NUTRITION ASSISTANT APPLICATION

A PROJECT REPORT

Submitted by

JAYAKUMAR K K 732119205019

VAISHNAVI S 732119205052

HARIHARAN N 732119205017

KOWSIK G 732119205023

TEAM ID : PNT2022TMID32256

NANDHA COLLEGE OF TECHNOLOGY, ERODE.

VAAIKALMEDU, PERUNDHURAI - 638052

TABLE OF CONTENTS:

1. INTRODUCTION

Project Overview

- 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.

- 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.

Purpose

The Purpose of our Project is

It helps dieticians with providing proper nutrition at healthcare facilities.

They determine patients nutritional needs.

It assess factors and plans, meals and menus.

They also ensure proper sterilization of plates and utensils.

Nutitionists work to help people establish good connections between healthy weights and overall health.

1. **LITERATURE SURVEY**

Existing Problem :

- Patients who have to maintain diet have to give their body health details.
- They have check their BMI value to predict the food for them.
- Then the image or url of a food have to upload to know the further details of food.
- Finally,the patients have to follow the predicted food and maintain diet with respect to the nutrition details of a doof which is obtained.

References :

https://www.researchgate.net/publication/346411010_DEVELOPMENT_OF_A_CLOUD_BASED_SOLUTION_FOR_EFFECTIVE_NUTRITION_INTERVENTION_IN_THE_MANAGEMENT_OF_LIFESTYLE_DISEASES

https://www.academia.edu/43016077/A_DIET_CONTROL_AND_FITNESS_ASSISTANT_APPLICATION_USING_DEEP_LEARNING_BASED_IMAGE_CLASSIFICATION

S. Fang, Z. Shao, R. Mao, C. Fu, E. J. Delp, F. Zhu, D. A. Kerr, andC. J. Boushey, “Single-view food portion estimation: Learning Image-to-Energymappings using generative adversarial networks,” in Proc. 25thIEEEInt. Conf. Image Process. (ICIP), Oct. 2018, pp. 251–255.

Z. Ge, C. McCool, C. Sanderson, and P. Corke, “Modelling local deepconvolutional neural network features to improve fine-grainedimageclassification,” in Proc. IEEE Int. Conf. Image Process. (ICIP), Sep. 2015, pp. 4112–4116.

https://www.emizentech.com/blog/diet-nutrition-tracking-app-development.html

c. **Problem statement definition:**

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.

The main objective of this project is to building a web App that automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food.

1.Who are all affected by this issue?

➢ People from all age group who are all careless about their health due to their busy schedule and high calorie diet.

➢ This leads to an unhealthy lifestyle because of their eating habits.

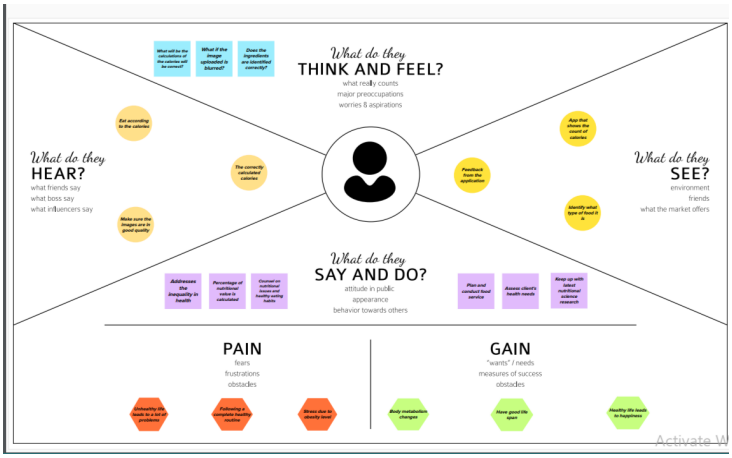
➢ Thus leads to many health issues like obesity, heart attack, diabetics and rise in cholesterol level.

2.What are the boundaries of the problem?

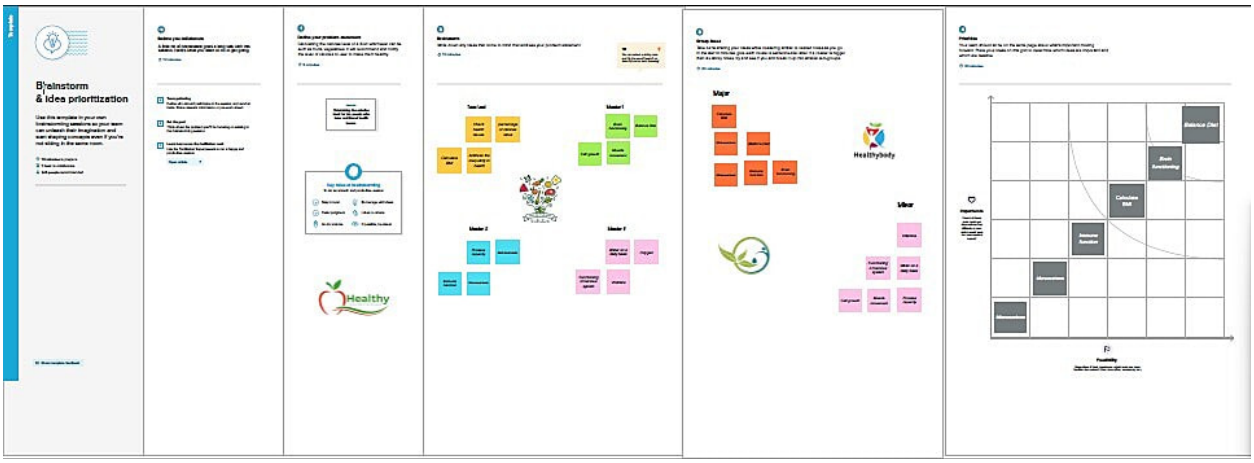
➢ Based on the information collected from the user, if the user is diagnosed with diabetes/Heart attack/obesity then the application provides information about diet.
ems with digestion so they will be provided with that information

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy map canvas:



3.2 Ideation & Brainstorming



3.3 Proposed Solution

S.No .	Parameter	Description
1	Problem Statement (Problem to be solved)	People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. 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 lifestyl
2	Idea / Solution description	Web App that automatically estimates food attributes such as ingredients and nutritional value by classifying the input image of food. Food Detection Model for accurate food identification and Food API's to give the nutritional value of the identified food to handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle.A
3	Novelty / Uniqueness	It helps user to get nutrition facts with the suggestion of the scanned food is suitable for user or not. The suggestion is based on user's data and BMI value.
4	Social Impact / Customer Satisfaction	The relationship between an individual's social, psychological, and cultural environment and his/her nutritional status is one of both cause and effect. Cultural patterns, economic stability, and attitudes toward health and disease all affect an individual's eating behaviour . The application which gives awareness among the people about the obesity and various health problems
5	Business Model (Revenue Model)	In market, this application gives a benefit across the people by health wise and economical wise. List your nutrition business on professional directories....

