THANTHAI PERIYAR GOVERNMENT INSTITUTE OF TECHNOLOGY

COMPUTER SCIENCE AND ENGINEERING

PROJECT REPORT

Nutrition Assistant Application

Submitted by

TEAM ID : PNT2022TMID29616

TEAML LEADER : SHARMILA RAJ S (513119104033)

TEAM MEMBER 1 : DEVIKA N (513119104005)

TEAM MEMBER 2 : KALKI D (513119104015)

TEAM MEMBER 3 : SUBHASHRI R (513119104037)

PROJECT REPORT FORMAT

1. **INTRODUCTION**
    1. Project Overview
    2. Purpose
2. **LITERATURE SURVEY**
    1. Existing problem
    2. References
    3. Problem Statement Definition
3. **IDEATION & PROPOSED SOLUTION**
    1. Empathy Map Canvas
    2. Ideation & Brainstorming
    3. Proposed Solution
    4. Problem Solution fit
4. **REQUIREMENT ANALYSIS**
    1. Functional requirement
    2. Non-Functional requirements
5. **PROJECT DESIGN**
    1. Data Flow Diagrams
    2. Solution & Technical Architecture
    3. User Stories
6. **PROJECT PLANNING & SCHEDULING**
    1. Sprint Planning & Estimation
    2. Sprint Delivery Schedule
    3. Reports from JIRA
7. **CODING & SOLUTIONING (Explain the features added in the project along with code)**
    1. Feature 1
    2. Feature 2
    3. Database Schema (if Applicable)
8. **TESTING**
    1. Test Cases

1. INTRODUCTION

1.1 Project Overview

The cloud based system would have the ability to calculate the nutritional requirements and to guide first line nutritional management to the clients automatically. 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 implementation once done would invite more and more queries for personalised nutrition support rather than depending on the set menu plans as in the case of current online approaches.

1.2 Purpose

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.

2.LITERATURE SURVEY

2.1 Existing Problem

APPLICATION OF ARTIFICIAL INTELLIGENCE ON NUTRITION ASSESSMENT AND MANAGEMENT

Published year: May 2021

Author: Dr. Kavita Sudersanadas

Journal Name: EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

Summary: The application of AI for the provision of food services to hospitalized patients is of immense scope. This review details the various ways through which AI can be applied for the nutrition assessment. Even though commercial AI-based nutritional assessment systems are available, many do not evaluate the nutrient intake, and the data available through them were not validated. Fat Secret is a commercially available AI-based food and nutrient

assessment system that can evaluate the food's calorie content. Also, the major challenge posed by such systems is the availability of locally appropriate data sets. Hence further research and validation are essential in this field. AI-based nutrient intake assessment system is of immense value to obtain and assess food intake data in isolation wards and for the follow-up without contact.

Methodology used: Artificial Intelligence

2.2 References

Paper 1: Virtual Nutritionist using AI

Publication year: June 2019

Author: Siddarthan Chitra Suseendran, Nanda Kishore B, Josephus Andrew, M.S. Rajya Shree

Journal Name: International Journal of Engineering and Advanced Technology (IJEAT).

Summary: In this way, a requirement for a full help for furnishing them with solid nourishment is a fundamental focus to reach. In this paper, we propose a model for a sustenance master framework which point is to give its clients the nourishment skill. It creates solid dinners for people in various ages as indicated by various criteria including their development stage, sexual orientation, and their wellbeing status. An application is created and a few contextual investigations are connected to show how the proposed model can be connected for deciding one's nourishment utilizing Artificial Intelligence (Machine and deep learning). Few key advantages are: Customized diet for any lifestyle and age along with various types of diets to choose from which acknowledges your pre medical conditions with appropriate macronutrient ratio split that ensures micronutrient supplement suggestions based on the foods you consume.

Methodology used: Artificial Intelligence

Paper 2: Personalized dietary assistant — An intelligent space application

Published year:2017

Author: Ballaz's Tusor, Gabriella Simon-Nagy, J.T. Tóth, A. R. Várkonyi-Kóczy

Journal Name: IEEE 21st International Conference on Intelligent Engineering Systems (INES)

Summary: Nowadays, there are numerous types of diets that aim to improve the quality of life, health and longevity of people. However, these diets typically involve a strictly planned regime, which can be hard to get used to or even to follow through at all, due to the sudden nature of the change. In this paper, the framework for an Intelligent Space application is proposed that helps its users to achieve a healthier diet in the long term by introducing small, gradual changes into their consumption habits. The application observes the daily nutrition intake of its users, applies data mining in order to learn their personal tastes, and educates them about the effects of their current diet on their health. Then it analyses the knowledge base to find different food or drink items that align with the perceived preferences, while also add to the balance of the daily nutrition of the users considering their physical properties, activities, and health conditions (e.g., diabetes, celiac disease, food allergies, etc). Finally, the system uses the findings to make suggestions about adding items from the consumption list, or change one item to another.

