NUTRITION ASSISTANT APPLICATION IBM PROJECT REPORT TEAM ID (PNT2022TMID43019)

Submitted by

MANOGARAN K (713119104010)

THILAGAVATHY K (713119104020)

BIRUNDHA M (713119104001)

KRISHNAVENI S (713119104008)

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ANNA UNIVERSITY: CHENNAI 600025 2022

ABSTRACT

Due to the ignorance of healthy food habits, obesity rates are increasing at an alarming speed, and this is reflective of the risks to people's health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, although food packaging comes with nutrition (and calorie) labels, it's still not very convenient for people to refer to App-based nutrient dashboard systems which can analyze real-time images of a meal and analyze it for nutritional content which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle.

This project aims at building a web App that automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food. Our method employs **Clarifai's AI-Driven Food Detection Model** for accurate food identification and Food API's to give the nutritional value of the identified food.

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INTRODUCTION

1.1 PROJECT OVERVIEW

- ➤ User interacts with the Web App to Load an image.
- ➤ The image is passed to the server application, which uses Clarifai's AI-Driven Food Detection Model Service to analyze the images and Nutrition API to provide nutritional information about the analyzed Image.
- ➤ Nutritional information of the analyzed image is returned to the app for display.

1.2 PURPOSE

Lose weight with a personal diet plan to build immunity & achieve health and fitness goals creates a diet chart and meal planner from your health data and BMI so you know exactly how to go about your diet and workout.

Eat healthy with your nutrition and calorie calculator! Log meals with a touch, check your macros, or simply take a photo of your lunch. Access the largest database of Indian foods including international cuisines & healthy recipes, from dal to dosa, with Indian serving sizes.

2. LITERATURE SURVEY

2.1 Existing problem

- ➤ The application was structured in two scenes that assign a logical division of the application. The first of these is Sample Scene which contains all the sections in the application, such a recording/logging, reports, recording daily consumption, etc., with which the user interacts. The augmented reality part AR option and offers all the functionalities to scan the barcode.
- The next page in the application that you are going to interact within the application is the one that contains the main menu. After the connection is successful, the user is shown this page where they can choose what they want to do next. There are six potential actions: recording consumed foods (Calories button), consulting the information section (Info Point button), scanning the food barcode (Food but-ton), consulting recipe recommendations (Recipes button), consulting reports on personal evolution (Reports button) and entry in the profile section.

2.2 RFFERENCES

https://pubmed.ncbi.nlm.nih.gov/29436107/

https://pubmed.ncbi.nlm.nih.gov/23969411/

https://pubmed.ncbi.nlm.nih.gov/24388594/

https://pubmed.ncbi.nlm.nih.gov/16557505/

https://pubmed.ncbi.nlm.nih.gov/28724373/

https://pubmed.ncbi.nlm.nih.gov/30509262/

https://pubmed.ncbi.nlm.nih.gov/24428255/

https://pubmed.ncbi.nlm.nih.gov/23746263/

https://pubmed.ncbi.nlm.nih.gov/24398643/

https://pubmed.ncbi.nlm.nih.gov/21832898/

https://pubmed.ncbi.nlm.nih.gov/18431078/

2.3 PROBLEM STATEMENT DEFINITION:

- A nutritional problem or deficiency refers to a condition when an individuals body experiences a shortage of essential nutrients or some specific nutrient. Such problems can give rise to several health issues such as anaemia.
- ➤ The human body needs nourishment in a balanced manner to carry out all its biological processes optimally. The micro and micronutrients which one needs are not synthesised naturally inside the human body. The nutritional problems in India mainly arise when there is a lack of essential nutrients within the human body.
- ➤ If you are worried about the common nutritional problems. Fret not. Keep reading to know all you need.



mirc

3.IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS:

THINK AND FEEL:

- Organic food is better quality.
- > Wants to diversity her diet.
- Farmers should be paid fairly.
- ➤ About health and we being.

HEAR:

- > Nutrition influencers online.
- > Nutrition advice.
- > Podcasts about health.
- ➤ UK farmers are not making enough money.

SAY AND DO:

- > Buys from ethical companies.
- ➤ Shops at formers markets.
- > Cooks at home 3 times per week.
- ➤ Always takes reusable bag to the supermarket.

SEE:

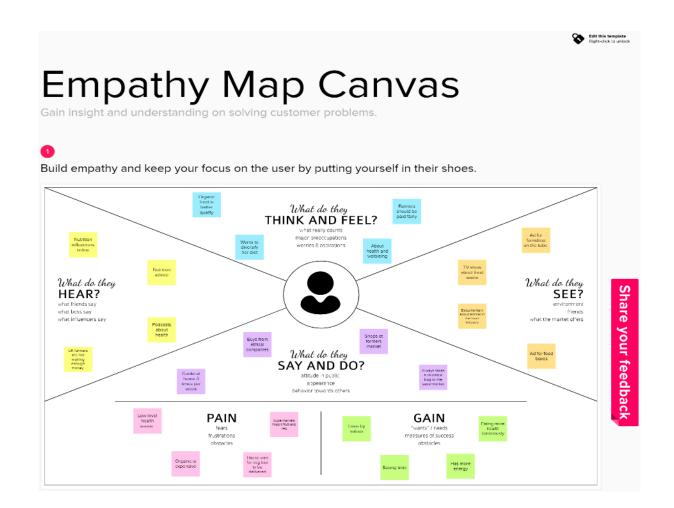
- ➤ Ad for farm drop on the tube.
- > TV show about food waste.
- ➤ Documentary about animal in the food industry.
- Ad for 1000 boxes.

PAIN:

- Low level health issues.
- > Organic is expensive.
- ➤ Has to wait for veg box to be delivered.
- > Super markets import fruit and veg.

GAIN:

- Lives by values.
- > Saving time.
- ➤ Has more energy.
- > Eating more health consciously.



3.2 IDEATION & BRAINSTORMING:

IDEAS 1:

- Make a server to be active at anytime.
- > Provide a image of food.
- Add extra features of settings that should be useful for a app user.

IDEAS 2:

- ➤ Provide a option to get extra details about a user about its health conditions.
- Provide a course for what are the food we should use and avoid.
- Make a worthful add to reach a customer.

IDEAS 3:

- ➤ Make available all kind of food for different users like some of users are heart patient, affected by any health issues.....
- ➤ Make track of user by adding his experience.

IDEAS 4:

- Take care of customers health to provide a proper nutrition foods.
- ➤ Webpage will be loaded fast.
- Make a search engine with sound and text with different languages.

GROUP IDEAS:

- > To provide easy features on a home page.
- ➤ Makes the home page comfortable to app users.
- > Contact with user and doctor.
- ➤ Avoid any issues occurred in data base.
- ➤ Add a calory tracker by thump impression.
- ➤ Make a notifications to be on at any time.
- Make chart of nutritious food.