6	Scalability of the Solution	★Its plays a vital role in users life because it shows and give a suggestions to user so they can control their food habits and maintain their health.

3.4 Problem Solution fit

The Problem solution aims at building a web App that automaticallestimates food attributes such as ingredients and nutritional value by classifyingthe input image of food. Our method employs Clarifai's AI-DrivenFoodDetection Model for accurate food identification and Food API's togivethenutritional value of the identified food..

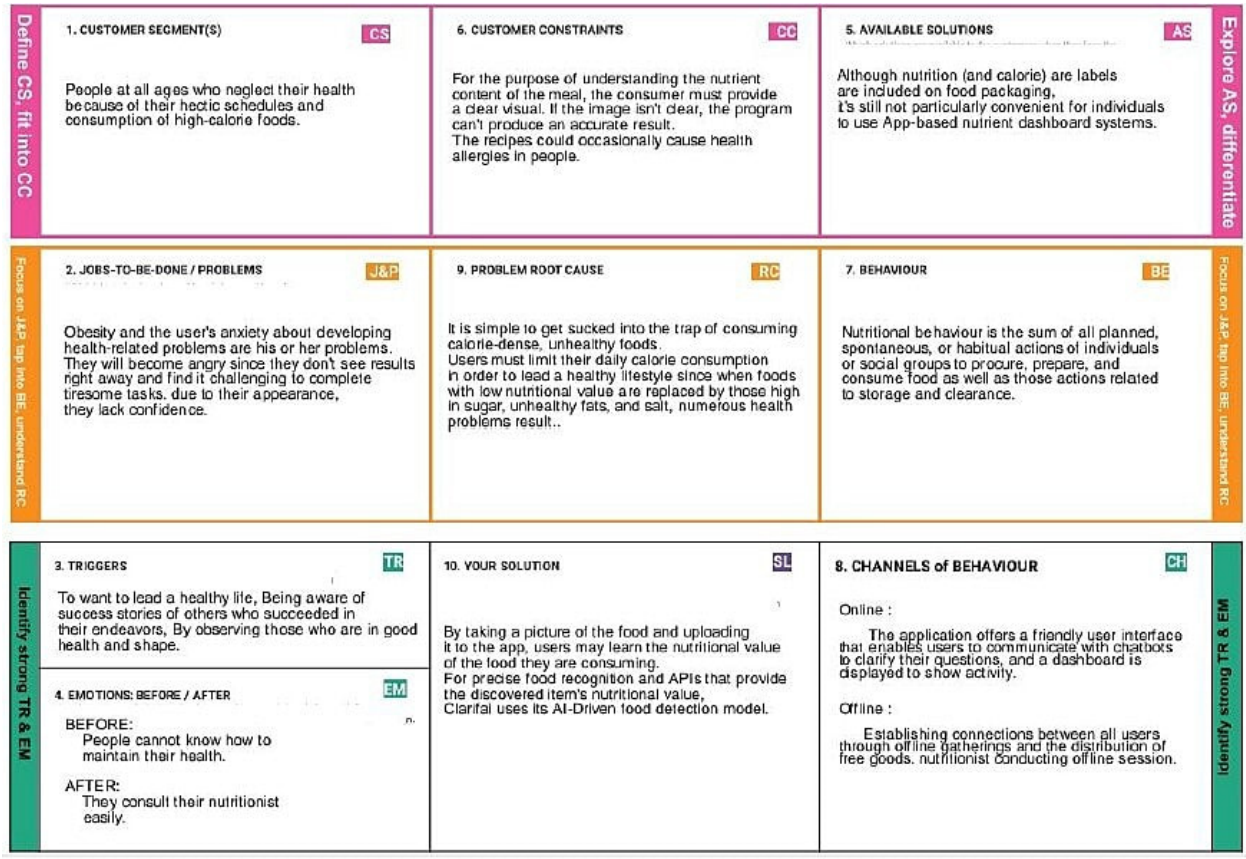
PURPOSE:

❑ Solve complex problems in a way that fits the state of your customers.

❑ Succeed faster and increase your solution adoption by tapping intoexistingmediums and channels of behavior.

❑ Sharpen your communication and marketing strategy with the right triggersand messaging.

❑ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.



4. REQUIREMENT ANALYSIS

4.1 Functional requirement :

Following are the functional requirements of the proposed solution.

FR NO	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Gmail Registration through mobile number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User profile completion	Get all the required details about user such as weight, height, health issues, Etc FR-4 Gather food image User take live photo of a food
FR-4	Display calorie information	Calculate the calorie level Display that details to user

FR-5	Diet plans	Create various diet plans for user

4.2 Non-Functional requirement :

Following are the non-functional requirements of the proposed solution.

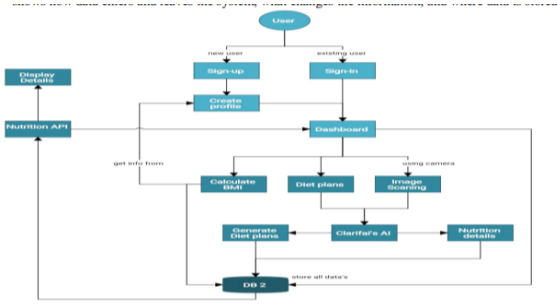
FR NO	Non-Functional Requirement	Description
NFR-1	Usability	This application helps us to maintain our physical and health goal accoring to the diet plan that we select. It also gives the client about the information of a food incredient. It manages them to keep a diet wit the plan that they prefer.
NFR-2	Security	This application prefers the best security systems,protect information and it manages the availability and modification.
NFR-3	Reliability	This application operate without failure while in aspecified environment
NFR-4	Performance	Entering the every food and incredients that you take daily. Then the calories are calculated with that uploaded information.
NFR-5	Availability	Fitness apps are nothing but where youcan monitor all your lifestyle parameters like step count, diet, water intake, blood parameters and workout routine. This application have a huge

		positive impact on your health.