Methodology used: Data Analytics

Paper 3: Development of Cloud Based Solution For Effective Nutrition Intervention in the management of lifestyle diseases

Published date: February 2018

Author: Manju P. George*, Kalpana C.A

Journal Name: Trans Asian Research Journal

Summary: A web-based tool is being planned for therapeutic nutrition prescriptions in clinical settings. The cloud-based system would have the ability to calculate the nutritional requirements and to guide first line nutritional management to patients and clients automatically. Also, it serves as an electronic medical and dietetic record, and personalised nutrition consultation approach can be planned even in the client's busy schedule. One to One approach is much more simplified and the client can converse to his/ her personal dietitian at their own convenient setting. The implementation once done would invite more and more queries for personalised nutrition support rather than depending on the set menu plans as in the case of current online approaches. Authenticity of the consultant dietitian would also be ensured by the responsible team providing nutrition support.

Methodology used: Cloud Computing

Paper 4: **A DIET CONTROL AND FITNESS ASSISTANT APPLICATION USING DEEP LEARNING-BASED IMAGE CLASSIFICATION**

Published date:2019

Author: Tianren Dong1, Yu Sun and Fangyan Zhang

Journal Name: CSCP

Summary: With more and more attentions paid on health, people begin to care about healthy diet options created by experts on nutrition. However, it will take a long time to observe the effects by taking healthy diet. This causes great difficulty for users to follow the healthy diet strictly. Most existing applications are not user-friendly in inputting information to the application. Then it becomes difficulty to track for exact health status. This paper proposes an android application which can be trained to recognize different kinds of food and facilitate the information input through phone camera using machine learning algorithms. Thus, nutritional information can be fed in application accurately.

Methodology Used: Machine learning, Image recognition

Paper 5: Smartphone Applications for Promoting Healthy Diet and

Nutrition: A Literature Review

Published date: January 2016

Author: Steven S. Coughlin, Mary Whitehead, Joyce Q. Sheats, Jeff Mastromonico, Dale Hardy, Selina A. Smith

Journal Name: Jacobs J Food Nutra

Summary: Rapid developments in technology have encouraged the use of smartphones in health promotion research and practice. Although many applications (apps) relating to diet and nutrition are available from major smartphone platforms, relatively few have been tested in research studies in order to determine their effectiveness in promoting health. In this article, we summarize data on the use of smartphone applications for promoting healthy diet and nutrition based upon bibliographic searches in PubMed and CINAHL with relevant

search terms pertaining to diet, nutrition, and weight loss through August 2015.

Methodology Used: Bibliographic searches in PubMed and CINAHL with relevant search terms pertaining to diet, nutrition, and weight loss through August 2015.

Paper 6: An Intelligent Application for healthcare Recommendation using Fuzzy Logic

Published date:2019

Author: Nikahat Mulla, Swapnali Kurhade, Meghana Naik, Nida Bakereywala

Journal Name: IEEE

Summary: In the beginning of the application, the user has to sign-up with the application, where he/she has to put data regarding his height, weight, eating preferences, physical activity etc. After signing up, the application finds the membership value of the information such as age, BMI (which it calculates from the weight and height which the user inputs), physical activity and maps it to the output calorie function. The user must log in to the system where the user gets the information such as required total daily calorie intake, and the calories intake according to nutrients such as fats, proteins etc. The user also can keep the count of his/her daily steps so that on an everyday basis if his/her physical activity changes, the calorie intake should also change. For doing so the application uses the sensors in android studio which helps in detecting the user movements. This makes the application dynamic. The user can also update his profile as it changes.

Methodology Used: Fuzzy Logic:Min-Max algorithm

Paper 7: Smart-Log: A Deep-Learning based Automated Nutrition Monitoring System in the IoT

Published date: 29 August 2018

Author: Prabha Sundaravadivel, Kavya Kesavan, Lokesh war Kesavan, Saraju P. Mohanty, and Elias Kougianos

Journal Name: IEEE Transactions on Consumer Electronics

Summary: A correct balance of nutrient intake is very important, particularly in infants. When the body is deprived of essential nutrients, it can lead to serious disease and organ deterioration which can cause serious health issues in adulthood. Automated monitoring of the nutritional content of food provided to infants, not only at home but also in daycare facilities, is essential for their healthy development. To address this challenge, this paper presents a new Internet of Things (IoT)-based fully automated nutrition monitoring system, called Smart-Log, to advance the state-of-art in smart healthcare. For the realization of Smart-Log, a novel 5-layer perceptron neural network and a Bayesian network-based accurate meal prediction algorithm are presented in this paper. Smart-Log is prototyped as a consumer electronics product which consists of WiFi enabled sensors for food nutrition quantification, and a smart phone application that collects nutritional facts of the food ingredients. The Smart-Log prototype uses an open IoT platform for data analytics and storage. Experimental results consisting of 8172 food items for 1000 meals show that the prediction accuracy of Smart-Log is 98.6%.

