    </header>

  </body>

</html>
```

```

    <a href="./About.html" target="_blank">about</a>
    <a href="./Contact.html">contact</a>
</div>
</nav>
</header>
<br /><br />
<div class="container" id="container">
    <div class="form-container sign-up-container">
        <form action="">
            <h1 style="font-family: times new roman">Create Account</h1>
            <div class="social-container">
                <a href="https://www.facebook.com/" class="social"
                    ><i class="fa fa-facebook"></i>
                </a>
                <a href="https://myaccount.google.com" class="social"
                    ><i class="fa fa-google"></i>
                </a>
                <a href="https://myaccount.google.com" class="social"
                    ><i class="fa fa-linkedin"></i>
                </a>
            </div>
            <span><b>or use your email for registration</b></span>
            <input type="text" name="name" placeholder="Name" />
            <input type="email" name="email" placeholder="Email" />
            <input type="password" name="password" placeholder="Password" />
            <button>Sign Up</button>
        </form>
    </div>
    <div class="form-container sign-in-container">

```

```

<form action="#">
  <h1
    style="
      color: #000000;
      font-family: Georgia, 'Times New Roman', Times, serif;
    "
  >
    Sign In
  </h1>
  <div class="social-container">
    <a href="https://www.facebook.com/" class="social"
      ><i class="fa fa-facebook"></i>
    </a>
    <a href="https://myaccount.google.com/" class="social"
      ><i class="fa fa-google"></i>
    </a>
    <a href="#" class="social"><i class="fa fa-linkedin"></i></a>
  </div>
  <span><b>Or Use Your Account</b></span>
  <input type="email" name="email" placeholder="Email" />
  <input type="password" name="password" placeholder="Password" />
  <a href="#"><b>Forgot Password?</b></a>
  <button>Sign In</button>
</form>
</div>
<div class="overlay-container">
  <div class="overlay">
    <div class="overlay-panel overlay-left">
      <h1 style="font-family: times new roman">Welcome Back!</h1>

```

```

    <p>
      To keep connected with us please login with your personal info
    </p>
    <button class="ghost" id="signIn">Sign In</button>
  </div>
  <div class="overlay-panel overlay-right">
    <h1 style="font-family: times new roman">Hello, Friend!</h1>
    <p>Enter your details and start journey with us</p>
    <button class="ghost" id="signUp">Sign Up</button>
  </div>
</div>
</div>
</div>
</div>

<script type="text/javascript">
  const signUpButton = document.getElementById("signUp");
  const signInButton = document.getElementById("signIn");
  const container = document.getElementById("container");

  signUpButton.addEventListener("click", () => {
    container.classList.add("right-panel-active");
  });
  signInButton.addEventListener("click", () => {
    container.classList.remove("right-panel-active");
  });
</script>
</body>
</html>
style.css

```

```

* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: "Josefin Sans", sans-serif;
}

body{
  background: linear-gradient(rgba(0, 0, 0, 0.6), rgba(0, 0, 0, 0.5)),url("../images/Fruits.png");
  background-repeat: no-repeat;
  background-size: cover;
  width: 100vw;
  height: 100vh;
}

header {
  width: 100vw;
  height: 100vh;
  background-image: linear-gradient(rgba(0, 0, 0, 0.6), rgba(0, 0, 0, 0.5)),
    url("../images/Fruits.png");
  background-repeat: no-repeat;
  background-size: cover;
}

nav {
  width: 100%;
  height: 15vh;
  background: rgba(0, 0, 0, 0.2);
  color: #07ebb9;
  display: flex;
  justify-content: space-between;

```

```
    align-items: center;
    text-transform: uppercase;
}
```

```
nav .logo {
    width: 25%;
    text-align: center;
    /*background: red;*/
}
```

```
nav .menu {
    width: 40%;
    display: flex;
    justify-content: space-around;
}
```

```
nav .menu a {
    width: 25%;
    text-decoration: none;
    color: white;
    font-weight: bold;
}
```

```
nav .menu a:hover {
    color: #07ebb9;
}
```

```
main {
    width: 100%;
```

```
height: 85vh;
display: flex;
justify-content: center;
align-items: center;
text-align: center;
color: white;
}
```