5. PROJECT DESIGN

5.1 Data Flow Diagram :

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored



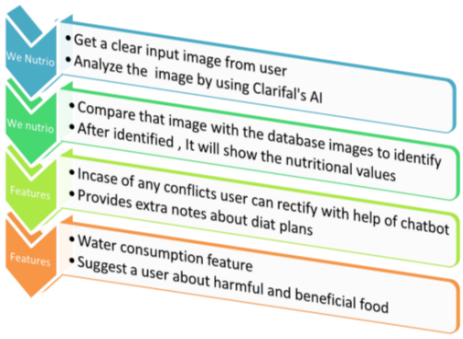
5.2 Solution and Technical Architecture

Solution Architecture :

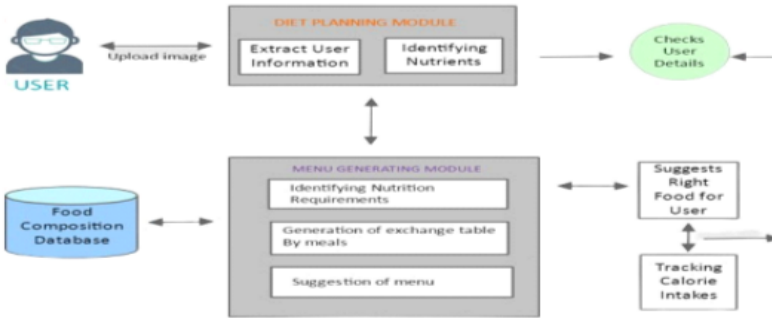
PROJECT DESCRIPTION:

Due to the ignorance of healthy food habits, obesity rates are increasingatan alarming speed, and this is reflective of the risks to people's health. Peopleneed to control their daily calorie intake by eating healthier foods, whichisthemost basic method to avoid obesity. However, although food packagingcomeswith nutrition (and calorie) labels, it's still not very convenient for peopletorefer to App-based nutrient dashboard systems which can analyze real-timeimages of a meal and analyze it for nutritional content which can be veryhandyand improves the dietary habits, and therefore, helps in maintainingahealthylifestyle.This project aims at building a web App that automaticallyestimatesfood attributes such as ingredients and nutritional value by

classifyingtheinputimage of food. Our method employs Clarifai's AI-Driven FoodDetectionModel for accurate food identification and Food API's to give the nutritionalvalue of the identified food.



Technical Architecture:



SOLUTION:

- ➤ User interacts with the Web App to Load an image.
- ➤ The image is passed to the server application, which uses Clarifai'sAI-Driven Food Detection.
- ➤ Model Service to analyze the images and Nutrition API toprovidenutritional information about the analyzed Image

➤ Nutritional information of the analyzed image is returned to theappfordisplay.

PROCEDURE:

1. IMPLEMENTING WEB APPLICATION

- Registration (Push the registration data into the database)
- Login (Fetch the data upon login)
- Upload the food image and get the prediction
- Get Calories from the food items
- Add food data to the database

2. CREATE UI TO INTERACT WITH THE APPLICATION

- Registration Page
- Login Page
- Upload Image page 15
- Prediction results page for food items
- View history of items

3. CREATE IBM DB2 AND CONNECT WITH PYTHON

- Create the IBM Db2 service in the IBM cloud and connect thepythoncode with DB.

4. INTEGRATE NUTRITION API

- Integrate the Nutrition API to the flask with API call.

APPROACH:

KUBERNETES CLUSTERS - Kubernetes clusters allowcontainers torunacross multiple machines and cloud based application. IBM DB2- Used for Backup & recovery. Comprehensive data resilienceforphysical and virtual servers.Cloud hosting. Dedicated, virtual private, andbaremetal server options

CONTAINER REGISTRY - Container Registry is a single place for your teamto manage Docker images, perform vulnerability analysis, and decide whocanaccess what with fine-grained access control

NUTRITION API - A nutrition API acts as a container for informationfromthousands of products. When an application sends a GET request to theAPI, itreturns the nutrition

information about a given product.

RESULT:

Despite processing, we do not believe that our outcomes are flawless. There is always opportunity for improvement in your procedure becausecloudcomputing is a topic that is constantly developing. Additionally, therewillalways be new approaches that offer better results for the same problems. It hasbeen done, the application. Clarifai's AI-Driven Food Detection Model Service, Nutrition API.

5.3 User Stories

User Stories :

.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Client 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
	Verification	USN-2	As a user, I will receive	I can receive confirmation email &	Medium	Sprint-1

			confirmation email once I have registered for the application	click confirm		
	Registration	USN-3	As a user, I can register for the application through mobile number	I can access my account / dashboard	Medium	Sprint-2
	Login	USN-4	As a user, I can log into the application by entering email & password	I can access the dashboard	High	Sprint-1
	Dashboard	USN-5	As a user, I can easily track my calories and i can identify the nutritional information about the food.	II get appropriate information about the food	High	Sprint 2
	Chat bot	USN-6	As a user, It is very convenient to use with the help of a chatbot.	I get clear details with the help of a chatbot.	Medium	Sprint 2
Customer Care Executive	Help	USN-7	As a user I can go to help page to rectify my queries	I can easily clear my queries	Medium	Sprint 3
Administrator	Send confirmation	USN-8	As an admin, Confirmation mail is sent from the respected company	Confirmation received by user	High	Sprint 1

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning and Estimation :

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	5	High	Jayakumar KK , Vaishnavi S
		USN-2	As a user, I will receive confirmation email once I have registered for the application	3	Medium	Jayakumar KK , Hariharan N
Sprint-2		USN-3	As a user, I can register for the application through Facebook	3	Low	Jayakumar KK , Kowsik G
		USN-4	As a user, I can register for the application through Gmail	3	Low	Vaishnavi S, Kowsik G
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	5	High	Jayakumar KK
	Dashboard (Home)	USN-6	As a user, I can check body details and BMI by adding body details.	3	High	Vaishnavi S
Sprint-2		USN-7	As a user, Chatbot can route where they want to go and gives tips for health.	2	Medium	Hariharan N
	Dashboard (Health)	USN-8	As a user, System shows the prediction and Body health detail.	5	Medium	Jayakumar KK , Kowsik G
Sprint-3	Dashboard (Accessory)	USN-9	As a user, I can take photos and identify the nutritional information about the food.	5	High	Jayakumar KK , Vaishnavi S
		USN-10	As a user, I can track Sleep and menstruation	3	Medium	Jayakumar KK , Hariharan N
	Dashboard (Health)	USN-11	As a user, I can easily track my calories	5	High	Jayakumar KK , Kowsik G

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	About	USN-12	As a user, I can view the Frequently Asked Questions (FAQ).	2	Low	Jayakumar KK
	Dashboard	USN-13	As a user, I get customer support and extra features from accessory.	3	Medium	Jayakumar KK , Vaishnavi S, Hariharan N , Kowsik G
	User control	USN-14	As a admin, I can control user create, update and delete.	5	High	Vaishnavi S , Hariharan N
	Review	USN-15	As an admin, I must make the reviews appear on the company's profile	2	Medium	Jayakumar KK , Hariharan N