Methodology Used: Internet of Things (IoT), Deep-Learning

Paper 8: Intelligent SVM Based Food Intake Measurement System

Published date: 15-17 July 2013

Author: Parisa Pouladzadeh ,Shervin Shi Mohammadi ,Tarik Arici

Journal Name: 2013 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA)

Summary: As people across the globe are becoming more interested in watching their weight, eating more healthily, and avoiding obesity, a system that can measure calories and nutrition in everyday meals can be very useful. Recently, due to ubiquity of mobile devices such as smart phones, Net books and tablets, the health monitoring applications are accessible by the patients practically all the time. A semi-automated food intake measurement application, running on a mobile device, could assist the patient to estimate his/her consumption calories. In this paper, to improve the accuracy of the current state of the art technologies, we have engaged color k-mean clustering along with color mean shift and texture segmentation schemes to get more accurate results in segmentation phase. Furthermore, the proposed system is built on food image processing techniques and uses nutritional fact tables. Via a special calibration technique, our system uses the built-in camera of such mobile devices and records a photo of the food before and after eating it in order to measure the consumption of calorie and nutrient components. The proposed algorithm extracts important features such as shape, color, size and texture. Using various combinations of these features and adopting computational intelligence techniques, such as support vector machine, as a classifier, accurate results are achieved which are very close to the real calorie of the food.