3.3 PROPOSED SOLUTION:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Problem: Desity rates are increasing at an alarming speed, and this is reflective of the risks to people's health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, although food packaging comes with nutrition (and calorie) labels, it's still not very convenient for people to refer to App- based nutrient dashboard systems which can analyze real-time images of a meal and analyze it for nutritional content which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle.
		Solution: Choosing healthier foods (whole grains, fruits and vegetables, healthy fats and protein sources) and beverages. Limiting unhealthy foods (refined grains and sweets, potatoes, red meat, processed meat) and beverages (sugary drinks) Increasing physical activity. Limiting television time, screen time, and other "sit time"
2.	Idea / Solution description	Idea: Make available all kind of food for different users like some of user are heart patient, affected by any health issues.
3.	Novelty / Uniqueness	Uniqueness: Uncontrolled sugar consumption is one of the main causes of obesity and diabetes. Since today more people are interested in calculating amounts of sugar and fat they consume you need to create a diet and nutrition app with a sugar and fat tracker. This tracker may go in connection with automatically-

		generated recommendations that fit individual cases.		
4.	Social Impact / Customer Satisfaction	Social impact: Kids who ate healthier diets showed more friendliness and social play than kids who didn't. If you are prone to social anxiety, limit caffeine, which can really fuel anxiety symptoms and alcohol, which can also		
		interfere.		
5.	Business Model (Revenue Model)	Nutrition assistant applicationWebsite		
6.	Scalability of the Solution	 Healthy nutrition contributes to preventing non-related diseases. Knowledge about the effects of the long term provision of health-aware recommanendations in real-life situation is limited. 		

3.4 PROBLEM SOLUTION FIT:

Project TiProject Title:Nutrition Assistant Application

Team ID: PNT2022TMID43019

Project Design Phase-I - Solution Fit Template





3. TRIGGERS

Desire to live a healthy lifestyle.By knowing this success story of people who achieved their goal.Bt seeing people who are fit and healthy.

4. EMOTIONS: BEFORE / AFTER

They are scared of declining health, so they get motivated to ward eating healthy foods and move to healthy lifestyle.

TR 10. YOUR SOLUTION



ΕМ

In the service of the

By taking the picture of the food and uploading it in the app, the user can know what are all the nutrients present in the food. Clarifai's Al-Driven food detection model is used for getting accurate identification of food and APIs to give the nutritional value of the identified food.

8. CHANNELS of BEHAVIOUR



8.1 ONLINE
What kind of actions do customers take online? Extract online channels from #7

The application provides a user friendly environment that enables users to interact through chatbot to clarify their queries and sa dashboard is displayed to know the activities.

8.2 OFFLINE
What kind of actions do customers take offline?
Extract offline channels from #7 and use them for customer development.

Connecting all the users through offline meeting and giving some complimentary gifts.Conducting offline session by nutrition expert.

4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

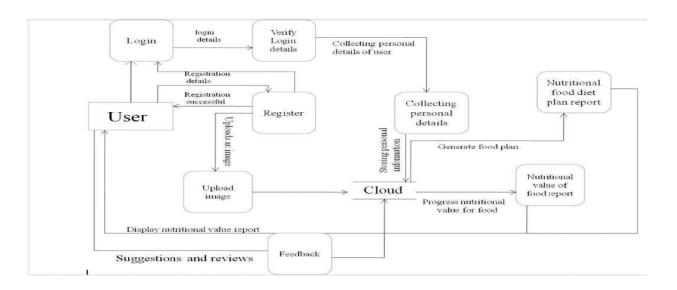
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form
		Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	User home page	Stores the user uploaded image
		API will compute the nutritional content and send it to the
		application.
FR-4	User progress	Taking picture of the food
		Uploading image from gallery
FR-5	User output	Rich and less nutritional content
		Suggest to eat
		Suggest an alternative to the particular ingredient

4.2 NON -FUNCTIONAL REQUIREMENT:

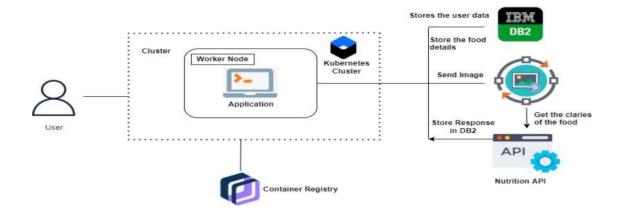
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	How effectively and easy users can learn and use a system.(To guide a new user easily understands a home page.)
NFR-2	Security	System and its data were protected against malware attacks or unauthorized access (using two factor authentication during registration its leads to confirmation from user to get a next page.)
NFR-3	Reliability	The system would run without failures for a given period of time under predefined conditions. (There is a less chance to occur any failure, then it has 80% of restoring capability even if the system fails.)
NFR-4	Performance	Deals with measure of the system response time under different load conditions (The application takes minimum 2 tom 3 seconds to load a page and predicted result will be displayed within 5 seconds with WIFI OR LTE connection.)

5. PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS:



5.2 SOLUTION & TECHNICAL ARCHITECTURE:



5.3 USER STORIES:

User Type	Functi onal Requir ement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Relea se
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering myemail, 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 haveregistered for the application	I can receive confirmatio nemail & click confirm	High	Sprint -1
	Login	USN-3	As a user, I can log into the application by entering email &password	I can login when password and email are correct	High	Sprint -1
	Collecting personal details	USN-4	As a user,I can provide a personal information for processing	I can enter the personal details	Mediu m	Sprint -1
	Upload image	USN-5	As a user,I can upload an image for the processing of food.	I can upload a food image.	High	Sprint -1
	Feedback	USN-6	As a user,I can give feedback	I can give feedback aboutthe application	Low	Sprint-1
Cloud	Nutritional value ofreport	USN-7	In cloud the food image is processed and provides thenutritional value of food.	It gives the nutritional valueof food.	High	Sprint-2
	Nutritional food dietplan report	USN-8	In cloud the food diet plan based on nutritional value is generated based on the personal information provided bythe user.	It pro vide s the diet nutr itio nal plan	Mediu m	Sprint-2

6.PROJECT PLANNING & SCHEDULING

6.1project planning &scheduling

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint- 1	User login	USN-1	As a developer I have to collect the different type of data possible and other data supportingthe model user can register for the application by entering my email, password, and confirming my password. I will receive confirmation email onecle have registered for the application I can register for the application through Gmail.	20	High	Manogaran Thilagavathy Birundha Krishnaveni
Sprint- 2	Model building	USN-2	Development of the model with the prepared data As a user can view my calories by uploading the photo of the food that I want to eat.	20	High	Manogaran Thilagavathy
Sprint-	User image analysis	USN-3	Uploaded food pic result will show in app page and its tell less and high nutrition detailsAs a user can track my calories intake and know about my food in detail.	20	High	Birundha Krishnaveni
Sprint- 4	Diet plan for free users	USN-4	As a dietician I provide a diet plan for the betterment of the user and As a user now I can make recommendations such as nutritionplans, diet plans etc	20	High	Manogaran Thilagavathy Birundha Krishnaveni