6.2 Sprint Delivery Schedule :

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	16	6 Days	24 Oct 2022	29 Oct 2022		29 Oct 2022
Sprint-2	13	6 Days	31 Oct 2022	05 Nov 2022		05 Nov 2022
Sprint-3	13	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	12	6 Days	14 Nov 2022	19 Nov 2022		19 Nov 2022

VELOCITY:

Imagine we have a 10-day sprint duration, and the velocity of theteam20(points per sprint).Let's calculate the team's average velocity (AV) periteration unit.

$$AV = \frac{sprint\ duration}{velocity} = \frac{16}{6} = 2.67$$

Sprint-2 and Sprint-3

$$AV = \frac{sprint\ duration}{velocity} = \frac{13}{6} = 2.17$$

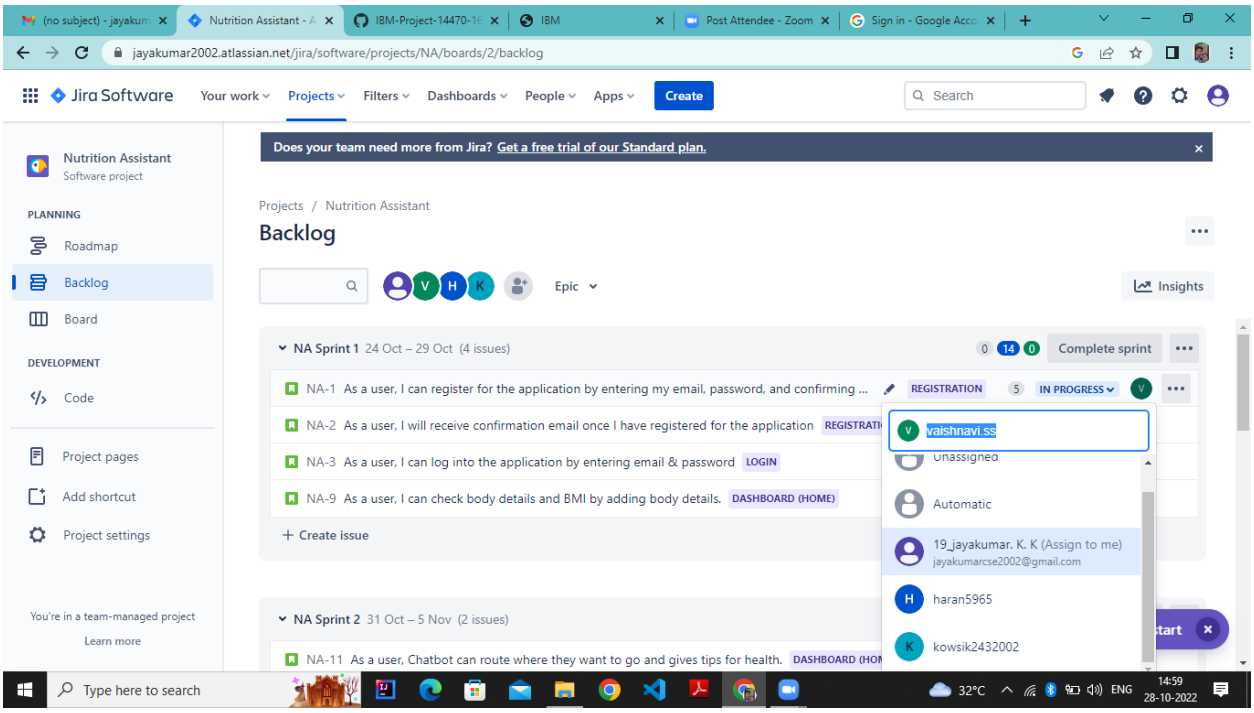
Sprint-4

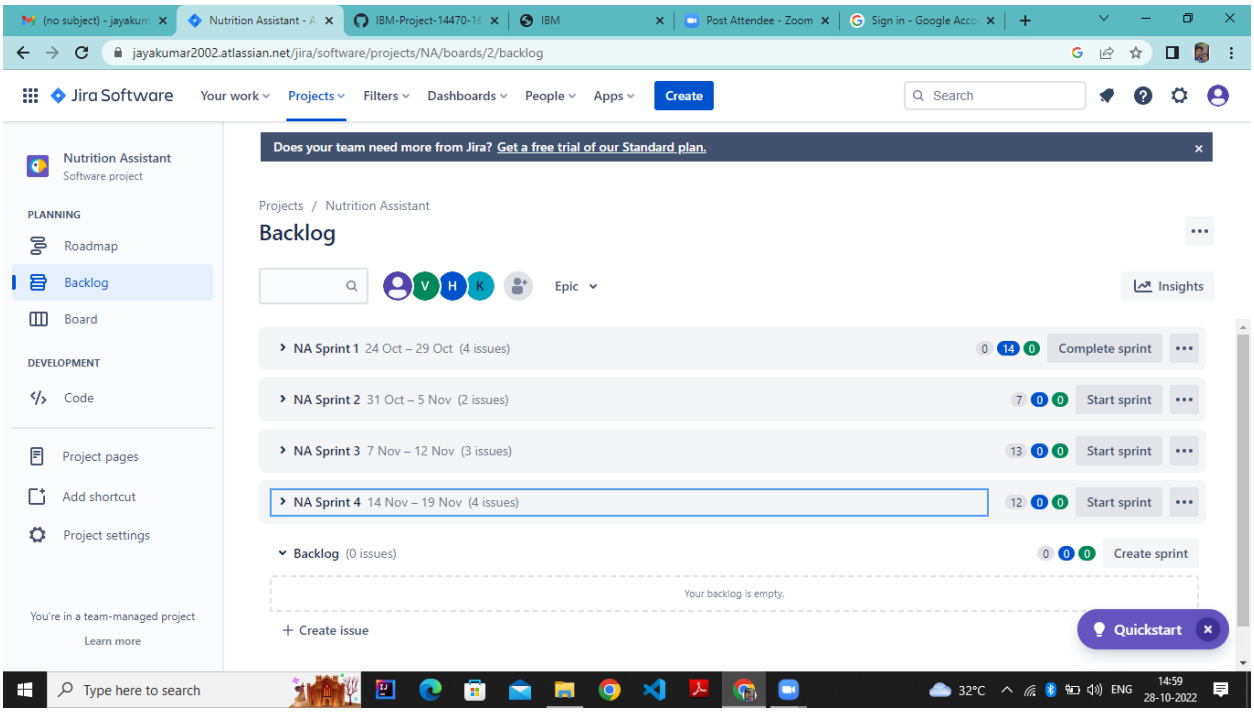
$$AV = \frac{sprint\ duration}{velocity} = \frac{12}{6} = 2$$