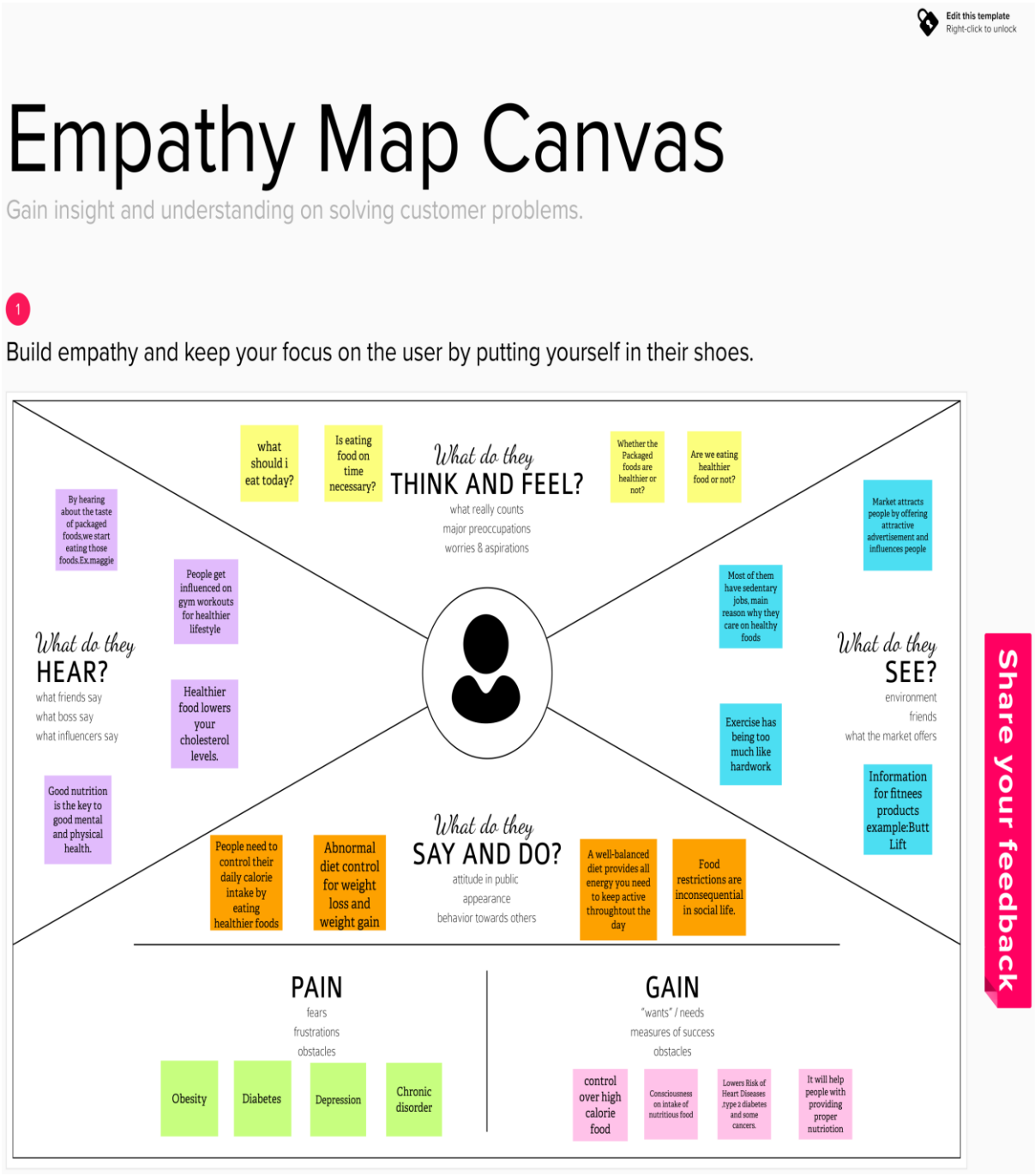
Methodology Used: SVM Based, AI

2.3 Problem Statement Definition

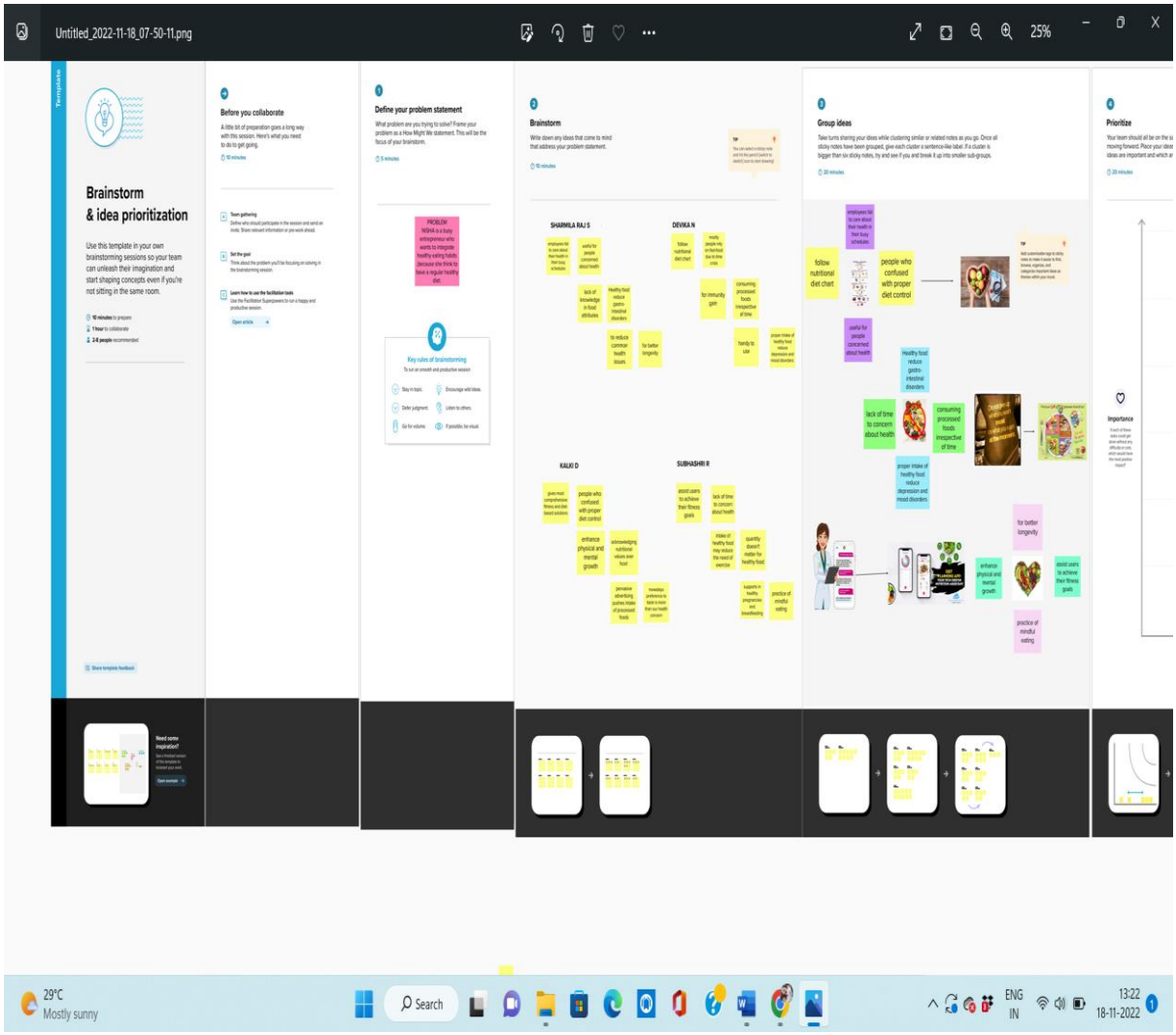
NISHA is a busy entrepreneur who wants to integrate healthy eating habits, because she think to have a regular healthy diet. Wellness and healthy lifestyles have become mainstream. Interest in fitness applications and revenue from them grow as fast as the number of people striving to be fit. The spoonacular Nutrition, Recipe, and Food API allow you to access over 365,000 recipes and 86,000 food products. Our food ontology and semantic recipe search engine make it possible to search for recipes using natural language queries, such as "gluten-free brownies without sugar" or "low-fat vegan cupcakes." You can automatically calculate the nutritional information for any recipe, analyze recipe costs, visualize ingredient lists, find recipes for what's in your fridge, find recipes based on special diets, nutritional requirements, or favorite ingredients, classify recipes into types and cuisines, convert ingredient amounts, or even compute an entire meal plan. With our powerful API, you can create many kinds of food and especially nutrition apps.