6.2 SPRINT DELEVERY SCHEDULE

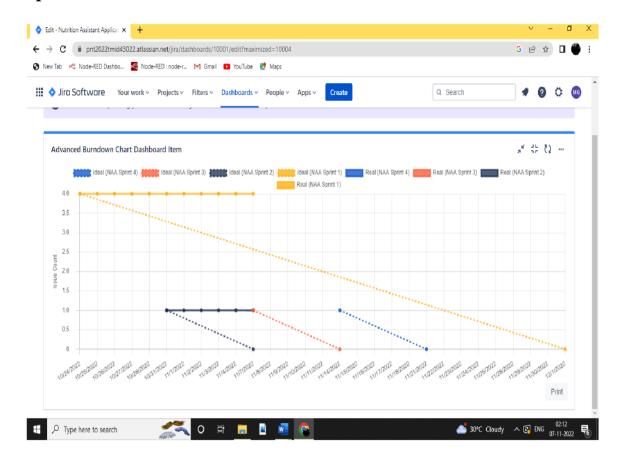
Sprint	Total Story Point	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	07\11\2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	10\11\2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	14\11\2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	18\11\2022

6.3 REPORTS FROM JIRA:

ROADMAP:



Graph:



7. Coding & Solutioning

7.1 Feature 1:

Registration & login page HTML:

```
<html
lang="en">
              <head>
              <meta charset="UTF-8">
              <meta http-equiv="X-UA-Compatible" content="IE=edge">
              <meta name="viewport" content="width=device-width, initial-</pre>
              scale=1.0">
              <link rel="stylesheet" href="index.css">
              <!--<title>Login & Registration Form</title>-->
              </head>
              <body>
              <h1 style="color:white">Nutrition Assistent Application</h1>
              <div class="container">
              <div class="forms">
              <div class="form login">
              <span class="title">Login</span>
              <form action="#">
                          <div class="input-field">
                            <input type="text" placeholder="Enter your email"</pre>
              required>
                            <i class="uil uil-envelope icon"></i>
                          </div>
                          <div class="input-field">
                            <input type="password" class="password"</pre>
              placeholder="Enter your password" required>
```

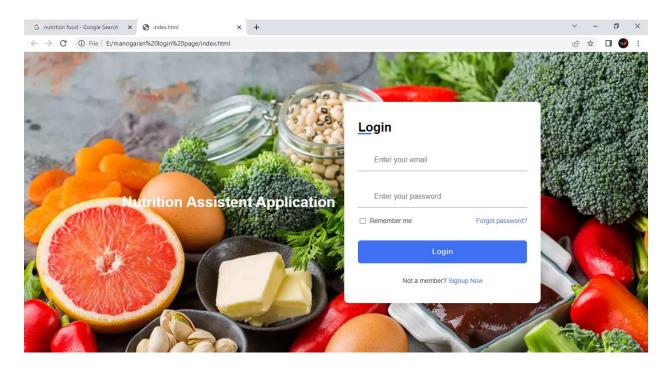
```
<i class="uil uil-lock icon"></i>
              <i class="uil uil-eye-slash showHidePw"></i>
            </div>
            <div class="checkbox-text">
              <div class="checkbox-content">
                 <input type="checkbox" id="logCheck">
                 <label for="logCheck" class="text">Remember
me</label>
              </div>
              <a href="#" class="text">Forgot password?</a>
            </div>
            <div class="input-field button">
              <input type="button" value="Login">
            </div>
         </form>
         <div class="login-signup">
            <span class="text">Not a member?
              <a href="#" class="text signup-link">Signup
Now < /a >
            </span>
         </div>
       </div>
       <script src="index.js"></script>
       <!-- Registration Form -->
       <div class="form signup">
         <span class="title">Registration</span>
         <form action="#">
            <div class="input-field">
              <input type="text" placeholder="Enter your name"</pre>
required>
```

```
<i class="uil uil-user"></i>
            </div>
            <div class="input-field">
              <input type="text" placeholder="Enter your email"</pre>
required>
              <i class="uil uil-envelope icon"></i>
            </div>
            <div class="input-field">
              <input type="password" class="password"</pre>
placeholder="Create a password" required>
              <i class="uil uil-lock icon"></i>
            </div>
            <div class="input-field">
              <input type="password" class="password"</pre>
placeholder="Confirm a password" required>
              <i class="uil uil-lock icon"></i>
              <i class="uil uil-eye-slash showHidePw"></i>
            </div>
            <div class="checkbox-text">
              <div class="checkbox-content">
                 <input type="checkbox" id="termCon">
                 <label for="termCon" class="text">I accepted
all terms and conditions</label>
              </div>
            </div>
            <div class="input-field button">
              <input type="button" value="Signup">
            </div>
         </form>
         <div class="login-signup">
            <span class="text">Already a member?
              <a href="#" class="text login-link">Login
Now</a>
```

```
</span>
</div>
</div>
</div>
</div>

<!--<script src="index.js"></script>-->
</body>
</html>
```

Login page Solution:



Picture upload page HTML:

```
YPE
html>
            <html lang="en">
            <head>
              <meta charset="UTF-8">
              <meta http-equiv="X-UA-Compatible" content="IE=edge">
              <meta name="viewport" content="width=device-width, initial-</pre>
            scale=1.0">
              k rel="stylesheet"
            href="https://use.fontawesome.com/releases/v5.15.3/css/all.css"
            integrity="sha384-
            SZXxX4whJ79/gErwcOYf+zWLeJdY/qpuqC4cAa9rOGUstPomtq
            puNWT9wdPEn2fk" crossorigin="anonymous">
              <link rel="stylesheet" href="css/style.css">
              <title>Upload File</title>
            </head>
            <body>
              <div class="container">
                <input type="file" class="upload_hide" id="upload_costum"</pre>
            multiple>
                 <label for="upload_costum" class="upload_label">
                   <div class="image">
                     <img src="" alt="">
                   </div>
                   <i class="fas fa-cloud-upload-alt"></i>
                   Drag & Drop to Upload File
                   <button class="choose_file">Choose a File</button>
                </label>
                <button class="delete_file"> Delete File</button>
              </div>
              <script src="https://code.jquery.com/jquery-3.6.0.js"</pre>
            integrity="sha256-
            H+K7U5CnXl1h5ywQfKtSj8PCmoN9aaq30gDh27Xc0jk="
            crossorigin="anonymous"></script>
              <script>
```