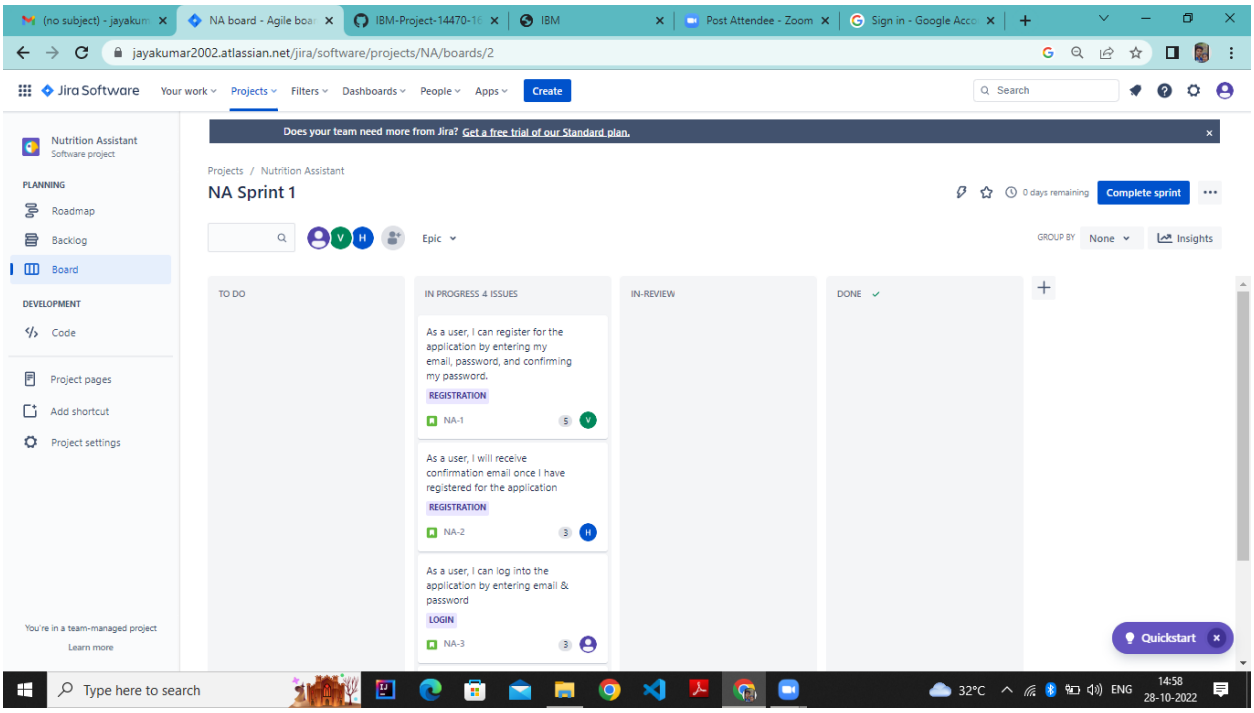
Total Average Velocity

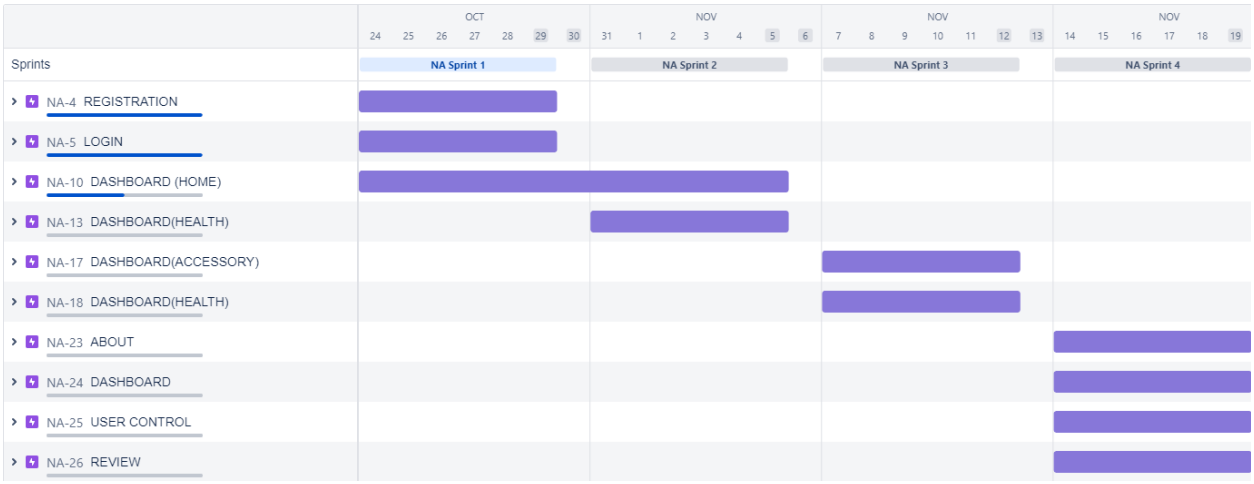
$$\frac{9.01}{4} = 2.25$$

6.3 Reports from JIRA


jayakumar2002.atlassian.net/jira/software/projects/NA/boards/2/backlog
Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
Nutrition Assistant
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Does your team need more from Jira? Get a free trial of our Standard plan.
Projects / Nutrition Assistant
Backlog
Epic
Insights
NA Sprint 1 24 Oct – 29 Oct (4 issues)
Complete sprint
NA-1 As a user, I can register for the application by entering my email, password, and confirming ...
REGISTRATION
IN PROGRESS
NA-2 As a user, I will receive confirmation email once I have registered for the application
NA-3 As a user, I can log into the application by entering email & password
LOGIN
NA-9 As a user, I can check body details and BMI by adding body details.
DASHBOARD (HOME)
Create issue
vaishnavi.ss
Unassigned
Automatic
19_jayakumar. K (Assign to me)
jayakumarcse2002@gmail.com
haran5965
kowsik2432002
NA Sprint 2 31 Oct – 5 Nov (2 issues)
NA-11 As a user, Chatbot can route where they want to go and gives tips for health.
Type here to search
32°C
ENG
14:59
28-10-2022