3.IDEATION & PROPOSED SOLUTION

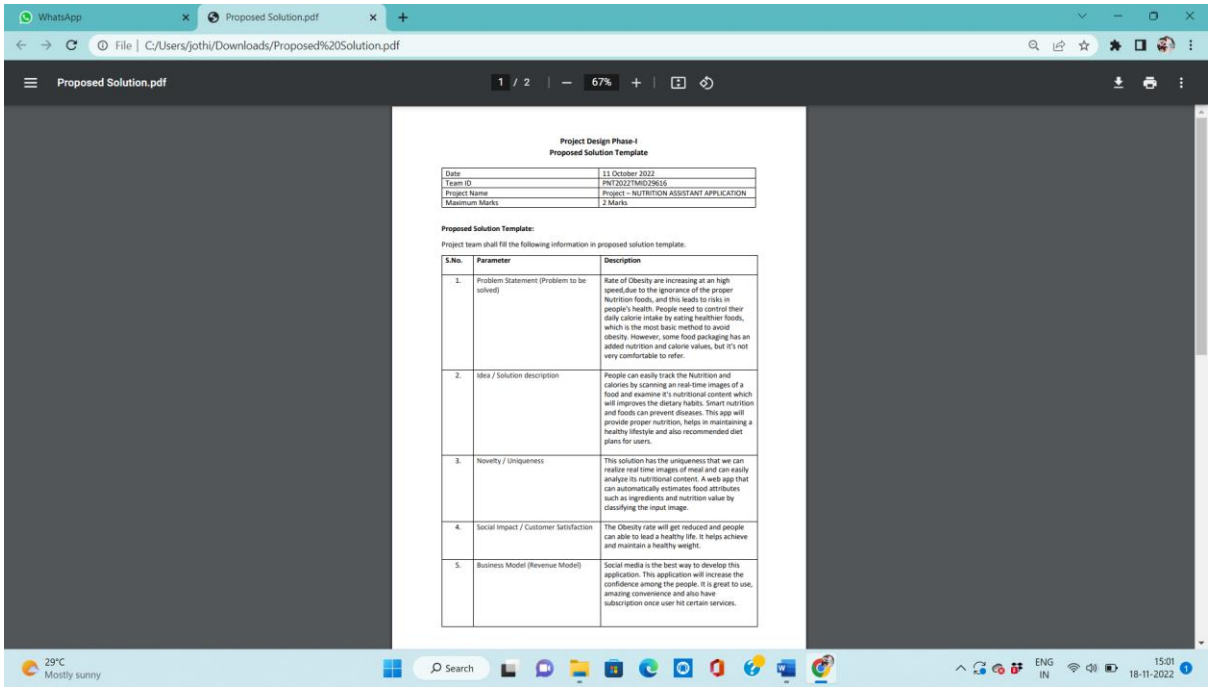
3.1 Empathy Map Canvas



3.2 Ideation & Brainstroming



3.3 Proposed Solution



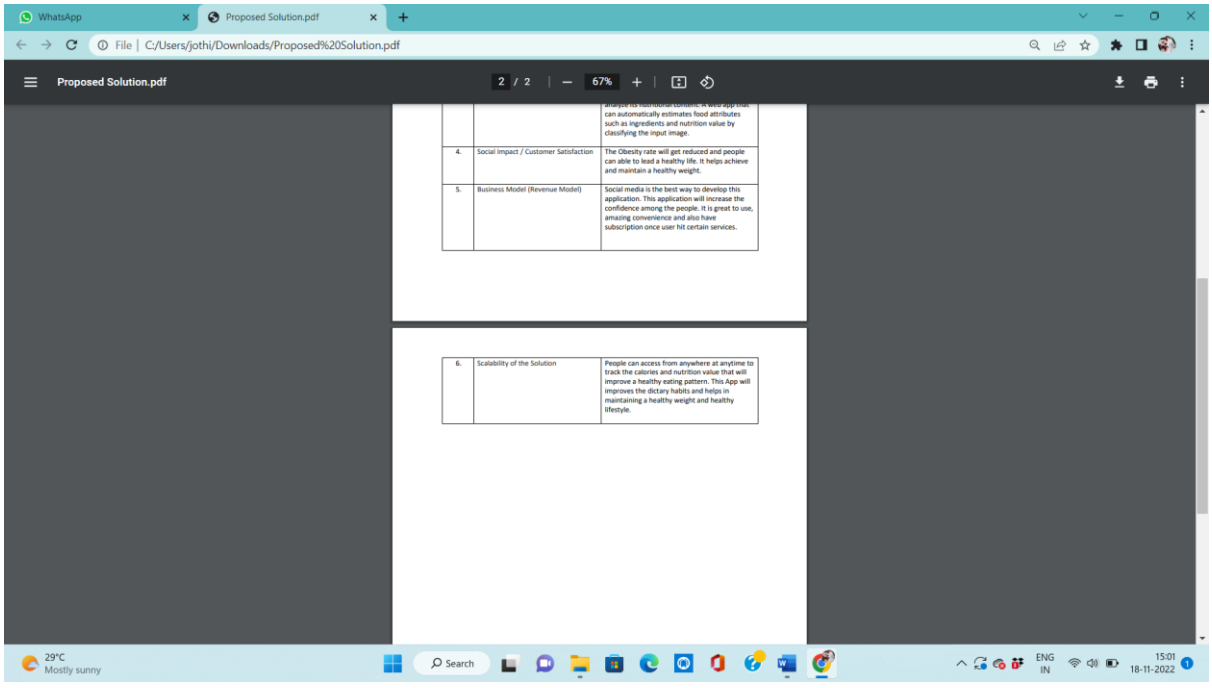
Project Design Phase-I
Proposed Solution Template