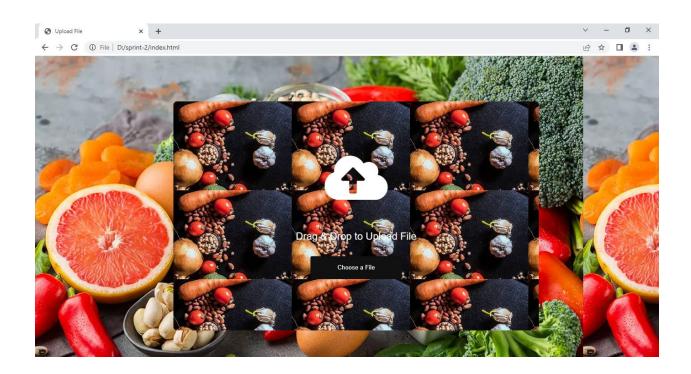
<!DOCT

```
$('.delete_file').hide();
$('#upload_costum').change(function(event) {
    let tmppath = URL.createObjectURL(event.target.files[0])
    $('.image > img').fadeIn('fast').attr('src',tmppath)
    $('.delete_file').show();
    $('.choose_file').hide();

$('.delete_file').click(function() {
        $('.image > img').fadeIn('fast').attr('src',")
        $('.delete_file').hide();

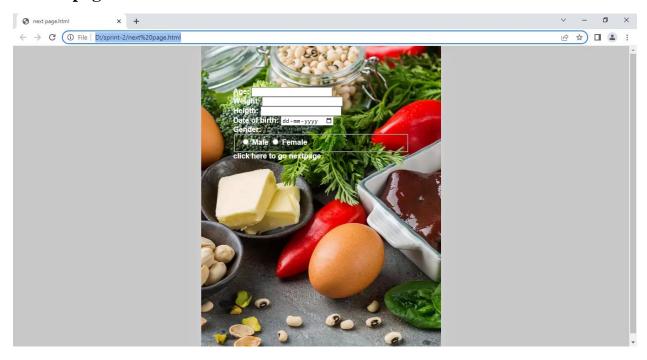
})
})
</script>
</body>
<br/>
</body>
<br/>
</body>
<br/>
```

Picture upload page solution:



Details page HTML:

Details page solution:



Registration & login page CSS:

```
*{
         margin: 0;
         padding: 0;
         box-sizing: border-box;
         font-family: 'Poppins', sans-serif;
      }
      body{
         height: 100vh;
         display: flex;
         align-items: center;
         justify-content: center;
         background-image:url(https://static.toiimg.com/photo/74963413.cms);
         background-size: cover;
         background-attachment:fixed;
      }
      .container{
         position: relative;
         max-width: 430px;
         width: 100%;
         background:white;
         border-radius: 10px;
         box-shadow: 0 5px 10px rgba(0, 0, 0, 0.1);
         overflow: hidden;
         margin: 0 20px;
      .container .forms{
         display: flex;
         align-items: center;
         height: 440px;
         width: 200%;
```

```
transition: height 0.2s ease;
}
.container .form{
  width: 50%;
  padding: 30px;
  background-color: transparent;
  transition: margin-left 0.18s ease;
.container.active .login{
  margin-left: -50%;
  opacity: 0;
  transition: margin-left 0.18s ease, opacity 0.15s ease;
}
.container .signup{
  opacity: 0;
  transition: opacity 0.09s ease;
.container.active .signup{
  opacity: 1;
  transition: opacity 0.2s ease;
}
.container.active .forms{
  height: 600px;
}
.container .form .title{
  position: relative;
  font-size: 27px;
  font-weight: 600;
}
```

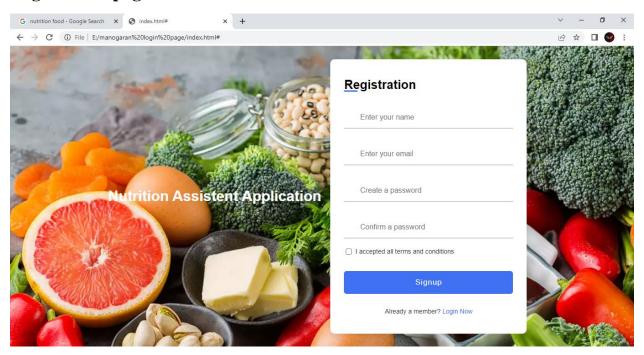
```
.form .title::before{
  content: ";
  position: absolute;
  left: 0;
  bottom: 0;
  height: 3px;
  width: 30px;
  background-color: #4070f4;
  border-radius: 25px;
.form .input-field{
  position: relative;
  height: 50px;
  width: 100%;
  margin-top: 30px;
.input-field input{
  position: absolute;
  height: 100%;
  width: 100%;
  padding: 0 35px;
  border: none;
  outline: none;
  font-size: 16px;
  border-bottom: 2px solid #ccc;
  border-top: 2px solid transparent;
  transition: all 0.2s ease;
.input-field input:is(:focus, :valid){
  border-bottom-color: #4070f4;
}
```

```
.input-field i{
  position: absolute;
  top: 50%;
  transform: translateY(-50%);
  color: #999;
  font-size: 23px;
  transition: all 0.2s ease;
}
.input-field input:is(:focus, :valid) \sim i{
  color: #4070f4;
}
.input-field i.icon{
  left: 0;
.input-field i.showHidePw{
  right: 0;
  cursor: pointer;
  padding: 10px;
}
.form .checkbox-text{
  display: flex;
  align-items: center;
  justify-content: space-between;
  margin-top: 20px;
.checkbox-text .checkbox-content{
  display: flex;
  align-items: center;
.checkbox-content input{
```

```
margin: 0 8px -2px 4px;
  accent-color: #4070f4;
.form .text{
  color: #333;
  font-size: 14px;
}
.form a.text{
  color: #4070f4;
  text-decoration: none;
.form a:hover{
  text-decoration: underline;
}
.form .button{
  margin-top: 35px;
.form .button input{
  border: none;
  color: #fff;
  font-size: 17px;
  font-weight: 500;
  letter-spacing: 1px;
  border-radius: 6px;
  background-color: #4070f4;
  cursor: pointer;
  transition: all 0.3s ease;
}
.button input:hover{
  background-color: #265df2;
```

```
.form .login-signup{
   margin-top: 30px;
   text-align: center;
}
```

Registration page solution:



Picture upload page CSS:

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

body{
```

```
height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
  background-image:url(https://static.toiimg.com/photo/74963413.cms);
  background-size: cover;
  background-attachment:fixed;
}
.container{
  position: relative;
  max-width: 430px;
  width: 100%;
  background:white;
  border-radius: 10px;
  box-shadow: 0 5px 10px rgba(0, 0, 0, 0.1);
  overflow: hidden;
  margin: 0 20px;
.container .forms{
  display: flex;
  align-items: center;
  height: 440px;
  width: 200%;
  transition: height 0.2s ease;
.container .form{
  width: 50%;
  padding: 30px;
  background-color: transparent;
  transition: margin-left 0.18s ease;
}
```

```
.container.active .login{
  margin-left: -50%;
  opacity: 0;
  transition: margin-left 0.18s ease, opacity 0.15s ease;
}
.container .signup{
  opacity: 0;
  transition: opacity 0.09s ease;
.container.active .signup{
  opacity: 1;
  transition: opacity 0.2s ease;
.container.active .forms{
  height: 600px;
}
.container .form .title{
  position: relative;
  font-size: 27px;
  font-weight: 600;
}
. form . title::before \{
  content: ";
  position: absolute;
  left: 0;
  bottom: 0;
  height: 3px;
  width: 30px;
  background-color: #4070f4;
  border-radius: 25px;
}
```

```
.form .input-field{
  position: relative;
  height: 50px;
  width: 100%;
  margin-top: 30px;
.input-field input{
  position: absolute;
  height: 100%;
  width: 100%;
  padding: 0 35px;
  border: none;
  outline: none;
  font-size: 16px;
  border-bottom: 2px solid #ccc;
  border-top: 2px solid transparent;
  transition: all 0.2s ease;
.input-field input:is(:focus, :valid){
  border-bottom-color: #4070f4;
}
.input-field i{
  position: absolute;
  top: 50%;
  transform: translateY(-50%);
  color: #999;
  font-size: 23px;
  transition: all 0.2s ease;
.input-field input:is(:focus, :valid) ~ i{
  color: #4070f4;
}
```

```
.input-field i.icon{
  left: 0;
.input-field i.showHidePw{
  right: 0;
  cursor: pointer;
  padding: 10px;
.form .checkbox-text{
  display: flex;
  align-items: center;
  justify-content: space-between;
  margin-top: 20px;
}
.checkbox-text .checkbox-content{
  display: flex;
  align-items: center;
}
.checkbox-content input{
  margin: 0 8px -2px 4px;
  accent-color: #4070f4;
}
.form .text{
  color: #333;
  font-size: 14px;
.form a.text{
  color: #4070f4;
```

```
text-decoration: none;
.form a:hover{
  text-decoration: underline;
}
.form .button{
  margin-top: 35px;
.form .button input{
  border: none;
  color: #fff;
  font-size: 17px;
  font-weight: 500;
  letter-spacing: 1px;
  border-radius: 6px;
  background-color: #4070f4;
  cursor: pointer;
  transition: all 0.3s ease;
}
.button input:hover{
  background-color: #265df2;
}
.form .login-signup{
  margin-top: 30px;
  text-align: center;
}
```

Details page CSS:

* {

```
margin: 0;
  padding: 0;
  box-sizing: border-box;
body {
  font-family: sans-serif;
  background-image: url(https://static.toiimg.com/photo/74963413.cms);
.container {
  max-width: 1160px;
  margin: 0 auto;
.upload_hide {
  position: absolute;
  max-width: 840px;
  max-height: 540px;
  width: 100%;
  height: 100%;
  background-color: red;
  left: 50%;
  top: 50%;
  transform: translate(-50%, -50%);
  z-index: 5;
  opacity: 0;
.upload_label {
  position: absolute;
  max-width: 800px;
  max-height: 500px;
  width: 100%;
  height: 100%;
  margin: 20px !important;
```

```
background-image: url(https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcS9jfZEL757HMCpcGyebkYhIgy
ukE48Stto-w&usqp=CAU);
  left: 50%;
  top: 50%;
  transform: translate(-50%, -50%);
  display: flex;
  justify-content: center;
  text-align: center;
  border-radius: 8px;
  flex-direction: column;
.choose_file {
  width: 200px;
  height: 50px;
  border: none;
  background-color: #111111;
  color: #fff;
  border-radius: 3px;
  margin: 30px auto;
  pointer-events: none;
}
.delete_file {
  width: 200px;
  height: 50px;
  border: none;
  background-color: #ffffff;
  color: #fff;
  border-radius: 3px;
  margin: 30px auto;
  cursor: pointer;
  z-index: 6;
  position: absolute;
  top: 62%;
  left: 51%;
  transform: translate(-50%, -50%);
```

```
outline: none;
.upload_label > i {
  color: #ffffff;
  font-size: 110px;
  margin: 30px 0;
}
.drag_text {
  color: #ffffff;
  font-size: 22px;
  margin: 30px 0 0 0;
}
.image > img {
  padding: 40px;
  width: 80%;
  height: auto;
  position: absolute;
  left: 10%;
  top: 0;
```

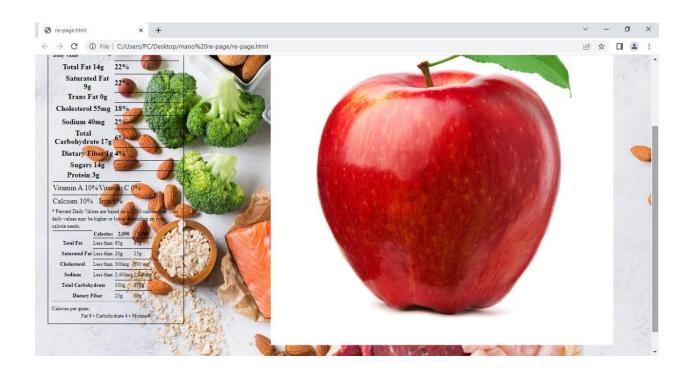
7.2 Feature 2:

Result page HTML:

```
<!DOCT
YPE
html>
            <html lang="en">
            <head>
              <meta charset="UTF-8">
              <meta http-equiv="X-UA-Compatible" content="IE=edge">
              <meta name="viewport" content="width=device-width, initial-</pre>
            scale=1.0">
              k rel="stylesheet"
            href="https://use.fontawesome.com/releases/v5.15.3/css/all.css"
            integrity="sha384-
            SZXxX4whJ79/gErwcOYf+zWLeJdY/qpuqC4cAa9rOGUstPomtq
            puNWT9wdPEn2fk" crossorigin="anonymous">
              <link rel="stylesheet" href="css/style.css">
              <title>Upload File</title>
            </head>
            <body>
              <div class="container">
                <input type="file" class="upload_hide" id="upload_costum"</pre>
            multiple>
                 <label for="upload_costum" class="upload_label">
                   <div class="image">
                     <img src="" alt="">
                   </div>
                   <i class="fas fa-cloud-upload-alt"></i>
                   Drag & Drop to Upload File
                   <button class="choose_file">Choose a File</button>
                 </label>
                 <button class="delete_file"> Delete File</button>
              </div>
              <script src="https://code.jquery.com/jquery-3.6.0.js"</pre>
            integrity="sha256-
```