jayakumar2002.atlassian.net/jira/software/projects/NA/boards/2/backlog
Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
Nutrition Assistant
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Does your team need more from Jira? Get a free trial of our Standard plan.
Projects / Nutrition Assistant
Backlog
Epic
Insights
NA Sprint 1 24 Oct – 29 Oct (4 issues)
Complete sprint
NA Sprint 2 31 Oct – 5 Nov (2 issues)
Start sprint
NA Sprint 3 7 Nov – 12 Nov (3 issues)
Start sprint
NA Sprint 4 14 Nov – 19 Nov (4 issues)
Start sprint
Backlog (0 issues)
Create sprint
Your backlog is empty.
Create issue
Quickstart
Type here to search
32°C
ENG
14:59
28-10-2022


jayakumar2002.atlassian.net/jira/software/projects/NA/boards/2
Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
Nutrition Assistant
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Does your team need more from Jira? Get a free trial of our Standard plan.
Projects / Nutrition Assistant
NA Sprint 1
0 days remaining
Complete sprint
Epic
GROUP BY
None
Insights
TO DO
IN PROGRESS 4 ISSUES
IN-REVIEW
DONE
As a user, I can register for the application by entering my email, password, and confirming my password.
REGISTRATION
NA-1
As a user, I will receive confirmation email once I have registered for the application
REGISTRATION
NA-2
As a user, I can log into the application by entering email & password
LOGIN
NA-3
Quickstart
Type here to search
32°C
ENG
14:58
28-10-2022


OCT
NOV
NOV
NOV
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Sprints
NA Sprint 1
NA Sprint 2
NA Sprint 3
NA Sprint 4
NA-4 REGISTRATION
NA-5 LOGIN
NA-10 DASHBOARD (HOME)
NA-13 DASHBOARD(HEALTH)
NA-17 DASHBOARD(ACCESSORY)
NA-18 DASHBOARD(HEALTH)
NA-23 ABOUT
NA-24 DASHBOARD
NA-25 USER CONTROL
NA-26 REVIEW

7. CODING & SOLUTIONING

7.1 Feature 1

Nutrition Assistant Application:

Description:

In this feature I have designed a webpage to analyse the nutritional food and health.The user have register,if they haven't the Id .The user have to login the webpage using username and password. After successful login, the user wil be redirected **to the home page. In this form ,users are asked to fill the body health details and the food details . After entering the appropriate details the nutitional result will be displayed.**

Algorithm :

1. Enter the credentials and hit enter (email and password).

2. If already logged in user is taken to home page

3. Else , check for validity of credentials entered using query to cloudant db.

4. If wrong credentials entered , notification displayed to user and user stays in login page.

5. On correct credentials , user is taken to home page.

HOME PAGE :

```
<!DOCTYPE html>
<html  lang="en">
<head>
<title>Nutri Pulse</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<!--
============================================================================
============================-->
<link rel="icon" type="image/png" href="../static/images/icons/logo.ico"/>
<!--
============================================================================
============================-->
```

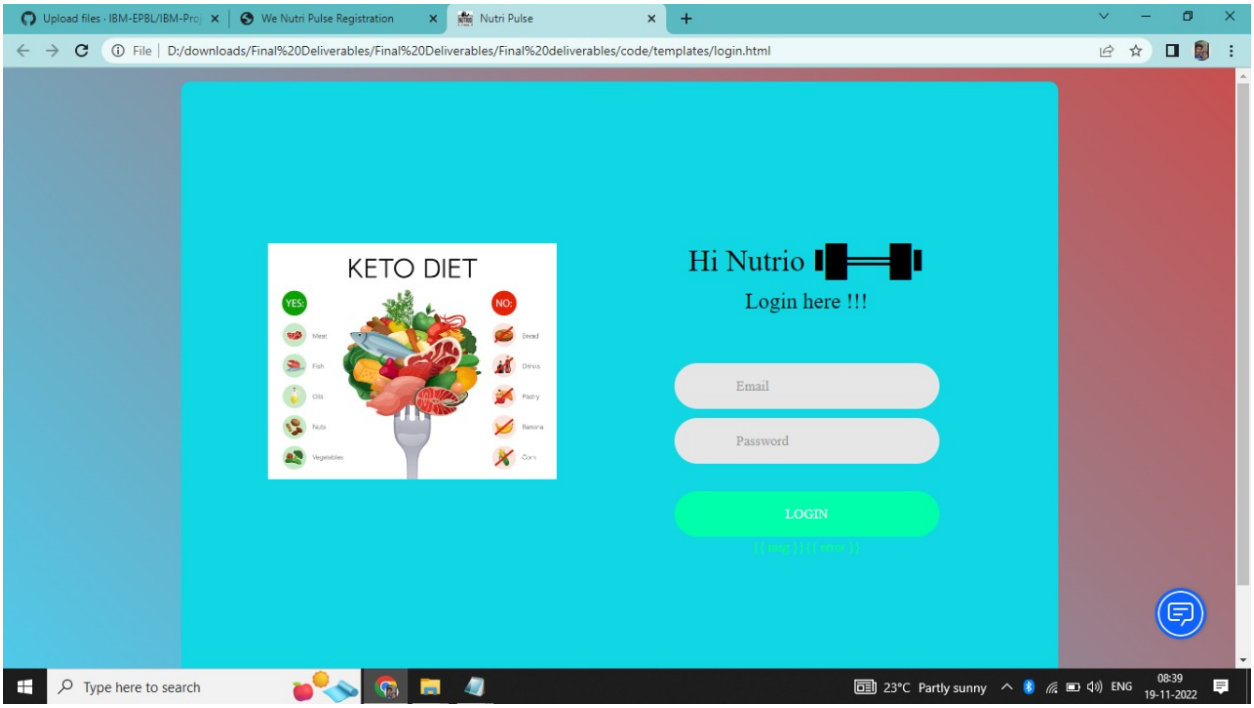
```
<link rel="stylesheet" type="text/css"
href="../static/vendor/bootstrap/css/bootstrap.min.css">
<!--
===============================================================
============================-->
<link rel="stylesheet" type="text/css" href="../static/fonts/font-awesome-
4.7.0/css/font-awesome.min.css">
<!--
===============================================================
============================-->
<link rel="stylesheet" type="text/css" href="../static/vendor/animate/animate.css">
<!--
===============================================================
============================-->
<link rel="stylesheet" type="text/css" href="../static/vendor/css-
hamburgers/hamburgers.min.css">
<!--
===============================================================
============================-->
<link rel="stylesheet" type="text/css"
href="../static/vendor/select2/select2.min.css">
<!--
===============================================================
============================-->
<link rel="stylesheet" type="text/css" href="../static/css/util.css">
<link rel="stylesheet" type="text/css" href="../static/css/main.css">
<!--
===============================================================
============================-->
</head>
<body>
<script>
  window.watsonAssistantChatOptions = {
    integrationID: "a09d8a78-e1f6-41b8-b072-5d26fe0b8f01", // The ID of this
integration.
    region: "au-syd", // The region your integration is hosted in.
    serviceInstanceID: "37c122b5-72e1-44df-a5fb-463376d0c8a1", // The ID of your
service instance.
    onLoad: function(instance) { instance.render(); }
  };
  setTimeout(function(){
    const t=document.createElement('script');
    t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
```

```
    document.head.appendChild(t);
  });
</script>
<div class="limiter">
        <div class="container-login100">
                <div class="wrap-login100">
                        <div class="login100-pic js-tilt" data-tilt>
                                <img src="../static/images/img-01.png" alt="IMG">
                        </div>

                        <form class="login100-form validate-form"  action="{{
url_for('login') }}" method="POST">
                                <span class="login100-form-title2">
                                        Hi Nutrio
                                </span>
                                <span class="login100-form-title">
                                        Login here !!!
                                </span>

                                <div class="wrap-input100 validate-input" data-validate =
"Valid email is required: ex@abc.xyz">
                                        <input id="usermail" class="input100" type="text"
name="usermail" placeholder="Email">
                                        <span class="focus-input100"></span>
                                        <span class="symbol-input100">
                                                <i class="fa fa-envelope" aria-
hidden="true"></i>
                                        </span>
                                </div>

                                <div class="wrap-input100 validate-input" data-validate =
"Password is required">
                                        <input id="password" class="input100"
type="password" name="password" placeholder="Password">
                                        <span class="focus-input100"></span>
                                        <span class="symbol-input100">
                                                <i class="fa fa-lock" aria-hidden="true"></i>
                                        </span>
                                </div>

                                <div class="container-login100-form-btn">
                                        <button class="login100-form-btn">
                                                Login
                                        </button>
                                        <p>{{ msg }}</p>
```