Date	11 October 2022
Team ID	PNT2022TMID29616
Project Name	Project – NUTRITION ASSISTANT APPLICATION
Maximum Marks	2 Marks

Proposed Solution Template:

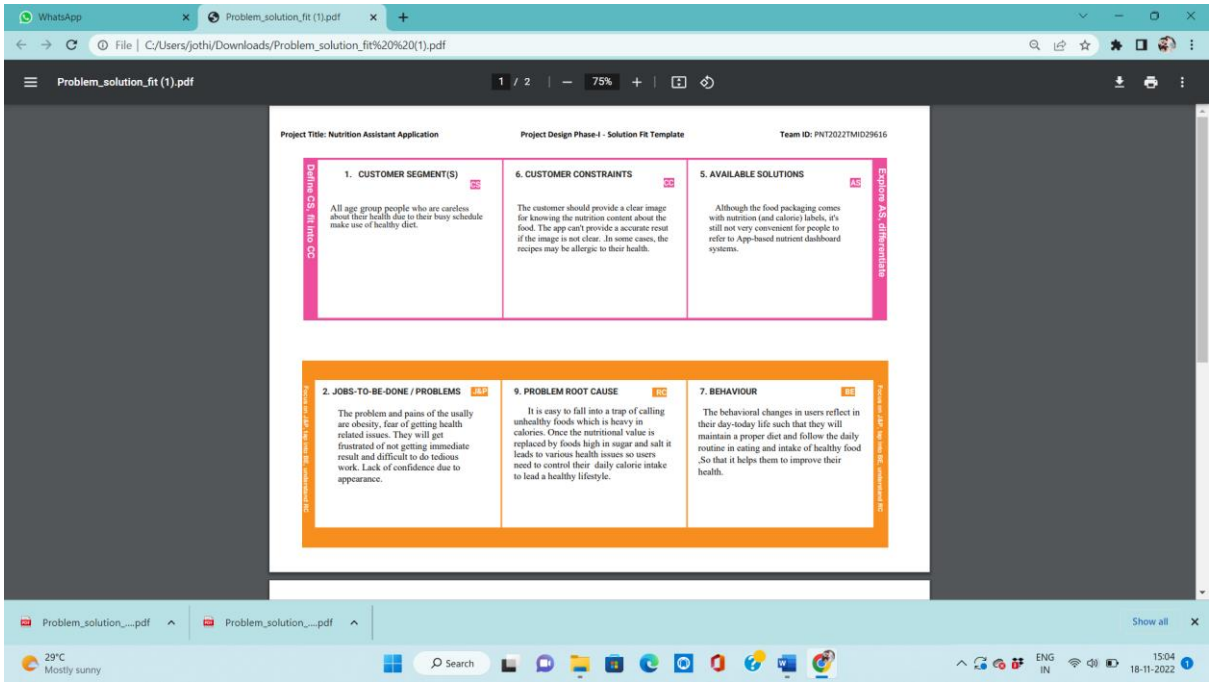
Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Rate of Obesity are increasing at an high speed,due to the ignorance of the proper Nutrition foods, and this leads to risks in 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, some food packaging has an added nutrition and calorie values, but it's not very comfortable to refer.
2.	Idea / Solution description	People can easily track the Nutrition and calories by scanning an real-time images of a food and examine it's nutritional content which will improves the dietary habits. Smart nutrition and foods can prevent diseases. This app will provide proper nutrition, helps in maintaining a healthy lifestyle and also recommended diet plans for users.
3.	Novelty / Uniqueness	This solution has the uniqueness that we can realize real time images of meal and can easily analyze its nutritional content. A web app that can automatically estimates food attributes such as ingredients and nutrition value by classifying the input image.
4.	Social Impact / Customer Satisfaction	The Obesity rate will get reduced and people can able to lead a healthy life. It helps achieve and maintain a healthy weight.
5.	Business Model (Revenue Model)	Social media is the best way to develop this application. This application will increase the confidence among the people. It is great to use, amazing convenience and also have subscription once user hit certain services.



6.	Scalability of the Solution	People can access from anywhere at anytime to track the calories and nutrition value that will improve a healthy eating pattern. This App will improves the dictary habits and helps in maintaining a healthy weight and healthy lifestyle.

3.4 Problem Solution



Project Title: Nutrition Assistant Application

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID29616

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

All age group people who are careless about their health due to their busy schedule make use of healthy diet.

6. CUSTOMER CONSTRAINTS CC

The customer should provide a clear image for knowing the nutrition content about the food. The app can't provide a accurate resut if the image is not clear. .In some cases, the recipes may be allergic to their health.

5. AVAILABLE SOLUTIONS AS

Although the food packaging comes with nutrition (and calorie) labels, it's still not very convenient for people to refer to App-based nutrient dashboard systems.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS J&P

The problem and pains of the usally are obesity, fear of getting health related issues. They will get frustrated of not getting immediate result and difficult to do tedious work. Lack of confidence due to appearance.