```
section h3 {
  font-size: 35px;
  font-weight: 200;
  letter-spacing: 3px;
  text-shadow: 1px 1px 2px black;
}
```

```
section h1 {
  margin: 30px 0 20px 0;
  font-size: 55px;
  font-weight: 700;
  text-shadow: 2px 1px 5px black;
  text-transform: uppercase;
}
```

```
section p {
  font-size: 25px;
  word-spacing: 2px;
  margin-bottom: 25px;
  text-shadow: 1px 1px 1px black;
}
```



```
section a {  
  padding: 12px 30px;  
  border-radius: 4px;  
  outline: none;  
  text-transform: uppercase;  
  font-size: 13px;  
  font-weight: 500;  
  text-decoration: none;  
  letter-spacing: 1px;  
  transition: all 0.5s ease;  
}
```

```
section .btnone {  
  /*background: #00b894;*/  
  background: #fff;  
  color: #000;  
}
```

```
.btnone:hover {  
  background: #07ebb9;  
  color: white;  
}
```

```
section .btntwo {  
  background: white;  
  color: black;  
}
```

```
.btntwo:hover {  
  background: #07ebb9;  
  color: white;  
}
```

```
.change_content:after {  
  content: "";  
  animation: changetext 10s infinite linear;  
  color: #07ebb9;  
}
```

```
@keyframes changetext {  
  0% {  
    content: "Fruits";  
  }  
  20% {  
    content: "Vegetables";  
  }  
  40% {  
    content: "Legumes";  
  }  
  60% {  
    content: "Grains";  
  }  
  80% {  
    content: "Mango";  
  }  
  100% {  
    content: "Grapes";  
  }  
}
```

```

    }
}

* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    font-family: "Poppins", sans-serif;
}

.container {
    margin-left: 35%;
    height: 350px;
    width: 430px;
    position: relative;
}

.container .wrapper {
    position: relative;
    height: 300px;
    width: 100%;
    border-radius: 10px;
    background: #fff;
    border: 2px dashed #c2cdda;
    display: flex;
    align-items: center;
    justify-content: center;
    overflow: hidden;
}

.wrapper.active {

```

```
border: none;
}
.wrapper .image {
  position: absolute;
  height: 100%;
  width: 100%;
  display: flex;
  align-items: center;
  justify-content: center;
}
.wrapper img {
  height: 100%;
  width: 100%;
  object-fit: cover;
}
.wrapper .icon {
  font-size: 100px;
  color: #9658fe;
}
.wrapper .text {
  font-size: 20px;
  font-weight: 500;
  color: #5b7b73;
}
.wrapper #cancel-btn i {
  position: absolute;
  font-size: 20px;
  right: 15px;
  top: 15px;
```

```

    color: #5209d1;
    cursor: pointer;
    display: none;
}

.wrapper.active:hover #cancel-btn i {
    display: block;
}

.wrapper #cancel-btn i:hover {
    color: #e74c3c;
}

.wrapper .file-name {
    position: absolute;
    bottom: 0px;
    width: 100%;
    padding: 8px 0;
    font-size: 18px;
    color: #fff;
    display: none;
    background: linear-gradient(135deg, #07ebb9 0%, #15bd93 100%);
}

.wrapper.active:hover .file-name {
    display: block;
}

.container #custom-btn {
    margin-top: 30px;
    display: block;
    width: 100%;
    height: 50px;

```

```

border: none;
outline: none;
border-radius: 25px;
color: #fff;
font-size: 18px;
font-weight: 500;
letter-spacing: 1px;
text-transform: uppercase;
cursor: pointer;
background: linear-gradient(135deg, #07ebb9 0%, #15bd93 100%);
}
.container #custom-btn:hover {
  color: #05aa73;
}

```

```

html,
body {
  background-color: transparent;
  display: grid;
  height: 60%;
  place-items: top;
  text-align: center;
}

```