```
H+K7U5CnXl1h5ywQfKtSj8PCmoN9aaq30gDh27Xc0jk="
crossorigin="anonymous"></script>
  <script>
     $('.delete_file').hide();
     $('#upload_costum').change(function(event) {
       let tmppath = URL.createObjectURL(event.target.files[0])
       $('.image > img').fadeIn('fast').attr('src',tmppath)
       $('.delete_file').show();
       $('.choose_file').hide();
       $('.delete_file').click(function() {
          $('.image > img').fadeIn('fast').attr('src',")
        $('.delete_file').hide();
       })
     })
  </script>
<a href="re-page.html">click here upload the image</a>
</body>
</html>
```

Result page solution:



Result page CSS:

```
.image
{
    width: 750px;
    float: right;
    margin: 75px;
}
body {
    font-size: small;
    line-height: 1.4;
    background-image: url(https://cdn1.sph.harvard.edu/wp-content/uploads/sites/30/2018/11/shutterstock_723278326-1200x882.jpg);
    }
    p {
        margin: 0;
    }
    .performance-facts {
        border: 1px solid black;
        margin: 20px;
```

```
float: left;
  width: 280px;
  padding: 0.5rem;
  tables {
   border-collapse: collapse;
 .performance-facts__title {
  font-weight: bold;
  font-size: 2rem;
  margin: 0 0 0.25rem 0;
 .performance-facts__header {
  border-bottom: 10px solid black;
  padding: 0 0 0.25rem 0;
  margin: 0 0 0.5rem 0;
  p {
   margin: 0;
  }
.performance-facts__table {
  width: 100%;
}
   td {
    border: 0;
   font-weight: normal;
   text-align: left;
   padding: 0.25rem 0;
   border-top: 1px solid black;
   white-space: nowrap;
  .blank-cell {
   width: 1rem;
   border-top: 0;
```

```
}
            .small-info {
             font-size: 0.7rem;
            .performance-facts__table--small {
             border-bottom: 1px solid #999;
             margin: 0 0 0.5rem 0;
            .performance-facts__table--grid {
             margin: 0 0 0.5rem 0;
                 content: "•";
                 font-weight: bold;
                 margin: 0 0.25rem 0 0;
            .text-center {
             text-align: center;
            .thick-end {
             border-bottom: 10px solid black;
            .thin-end {
             border-bottom: 1px solid black;
Diet plan page HTML:
 class="container-
                       <div class="row" id="dca_app">
                     <link rel="stylesheet" href="css/sprint-4.css">
```

<div

fluid">

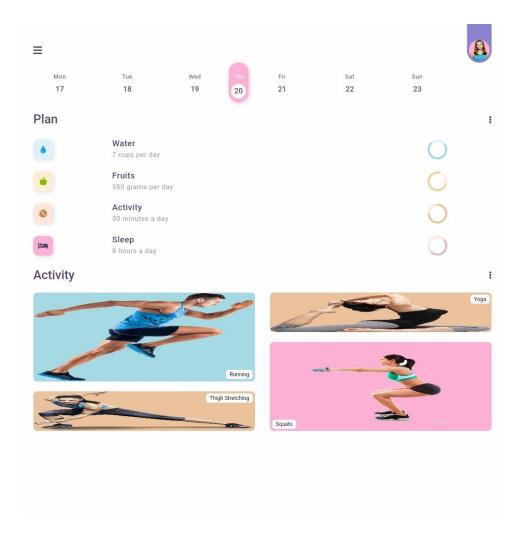
```
<section class="col-12" id="dca_header_bar">
       <div class="row">
         <div class="col-4">
           <i class="fa fa-bars"></i>
         </div>
         <div class="col-8 text-right">
            <img
src="https://i.postimg.cc/tRrRWdgf/profile.png" alt="">
         </div>
       </div>
    </section>
    <section class="col-12" id="dca_date_bar">
       <div>
         \langle li \rangle
              <span class="day">Mon</span>
              <span class="date">17</span>
            \langle li \rangle
              <span class="day">Tue</span>
              <span class="date">18</span>
            \langle li \rangle
              <span class="day">Wed</span>
              <span class="date">19</span>
            <span class="day">Thu</span>
              <span class="date">20</span>
            \langle li \rangle
              <span class="day">Fri</span>
              <span class="date">21</span>
            \langle li \rangle
              <span class="day">Sat</span>
              <span class="date">22</span>
```

```
<li>>
         <span class="day">Sun</span>
         <span class="date">23</span>
       </div>
</section>
<section class="col-12" id="dca_plan_tab">
  <div class="row heading">
    <div class="col-8">
       <span>Plan</span>
    </div>
    <div class="col-4 text-right">
       <i class="fa fa-ellipsis-v"></i>
    </div>
  </div>
  <div class="row content c1">
    <div class="col-2">
       <i class="fas fa-tint"></i>
    </div>
    <div class="col-8">
       <span>Water</span>
       <span>7 cups per day</span>
    </div>
    <div class="col-2">
       <span class="circle"></span>
    </div>
  </div>
  <div class="row content c2">
    <div class="col-2">
       <i class="fa fa-apple-alt"></i>
    </div>
    <div class="col-8">
       <span>Fruits</span>
       <span>350 grams per day</span>
    </div>
    <div class="col-2">
```

```
<span class="circle"></span>
    </div>
  </div>
  <div class="row content c3">
    <div class="col-2">
       <i class="fa fa-basketball-ball"></i>
    </div>
    <div class="col-8">
       <span>Activity</span>
       <span>30 minutes a day</span>
    </div>
    <div class="col-2">
       <span class="circle"></span>
    </div>
  </div>
  <div class="row content c4">
    <div class="col-2">
       <i class="fa fa-bed"></i>
    </div>
    <div class="col-8">
       <span>Sleep</span>
       <span>8 hours a day</span>
    </div>
    <div class="col-2">
       <span class="circle"></span>
    </div>
  </div>
</section>
<section class="col-12" id="dca_activity_tab">
  <div class="row heading">
    <div class="col-8">
       <span>Activity</span>
    </div>
    <div class="col-4 text-right">
       <i class="fa fa-ellipsis-v"></i>
    </div>
  </div>
```