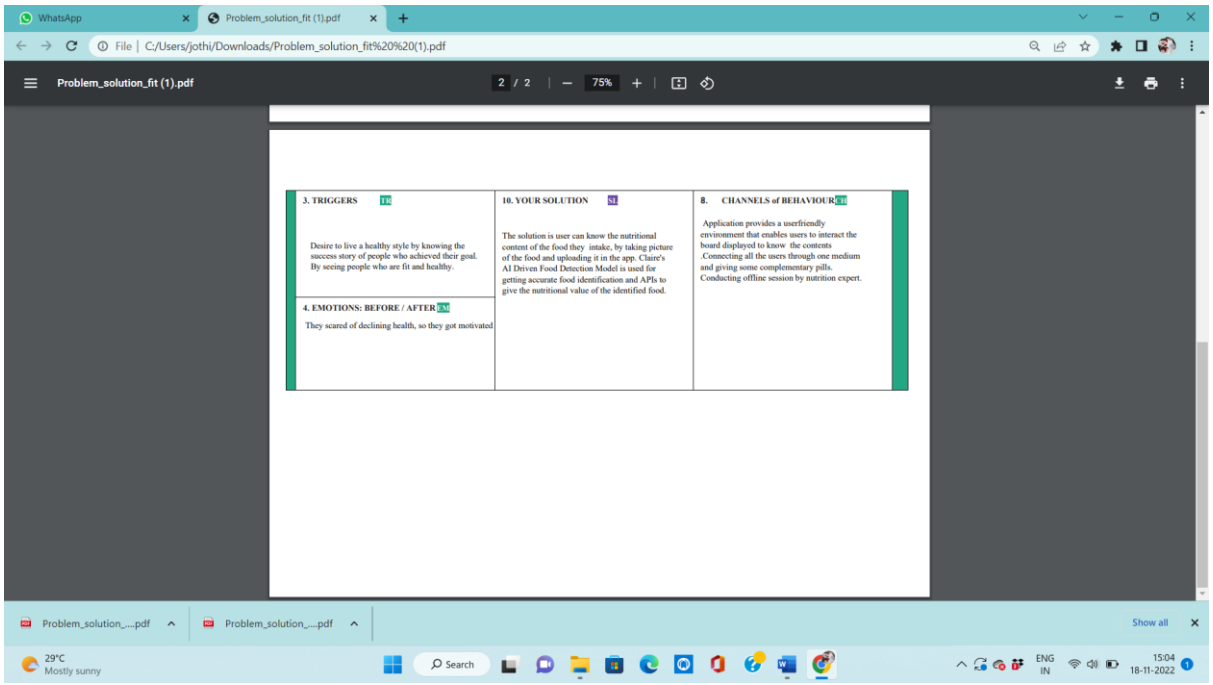
9. PROBLEM ROOT CAUSE RC

It is easy to fall into a trap of calling unhealthy foods which is heavy in calories. Once the nutritional value is replaced by foods high in sugar and salt it leads to various health issues so users need to control their daily calorie intake to lead a healthy lifestyle.

7. BEHAVIOUR BE

The behavioral changes in users reflect in their day-today life such that they will maintain a proper diet and follow the daily routine in eating and intake of healthy food ,So that it helps them to improve their health.

Focus on J&P, tap into BE, understand RC



3. TRIGGERS TR

Desire to live a healthy style by knowing the success story of people who achieved their goal. By seeing people who are fit and healthy.