```

kbd {
  height: 70%;
  padding: 10%;
  place-items: top;
}

```

```
p {  
  color: rgba(255, 255, 255, 0.918);  
  font-size: 22px;  
}
```

```
h1 {  
  font-size: 25px;  
}
```

```
h2 {  
  text-align: left;  
}
```

```
.text{  
  text-align: center;  
}
```

```
a{  
  text-decoration: none;  
  color: white;  
}
```

```
a:hover{  
  color: #03ad89  
}
```

### **upload\_image.html**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>AI-Powered Nutrition Analyzer for fitness enthusiasts</title>
```

```
<link rel="stylesheet" type="text/css" href="/static/style.css" />
```

```

<link
  href="https://fonts.googleapis.com/css?family=Josefin+Sans&display=swap"
  rel="stylesheet"
/>
<link
  rel="stylesheet"
  href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/3.7.2/animate.min.css"
/>
</head>
<body>
  <header>
    <nav>
      <div class="logo">
        <h1 style="font-size: 30px" style="color: #07ebb9">Diet Delight</h1>
      </div>
      <div class="menu">
        <a href="/Home.html">Home</a>
        <a href="/Gallary.html">gallery</a>
        <a href="/About.html" target="_blank">about</a>
        <a href="/Contact.html">contact</a><br /><br /></div>
      <div class="container">
        <div class="wrapper">
          <div class="image">
            <img src="" alt="" />
          </div>
          <div class="content">
            <div class="icon">
              <i class="fas fa-cloud-upload-alt"></i>

```



```

</div>
<div class="text">No file chosen, yet!</div>
</div>
<div id="cancel-btn">
  <i class="fas fa-times"></i>
</div>
<div class="file-name">File name here</div>
</div>
<button onclick="defaultBtnActive()" id="custom-btn">
  Choose a file</button>
><a href="predict.html"><button onclick="" id="custom-btn">
  Classify</a>
</button>
<input id="default-btn" type="file" hidden />
</div>
<script>
const wrapper = document.querySelector(".wrapper");
const fileName = document.querySelector(".file-name");
const defaultBtn = document.querySelector("#default-btn");
const customBtn = document.querySelector("#custom-btn");
const cancelBtn = document.querySelector("#cancel-btn i");
const img = document.querySelector("img");
let regExp =
  /[0-9a-zA-Z^\&\"@\\{\}\[\]\,\$=\!-\#\(\)\.\\%|+|\~\_ ]+$/;
function defaultBtnActive() {
  defaultBtn.click();
}
defaultBtn.addEventListener("change", function () {
  const file = this.files[0];

```

```

    if (file) {
      const reader = new FileReader();
      reader.onload = function () {
        const result = reader.result;
        img.src = result;
        wrapper.classList.add("active");
      };
      cancelBtn.addEventListener("click", function () {
        img.src = "";
        wrapper.classList.remove("active");
      });
      reader.readAsDataURL(file);
    }
    if (this.value) {
      let valueStore = this.value.match(regExp);
      fileName.textContent = valueStore;
    }
  });
</script>
</div>
</kbd>
</header>
</body>
</html>
style1.css
@import url("https://fonts.googleapis.com/css?family=Montserrat:400,800");

* {
  box-sizing: border-box;