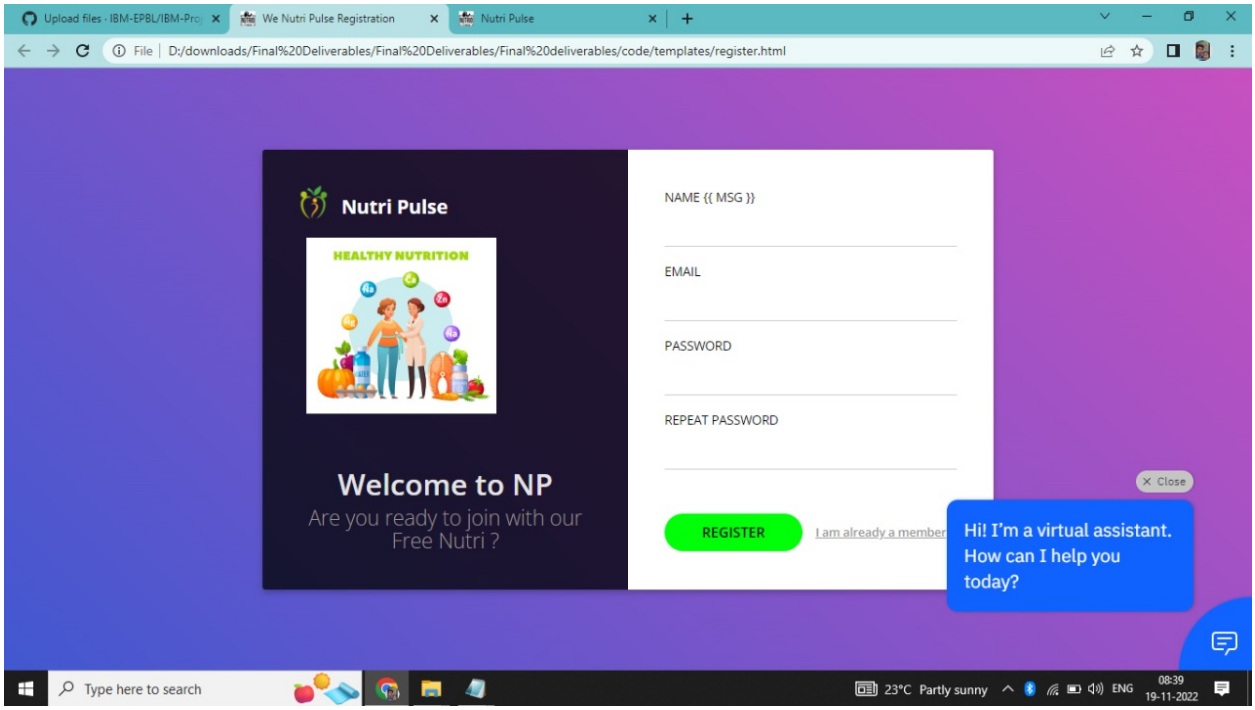
```
                                <p>{{ error }}</p>
                            </div>

                            <!-- <div class="text-center p-t-12">
                                <span class="txt1">
                                    Forgot
                                </span>
                                <a class="txt2" href="#">
                                    Username / Password?
                                </a>
                            </div> -->

                            <div class="text-center p-t-136">
                                <a class="txt2" href="{{ url_for('register') }}">
                                    Create your Account
                                    <i class="fa fa-long-arrow-right m-l-5" aria-
hidden="true"></i>
                                </a>
                            </div>
                        </form>
                </div>
        </div>
</div>
<!--
===============================================================================
============================-->
<script src="../static/vendor/jquery/jquery-3.2.1.min.js"></script>
<!--
===============================================================================
============================-->
<script src="../static/vendor/bootstrap/js/popper.js"></script>
<script src="../static/vendor/bootstrap/js/bootstrap.min.js"></script>
<!--
===============================================================================
============================-->
<script src="../static/vendor/select2/select2.min.js"></script>
<!--
===============================================================================
============================-->
<script src="../static/vendor/tilt/tilt.jquery.min.js"></script>
<script >
        $('.js-tilt').tilt({
                scale: 1.1
        })
</script>
```

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

Login Page



Sign Up Page


Upload files · IBM-EPBL/IBM-Proj
We Nutri Pulse Registration
Nutri Pulse
File | D:/downloads/Final%20Deliverables/Final%20Deliverables/Final%20deliverables/code/templates/register.html
Nutri Pulse
HEALTHY NUTRITION
Welcome to NP
Are you ready to join with our Free Nutri ?
NAME {{ MSG }}
EMAIL
PASSWORD
REPEAT PASSWORD
REGISTER
I am already a member
Close
Hi! I'm a virtual assistant. How can I help you today?
Type here to search
23°C Partly sunny
ENG
08:39
19-11-2022

7.2 Feature 2 : Sign up

Algorithm :