```
<div class="row">
         <div class="col-6">
            <div class="run activities">
src="https://i.postimg.cc/mZqYVHXX/running.png"
alt="">
              <span>Running</span>
            </div>
            <div class="stretch activities">
              <img
src="https://i.postimg.cc/htGM5B8M/thigh-stretching.png"
alt="">
              <span>Thigh Stretching</span>
            </div>
         </div>
         <div class="col-6">
            <div class="yoga activities">
              <img
src="https://i.postimg.cc/nVvFw8Ty/yoga.png" alt="">
              <span>Yoga</span>
            </div>
            <div class="squat activities">
              <img
src="https://i.postimg.cc/T3BB613C/squats.png" alt="">
              <span>Squats</span>
            </div>
         </div>
       </div>
     </section>
  </div>
</div>
```

Diet plan page solution:



Diet plan page CSS:

```
#dca_app > section:not(#dca_header_bar){
      padding: 0px 15px 0;
}
/* Start of DCA Header Bar */
#dca_header_bar img{
      height: 50px;
      width: 50px;
      border-radius: 50%;
      background: #fcb0d4;
      border: 4px solid #8b83d0;
}
#dca_header_bar:before{
      position: absolute;
      display: block;
      content: ";
      height: 90px;
      width: 50px;
      background: #8b83d0;
      right: 15px;
      top: -40px;
      border-bottom-left-radius: 25px;
      border-bottom-right-radius: 25px;
}
#dca_header_bar i{
      line-height: 50px;
      font-size: 20px;
}
/* End of DCA Header Bar */
```

```
/* Start of DCA Date Bar */
#dca_date_bar ul{
      padding: 0;
}
#dca_date_bar ul li{
      list-style: none;
      float: left;
      text-align: center;
      width: calc(100%/7);
      padding-top: 20px;
}
#dca_date_bar ul li span{
      display: block;
}
#dca_date_bar ul li span.day{
  font-size: 12px;
      letter-spacing: 0.5px;
      margin-bottom: 2px;
}
#dca_date_bar ul li .date{
  font-size: 15px;
  font-weight: 500;
  margin-top: 5px;
}
#dca_date_bar .active{
      background: #fcb0d4;
      height: 80px;
      width: 40px;
```

```
border-radius: 20px;
      padding-top: 20px;
      box-shadow: 2px 2px 8px -1px rgba(225,128,192,0.6);
}
#dca_date_bar .active .day{
      color: #fff;
}
#dca_date_bar .active .date{
      background: #fefefe;
      height: 30px;
      width: 30px;
      border-radius: 50%;
      line-height: 30px;
      text-align: center;
      margin-left: 5px;
}
/* End of DCA Date Bar */
/* Start of DCA Plan Tab */
#dca_plan_tab .heading{
      margin-bottom: 15px;
}
#dca_plan_tab .heading span{
      font-size: 25px;
      font-weight: 500;
}
#dca_plan_tab .heading i{
```

```
font-size: 15px;
      line-height: 40px;
}
#dca_plan_tab .content{
      margin-bottom: 15px;
      height: 50px;
}
#dca_plan_tab .content i{
      position: absolute;
      background: #dff1fb;
      height: 40px;
      width: 40px;
      border-radius: 10px;
      text-align: center;
      line-height: 40px;
      bottom: 5px;
}
#dca_plan_tab .c1 i{
      background: #dff1fb;
      color: #1ca3ec;
      box-shadow: 2px 2px 8px -1px rgba(0,0,0,0.15);
}
#dca_plan_tab .c2 i{
      background: #feeed5;
      color: #8db600;
      box-shadow: 2px 2px 8px -1px rgba(0,0,0,0.15);
}
#dca_plan_tab .c3 i{
      background: #ffe7dc;
      /*background: #fbd3c0;*/
```

```
color: #CF5300;
      box-shadow: 2px 2px 8px -1px rgba(0,0,0,0.15);
}
#dca_plan_tab .c4 i{
      background: #fcb0d4;
      box-shadow: 2px 2px 8px -1px rgba(0,0,0,0.15);
}
#dca_plan_tab .content span{
      display: block;
}
#dca_plan_tab .content div.col-8 span:first-child{
      font-size: 17px;
      font-weight: 500;
      letter-spacing: 0.5px;
}
#dca_plan_tab .content div.col-8 span:last-child{
      font-size: 14px;
      font-weight: 400;
      color: rgba(85,71,107,0.6);
      letter-spacing: 0.5px;
}
#dca_plan_tab span.circle{
      position: absolute;
      height: 40px;
      width: 40px;
      border-radius: 50%;
      border: 5px solid #dff1fb;
      border-left-color: rgba(0,0,255,0.3);
      bottom: 5px;
}
```

```
#dca_plan_tab .c1 span.circle{
      border: 4px solid #a5d9e4;
      border-left-color: #dff1fb;
      transform: rotate(95deg);
}
#dca_plan_tab .c2 span.circle{
      border: 4px solid #f9d090;
      border-left-color: #feeed5;
      transform: rotate(150deg);
}
#dca_plan_tab .c3 span.circle{
      border: 4px solid #ecc29c;
      border-left-color: #ffe7dc;
      transform: rotate(40deg);
}
#dca_plan_tab .c4 span.circle{
      border: 4px solid #edb1cd;
      border-left-color: #ffe9de;
      border-top-color: #ffe9de;
      transform: rotate(2deg);
}
/* End of DCA Plan Tab */
/* Start of DCA Activity Tab */
#dca_activity_tab .heading{
      margin-bottom: 15px;
}
```

```
#dca_activity_tab .heading span{
      font-size: 25px;
      font-weight: 500;
}
#dca_activity_tab .heading i{
      font-size: 15px;
      line-height: 40px;
}
#dca_activity_tab img{
      height: 150px;
      width: 100%;
      border-radius: 8px;
}
.activities span{
      position: absolute;
      font-size: 11px;
      background: white;
      padding: 1px 7px;
      border-radius: 5px;
      color: #000;
      z-index: 1;
}
.run img{
      background: #a5d9e4;
      height: 180px !important;
}
.run span{
      right: 20px;
```

```
bottom: 105px;
}
.yoga img{
      height: 80px !important;
      background: #ecc29c;
      border-radius: 8px !important;
}
.yoga span{
      right: 19px;
      top: 4px;
}
.stretch img{
      margin-top: 20px;
      height: 80px !important;
      background: #ecc29c;
      border-radius: 8px !important;
}
.stretch span{
      right: 20px;
      bottom: 57px;
}
. squat img \{\\
      background: #fcb0d4;
      height: 180px !important;
      margin-top: 20px;
}
.squat span{
      left: 20px;
```