```

```
}
```

```
body {  
  background-image: linear-gradient(rgba(0, 0, 0, 0.6), rgba(0, 0, 0, 0.5)),  
    url("../images/Fruits.png");  
  background-repeat: no-repeat;  
  background-size: cover;  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  flex-direction: column;  
  font-family: "Montserrat", sans-serif;  
  height: 90vh;  
  padding-bottom: 0.5%;  
}
```

```
h1 {  
  font-weight: bold;  
  margin: 0;  
}
```

```
h2 {  
  text-align: center;  
}
```

```
p {  
  font-size: 14px;  
  font-weight: 100;  
  line-height: 20px;
```

```
    letter-spacing: 0.5px;
    margin: 20px 0 30px;
}

span {
    font-size: 12px;
}

a {
    color: #333;
    font-size: 16px;
    text-decoration: none;
    margin: 15px 0;
}

button {
    border-radius: 20px;
    border: 1px solid #046d56;
    background-color: #07ebb9;
    color: #ffffff;
    font-size: 12px;
    font-weight: bold;
    padding: 12px 45px;
    letter-spacing: 1px;
    text-transform: uppercase;
    transition: transform 80ms ease-in;
}

button:active {
```

```
    transform: scale(0.95);  
}
```

```
button:focus {  
    outline: none;  
}
```

```
button.ghost {  
    background-color: transparent;  
    border-color: #ffffff;  
}
```

```
form {  
    background-color: #ccf0ee;  
    display: flex;  
    align-items: center;  
    justify-content: center;  
    flex-direction: column;  
    padding: 0 50px;  
    height: 100%;  
    text-align: center;  
}
```

```
input {  
    background-color: rgb(250, 249, 249);  
    border: none;  
    padding: 12px 15px;  
    margin: 8px 0;  
    width: 100%;
```

```
}
```

```
.container {  
  background-color: transparent;  
  border-radius: 10px;  
  box-shadow: 0 14px 28px rgba(0, 0, 0, 0.25), 0 10px 10px rgba(0, 0, 0, 0.22);  
  position: relative;  
  overflow: hidden;  
  width: 768px;  
  max-width: 100%;  
  min-height: 480px;  
  margin-top: 5%;  
}
```

```
.form-container {  
  position: absolute;  
  top: 0;  
  height: 100%;  
  transition: all 0.6s ease-in-out;  
}
```

```
.sign-in-container {  
  left: 0;  
  width: 50%;  
  z-index: 2;  
}
```

```
.container.right-panel-active .sign-in-container {  
  transform: translateX(100%);
```

```
}
```

```
.sign-up-container {
```

```
  left: 0;
```

```
  width: 50%;
```

```
  opacity: 0;
```

```
  z-index: 1;
```

```
}
```

```
.container.right-panel-active .sign-up-container {
```

```
  transform: translateX(100%);
```

```
  opacity: 1;
```

```
  z-index: 5;
```

```
  animation: show 0.6s;
```

```
}
```

```
@keyframes show {
```

```
  0%,
```

```
  49.99% {
```

```
    opacity: 0;
```

```
    z-index: 1;
```

```
  }
```

```
  50%,
```

```
  100% {
```

```
    opacity: 1;
```

```
    z-index: 5;
```

```
  }
```

```
}
```

```
.overlay-container {  
  position: absolute;  
  top: 0;  
  left: 50%;  
  width: 50%;  
  height: 100%;  
  overflow: hidden;  
  transition: transform 0.6s ease-in-out;  
  z-index: 100;  
}
```

```
.container.right-panel-active .overlay-container {  
  transform: translateX(-100%);  
}
```

```
.overlay {  
  background: #e40606;  
  background: -webkit-linear-gradient(to right, #f30b7f, #6b094e);  
  background: linear-gradient(to right, #6cd7f1, #046d56);  
  background-repeat: no-repeat;  
  background-size: cover;  
  background-position: 0 0;  
  color: #ffffff;  
  position: relative;  
  left: -100%;  
  height: 100%;  
  width: 200%;  
  transform: translateX(0);  
  transition: transform 0.6s ease-in-out;
```



```
}
```

```
.container.right-panel-active .overlay {  
  transform: translateX(50%);  
}
```

```
.overlay-panel {  
  position: absolute;  
  display: flex;  
  align-items: center;  
  justify-content: center;  
  flex-direction: column;  
  padding: 0 40px;  
  text-align: center;  
  top: 0;  
  height: 100%;  
  width: 50%;  
  transform: translateX(0);  
  transition: transform 0.6s ease-in-out;  
}
```

```
.overlay-left {  
  transform: translateX(-20%);  
}
```

```
.container.right-panel-active .overlay-left {  
  transform: translateX(0);  
}
```

```

.overlay-right {
  right: 0;
  transform: translateX(0);
}

.container.right-panel-active .overlay-right {
  transform: translateX(20%);
}

.social-container {
  margin: 20px 0;
}

.social-container a {
  border: 1px solid #070707;
  border-radius: 50%;
  display: inline-flex;
  justify-content: center;
  align-items: center;
  margin: 0 5px;
  height: 40px;
  width: 40px;
}

* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: "Josefin Sans", sans-serif;
}