1. Enter the signup form fields (name , email , password , re-enter password , date of birth) and hit enter.

2. All credentials are validated at client side.

3. Email is checked if already registered or not in the database.

4. If already registered , notification displayed. Or else, the user is taken to the successful signup page

Query to check if email is registered or not :

```
 <!DOCTYPE html>
<html lang="en" >
<head>
  <meta charset="UTF-8">
  <title>We Nutri0 Registration</title>
  <link rel="icon" type="image/png" href="../static/images/icons/logo.ico"/>
  <meta name="viewport" content="width=device-width, initial-scale=1"><link
rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css">
<link rel='stylesheet' href='https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.0.0-
alpha/css/bootstrap.min.css'>
<link rel='stylesheet'
href='https://fonts.googleapis.com/css?family=Open+Sans:400,600,700,300'>
<link rel='stylesheet' href='https://fonts.googleapis.com/css?family=Roboto:400,700,300'>
<link rel='stylesheet' href='https://maxcdn.bootstrapcdn.com/font-awesome/4.4.0/css/font-
awesome.min.css'>
<link rel="stylesheet" href="../static/css/style.css">
```

```
</head>
<body>
  <script>
    window.watsonAssistantChatOptions = {
      integrationID: "2d723f1c-6a3b-41bb-86a8-86eba26b492e", // The ID of this integration.
      region: "au-syd", // The region your integration is hosted in.
      serviceInstanceID: "80fba3ec-33ea-44ac-9c4b-60bc5c51988c", // The ID of your service
instance.
      onLoad: function(instance) { instance.render(); }
    };
    setTimeout(function(){
      const t=document.createElement('script');
      t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
      document.head.appendChild(t);
    });
  </script>
<!-- partial:index.partial.html -->
<div class="signup__container">
  <div class="container_child signup_thumbnail">
    <div class="thumbnail__logo">
      <img src="../static/images/logo.png" alt="logo" style="height: 50px; width:50px;"/>
      <h1 class="logo__text">We Nutrio</h1>
    </div>
    <div class="thumbnail__content text-center">
      <h1 class="heading--primary">Welcome to We Nutrio</h1>
      <h2 class="heading--secondary">Are you ready to join this nutrio journey <!DOCTYPE
html></h2>
    </div>
    <div class="signup__overlay">
      <img class="regPic" src="../static/images/registerImage2.png" alt="logo" />
    </div>
  </div>
  <div class="container_child signup_form">
    <form  action="{{ url_for('register') }}" method="POST">
      <div class="form-group">
        <label for="username">Name {{ msg }} </label>
        <input class="form-control" type="text" name="username" id="username" required />
      </div>
```

```
      <div class="form-group">
        <label for="email">Email</label>
        <input class="form-control" type="text" name="email" id="email" required />
      </div>
      <div class="form-group">
        <label for="password">Password</label>
        <input class="form-control" type="password" name="password" id="password"
required />
      </div>
      <div class="form-group">
        <label for="passwordRepeat">Repeat Password</label>
        <input class="form-control" type="password" name="passwordRepeat"
id="passwordRepeat"required />
      </div>
      <div class="m-t-lg">
        <ul class="list-inline">
          <li>
            <input class="btn btn--form" type="submit" value="Register" />
          </li>
          <li>
            <a class="signup__link" href="{{ url_for('login') }}">I am already a member</a>
          </li>
        </ul>
      </div>
    </form>
  </div>
</div>
<!-- partial -->
</body>
</html>
```

FEATURE 3 : HOME

Algorithm :

1. If the user is logged out , he/she is taken to the login page.

2. Home page buttons are displayed (Live tracker , Recent emergency notifications , Location history , Change password , Logout)

3. If buttons are clicked , the user is taken to the requested page

TESTING

TEST CASES :

1. Login button click with wrong credentials entered.

2. Signup with already registered mail ID.

3. Signup with wrong form data entered.

4. Entering home page with logged out session.

5. Clicking home page buttons with logged out session.

6. Invalid data entered in change password page and requested for change in password.

8.2 USER ACCEPTANCE TESTING

S.NO	TEST CASE	REQUIRED OUTPUT	RESULT OUTPUT	STATUS
1	Login button click with wrong credentials	Wrong credentials entered notification	Wrong credentials entered notification	ACCEPTED
2	Signup with already registered mail ID.	Email already registered notification	Email already registered notification	ACCEPTED
3	Signup with wrong form data entered.	Wrong credentials entered notification	Wrong credentials entered notification	ACCEPTED
4	Entering home page with logged out session.	Take user to login page	Take user to login page	ACCEPTED
5	Clicking home page buttons with logged out session.	Take user to login page	Take user to login page	ACCEPTED
6	Invalid data entered in change password page and requested for change in password.	Wrong form data entered notification	Wrong form data entered notification	ACCEPTED

RESULTS

PERFORMANCE METRICS:

1. Planned value : Rs.4000
2. Actual value : Rs.1300
3. Hours worked : 50 hours
4. Stick to Timelines : 100%
5. Stay within budget : 100%
6. Consistency of the product : 75%
7. Efficiency of the product : 80%
8. Quality of the product : 80%

ADVANTAGES AND DISADVANTAGES

ADVANTAGES :

1. Low cost.
2. Simple UI
3. Faster response due to single page web page.
4. Capability of adding many features with ease and less cost.

DISADVANTAGES :

1. Lack of efficiency .
2. Efficiency of the product needs to be improved.
3. Consistency of the product is not 100%.
4. Not a compact sized product. Size needs

CONCLUSION :

Dietary tracking is an essential task in chronic disease management andintervention. Food photo taking and image recognition significantly reducetheburden of food entering on personal mobile devices. In this work, wehavedeveloped a dietary tracking system that applies the deep-basedimagerecognition to accurately and efficiently log food and nutrition intake. Throughreal user food photo testing and user study, we found that laboratorymodelsform the foundation of the solution but miss out some of the key challenges. The diversity of real food photos is higher than the lab trained model. Aningredient based recognition is a promising way of tracking the free styleandhomemade food recognition problems in which training data is sparse andnotrepresentative. Moreover, the proposed photo based portion selectionmethodisshown to be more

accurate and engages the users better than the existingmethods.

FUTURE SCOPE:

In future we'll be adding more features which will benefit the users. The ui/ux of the web application will be improved. Scaling the project for more use cases and customers. Implementing distributed computing for efficient processing.Making encryption standard for cloud storage.

SOURCE CODE LINK :

https://github.com/IBM-EPBL/IBM-Project-14470-1659586017

DEMO VIDEO LINK:

https://drive.google.com/file/d/1n70dy6Cf4LL0zzzeirnq8NSrsh1_824e/view?usp=drivesdk