```
bottom: 4px;
```

8.TESTING:

8.1 TESTING CASES

Test cases	feature	Test scenario	Pre request	Execute	Working	Result
login	functional	Verify user details for opening home page	1.HTML 2.CSS 3.JS	Enter the user id, password for opening home page	Login should display in the screen	pass
Home page	Functional	Verify the user details for opening home page for the user can enter their URL link	Integrate with flask	The user can enter URL link in our home page in shows the login websites is fake or not	It shows the user websites is phishing website or not	pass

8.2 User Acceptance testing:

task	Severity 1	Severity 1	Severity 1	Severity 1	Sub total
Login	10	4	5	5	13
Home page	2	0	2	0	17
Modul building	5	3	2	1	4
Executed the modul	15	5	5	10	3
Flask (app.py)	0	0	0	0	3
Flask (IBM app.py)	0	0	1	1	1
Deploy the model	0	5	2	1	2
Total	32	17	17	18	84

Test case analysis:

Section	Total cases	Not tested	Fail	Pass
Login	10	0	0	10
Home page	40	0	0	40

9.Result:

9.1 Performance Metrics:

s.no	Project	Scope/feature	Function	Hardware	Software	Load/volume	Risk-
	name		changes	changes	changes	changes	score
1	LOGIN	New	Low	No	moderate	No changes	orange
	PAGE			changes			
2	IMAGE	New	High	No	no	low	green
	UPLOAD			changes			
	PAGE						
3	RESULT	New	Moderate	No	no	low	green
	PAGE			changes			

S.no	Project over view	NFT Test approach	Approvals/sign off
1	Login page	Using Python and	
		flask	
2	Image upload page	Using Python and	
		flask	
3	User web application	Using Python and	
		flask	

S.no	Project	NFT test	NFR-	Test	Go / no -	Identify defects	Approvals/signOff
	over	approach	Met	outcome	go		
	view				decision		
		T 7.	N T	D		T1 (00 1/1	
1	Login	Using	No	Expectance	Go	Identified/closed	
	page	python		met			
		flask					
2	Image	Using	Yes	Expectance	No – go	Identified/	
	upload	python		partially		rectified	
		flask		met			
3	Result	Using	No	Expectance	Go	Identified/	
	page	python		partially		rectified	
		flask		met			

10.ADVANTAGES & DISADVANTAGES:

Advantages:

➤ A well-balanced diet provides all of the: energy you need to keep active throughout the day. nutrients you need for growth and repair, helping you to stay strong and healthy and help to prevent diet-related illness, such as some cancers.

Dis-Advantages:

- > being overweight or obese
- > tooth decay
- ▶ high blood pressure
- ➤ high cholesterol
- ➤ heart disease and stroke

- > type-2 diabetes
- > osteoporosis
- > some cancers
- > depression
- > eating disorders.

CONCLUSION:

- ➤ Good nutrition promotes not only better physical health and reduced susceptibility to disease, but has also been demonstrated to contribute to cognitive development and academic success. Left to their own devices, children will not automatically select healthy foods.
- Most countries in the region implement school health and nutrition programmes, including school feeding, deworming, vitamin and mineral supplementation, etc. Innovative, creative and effective school nutrition education programmes exist in some countries in the region. However, these are often small-scale and implemented as pilot projects, focus on children with special needs and prioritize the transfer of knowledge over the promotion of active learning and the creation of appropriate attitudes, life skills and behaviour. Generally, nutrition education is not systematically integrated into school curricula in the region.

12.FUTURE SCOPE:

- The scope of this field is as follows: Graduates can work as a project assistant, project associate at an organization like PHFI, WHO, UNICEF, health organizations. Work as a chief nutritionist in NGO or private organizations. Work as a Regulatory affairs specialist.
- ➤ Nutrition is a good major for students who would like to become a part of the healthcare workforce after around four years of college and without necessarily providing direct patient care. An undergraduate degree in nutrition is also ideal for those who are planning on entering graduate or medical school.

13.APPENDIX:

Sample coding:

```
<html
lang="en">
             <head>
             <meta charset="UTF-8">
             <meta http-equiv="X-UA-Compatible" content="IE=edge">
             <meta name="viewport" content="width=device-width, initial-</pre>
             scale=1.0">
             <link rel="stylesheet" href="index.css">
             <!--<title>Login & Registration Form</title>-->
             </head>
             <body>
             <h1 style="color:white">Nutrition Assistent Application</h1>
             <div class="container">
             <div class="forms">
             <div class="form login">
             <span class="title">Login</span>
```

```
<form action="#">
            <div class="input-field">
              <input type="text" placeholder="Enter your email"</pre>
required>
              <i class="uil uil-envelope icon"></i>
            </div>
            <div class="input-field">
              <input type="password" class="password"</pre>
placeholder="Enter your password" required>
              <i class="uil uil-lock icon"></i>
              <i class="uil uil-eye-slash showHidePw"></i>
            </div>
            <div class="checkbox-text">
              <div class="checkbox-content">
                 <input type="checkbox" id="logCheck">
                 <label for="logCheck" class="text">Remember
me</label>
              </div>
              <a href="#" class="text">Forgot password?</a>
            </div>
            <div class="input-field button">
              <input type="button" value="Login">
            </div>
         </form>
         <div class="login-signup">
            <span class="text">Not a member?
              <a href="#" class="text signup-link">Signup
Now < /a >
            </span>
         </div>
       </div>
```

```
<script src="index.js"></script>
       <!-- Registration Form -->
       <div class="form signup">
          <span class="title">Registration</span>
          <form action="#">
            <div class="input-field">
               <input type="text" placeholder="Enter your name"</pre>
required>
               <i class="uil uil-user"></i>
            </div>
            <div class="input-field">
               <input type="text" placeholder="Enter your email"</pre>
required>
               <i class="uil uil-envelope icon"></i>
            </div>
            <div class="input-field">
               <input type="password" class="password"</pre>
placeholder="Create a password" required>
               <i class="uil uil-lock icon"></i>
            </div>
            <div class="input-field">
               <input type="password" class="password"</pre>
placeholder="Confirm a password" required>
               <i class="uil uil-lock icon"></i>
               <i class="uil uil-eye-slash showHidePw"></i>
            </div>
            <div class="checkbox-text">
               <div class="checkbox-content">
                 <input type="checkbox" id="termCon">
                 <label for="termCon" class="text">I accepted
all terms and conditions</label>
               </div>
            </div>
```

```
<div class="input-field button">
              <input type="button" value="Signup">
            </div>
         </form>
         <div class="login-signup">
            <span class="text">Already a member?
              <a href="#" class="text login-link">Login
Now < /a >
            </span>
         </div>
       </div>
     </div>
  </div>
  <!--<script src="index.js"></script>-->
</body>
</html>
```

Github & Project Demo Link:

https://drive.google.com/file/d/12A1cMLAjral8hDE3cE4XCd7vt8HrHMZL/view?usp=sharing

https://github.com/IBM-EPBL/IBM-Project-49103-1660815934