```

```
}
```

```
header {  
  width: 100%;  
  height: 1%;  
  background-image: linear-gradient(rgba(0, 0, 0, 0.6), rgba(0, 0, 0, 0.5)),  
    url("../images/Fruits.png");  
  background-repeat: no-repeat;  
  background-size: cover;  
}
```

```
nav {  
  padding-top: 10px;  
  width: 100%;  
  height: 15vh;  
  background: rgba(0, 0, 0, 0.2);  
  color: #07ebb9;  
  display: flex;  
  justify-content: space-between;  
  align-items: center;  
  text-transform: uppercase;  
}
```

```
nav .logo {  
  width: 25%;  
  text-align: center;  
  /*background: red;*/  
}
```

```
nav .menu {  
  width: 40%;  
  display: flex;  
  justify-content: space-around;  
}
```

```
nav .menu a {  
  width: 25%;  
  text-decoration: none;  
  color: white;  
  font-weight: bold;  
}
```

```
nav .menu a:first-child {  
  color: #07ebb9;  
}
```

```
main {  
  width: 100%;  
  height: 85vh;  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  text-align: center;  
  color: white;  
}
```

```
section h3 {  
  font-size: 35px;
```

```
font-weight: 200;  
letter-spacing: 3px;  
text-shadow: 1px 1px 2px black;  
}
```

```
section h1 {  
margin: 30px 0 20px 0;  
font-size: 55px;  
font-weight: 700;  
text-shadow: 2px 1px 5px black;  
text-transform: uppercase;  
}
```

```
section p {  
font-size: 25px;  
word-spacing: 2px;  
margin-bottom: 25px;  
text-shadow: 1px 1px 1px black;  
}
```

```
section a {  
padding: 12px 30px;  
border-radius: 4px;  
outline: none;  
text-transform: uppercase;  
font-size: 20px;  
font-weight: 500;  
text-decoration: none;  
letter-spacing: 1px;
```

```

    transition: all 0.5s ease;
}

section .btnone {
    /*background: #00b894;*/
    background: #fff;
    color: #000;
}

.btnone:hover {
    background: #07ebb9;
    color: white;
}

section .btntwo {
    background: #07ebb9;
    color: white;
}

.btntwo:hover {
    background: #fff;
    color: #000;
}

.change_content:after {
    content: "";
    animation: changetext 10s infinite linear;
    color: #07ebb9;
}

```

```

@keyframes changetext {
  0% {
    content: "Fruits";
  }
  20% {
    content: "Vegetables";
  }
  40% {
    content: "Legumes";
  }
  60% {
    content: "Grains";
  }
  80% {
    content: "Mango";
  }
  100% {
    content: "Grapes";
  }
}

```

### **index.html**

```

<!DOCTYPE html>
<html>
  <head>
    <title>AI-Powered Nutrition Analyzer for fitness enthusiasts</title>
    <link rel="stylesheet" type="text/css" href="/static/style.css" />
    <link
      href="https://fonts.googleapis.com/css?family=Josefin+Sans&display=swap"

```

```

    rel="stylesheet"
  />
<link
  rel="stylesheet"
  href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/3.7.2/animate.min.css"
 />
</head>
<body>
  <header>
    <nav>
      <div class="logo">
        <h1 style="font-size: 30px" style="color: #07ebb9">Diet Delight</h1>
      </div>
      <div class="menu">
        <a href="./Home.html" style="color: #07ebb9">Home</a>
        <a href="./Gallary.html">gallery</a>
        <a href="./About.html" target="_blank">about</a>
        <a href="./Contact.html">contact</a>
      </div>
    </nav>

    <main>
      <section>
        <h3>Welcome To Diet Nutrition</h3>
        <h1>
          DO EAT HEALTHY <span class="change_content"> </span>
          <span style="margin-top: -10px"> | </span>
        </h1>
        <p>"Life is a tragedy of nutrition"</p>

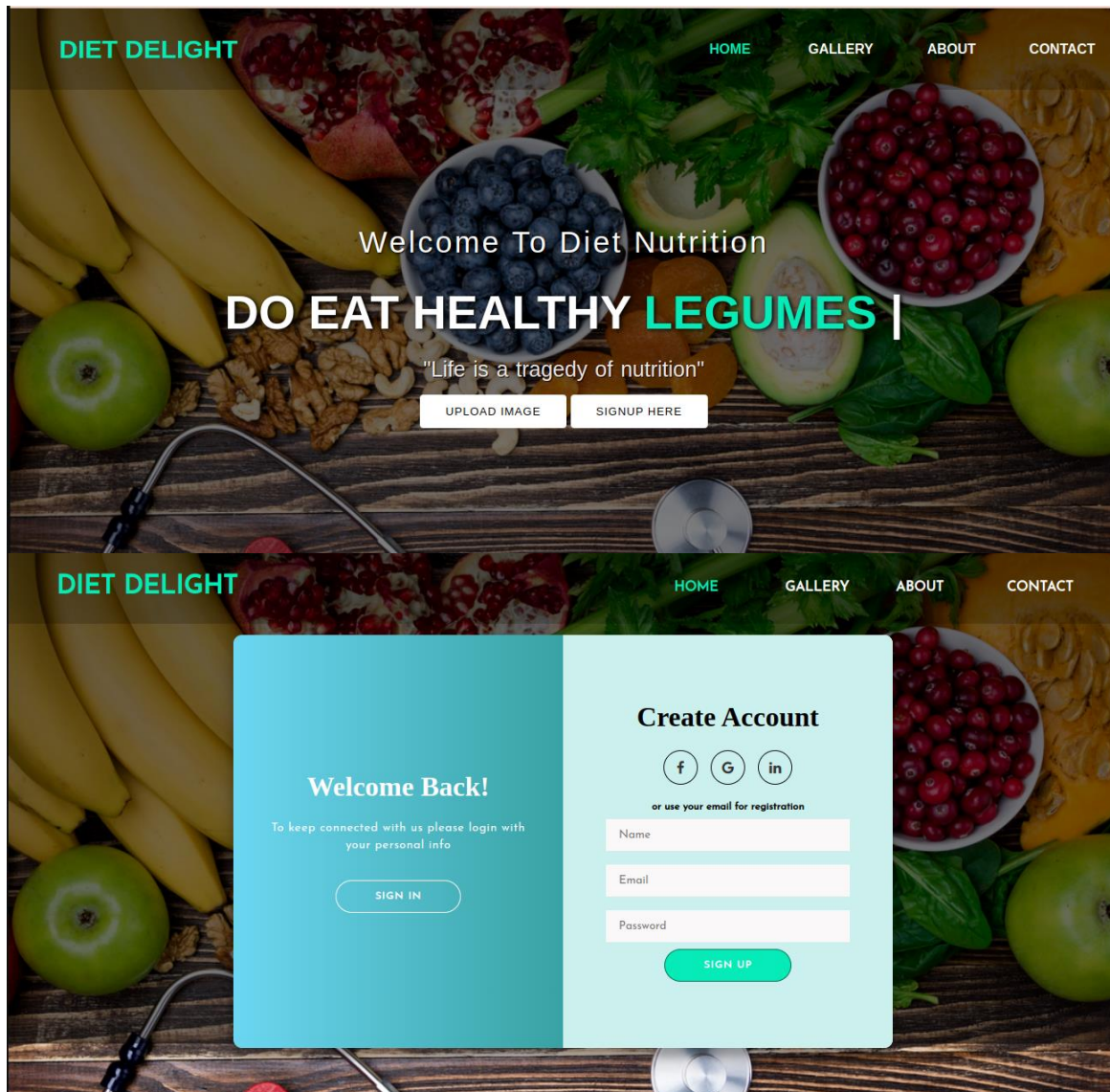
```

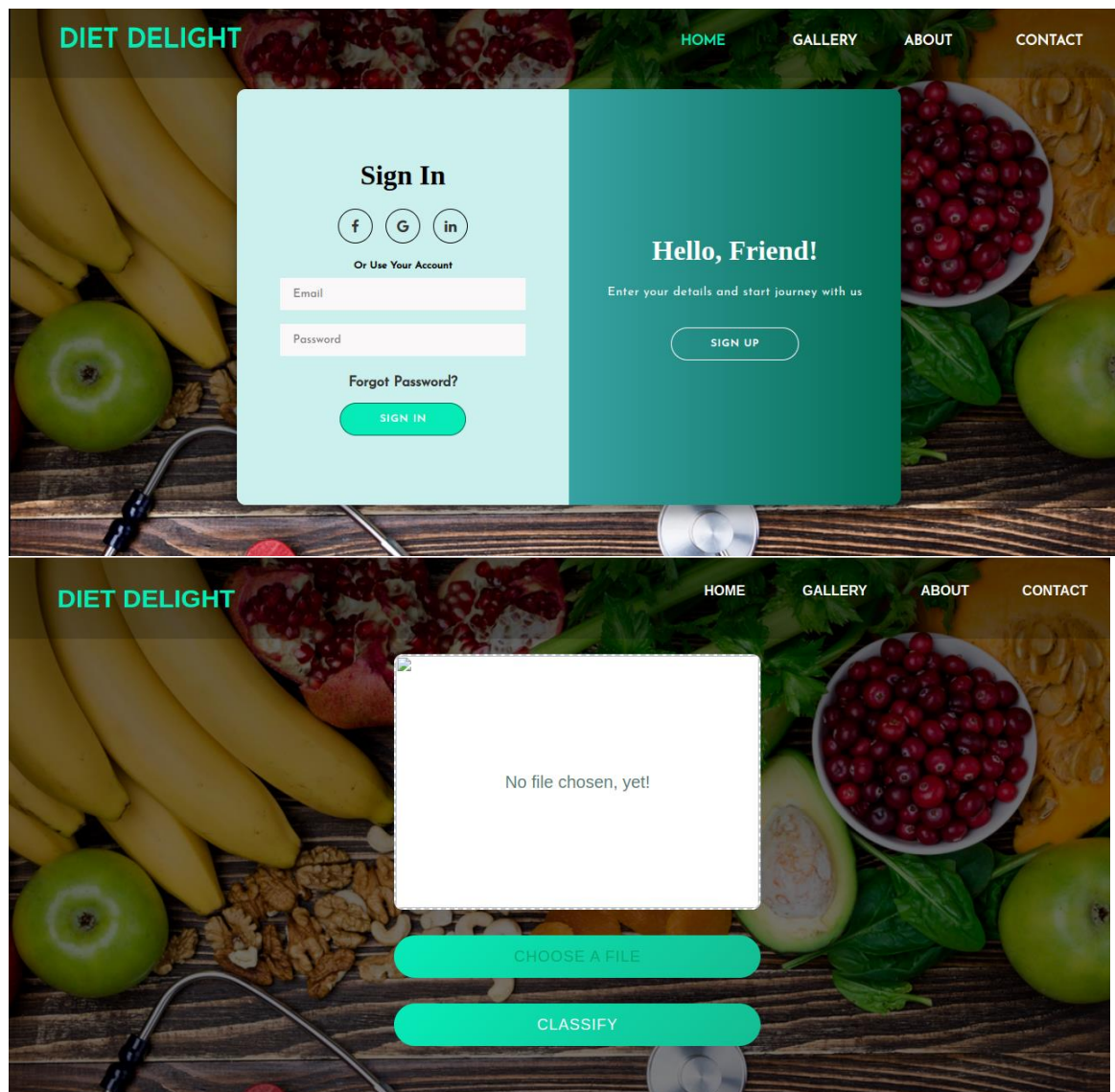


```

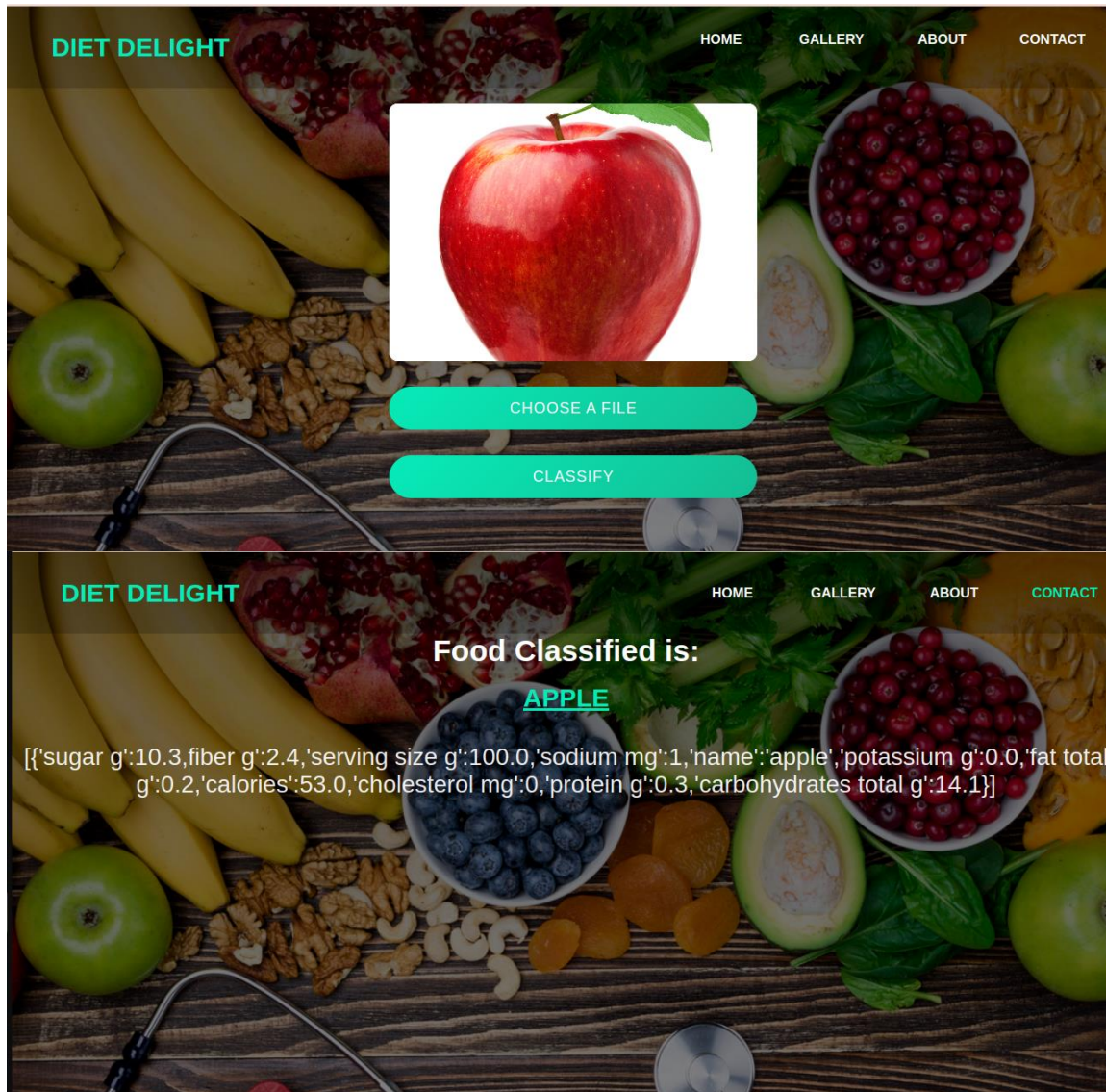
<a href="Upload Image.html" class="btnone">Upload Image</a>
<a href="Login/Singin.html" class="btntwo">signup here</a>
</section>
</main>
</header>
</body>
</html>

```









### 13.2. GitHub Link:

<https://github.com/IBM-EPBL/IBM-Project-44392-1660724431>

### 13.3. Demo Link:

<https://drive.google.com/file/d/1gbZYq21TW6Xn6z3IOpalMSKV3yCNfJfE/view?usp=sharing>