4. EMOTIONS: BEFORE / AFTER EM

They scared of declining health, so they got motivated

10. YOUR SOLUTION SL

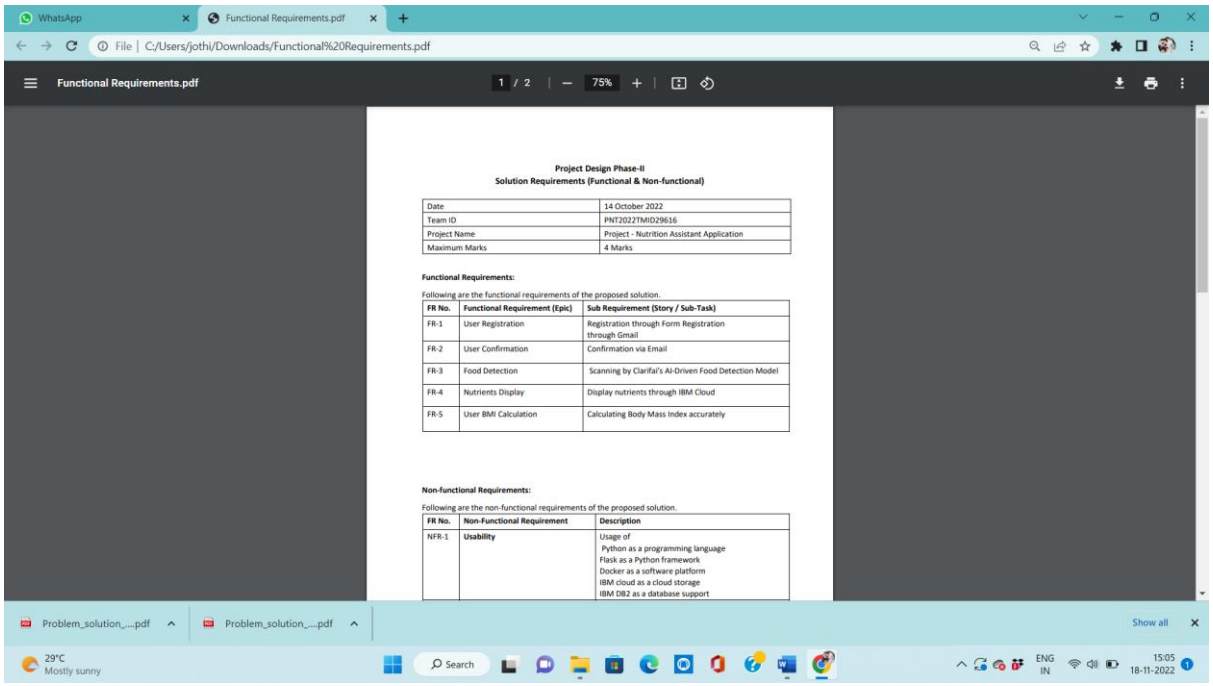
The solution is user can know the nutritional content of the food they intake, by taking picture of the food and uploading it in the app. Claire's AI Driven Food Detection Model is used for getting accurate food identification and APIs to give the nutritional value of the identified food.

8. CHANNELS of BEHAVIOUR CH

Application provides a userfriendly environment that enables users to interact the board displayed to know the contents .Connecting all the users through one medium and giving some complementary pills. Conducting offline session by nutrition expert.

4.REQUIREMENT ANALYSIS

4.1 Functional Requirement



Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	14 October 2022
Team ID	PNT2022TMID29616
Project Name	Project - Nutrition Assistant Application
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

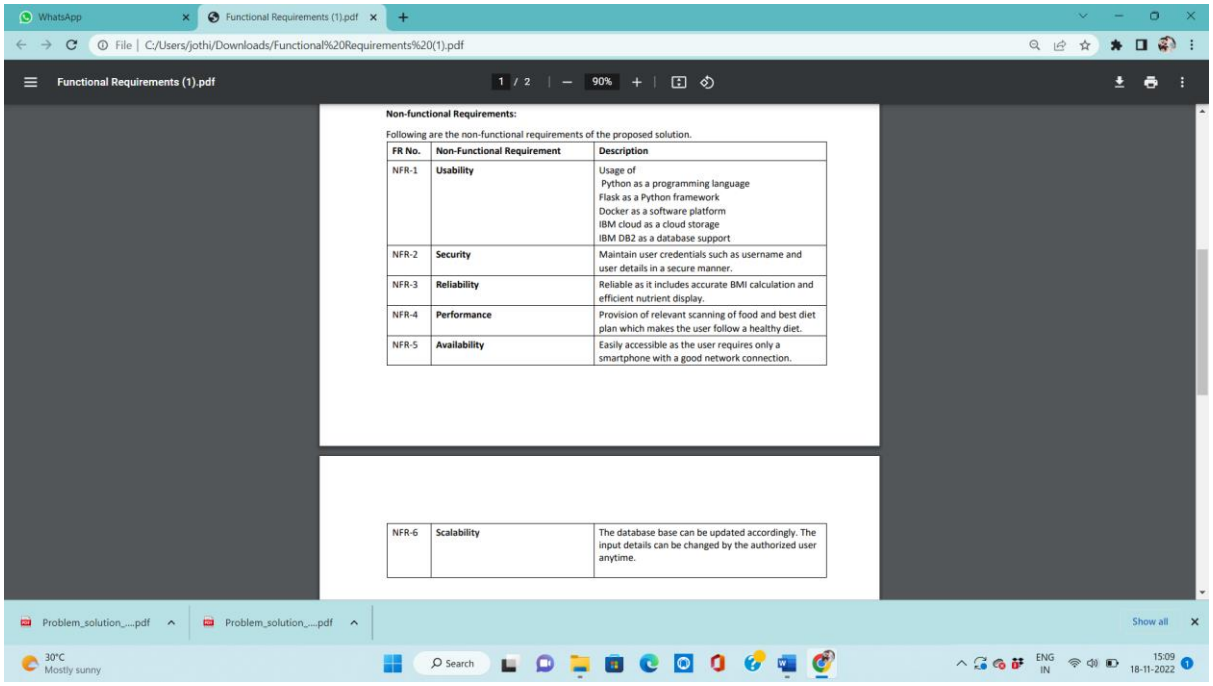
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
FR-3	Food Detection	Scanning by Clarifai's AI-Driven Food Detection Model
FR-4	Nutrients Display	Display nutrients through IBM Cloud
FR-5	User BMI Calculation	Calculating Body Mass Index accurately

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usage of Python as a programming language Flask as a Python framework Docker as a software platform IBM cloud as a cloud storage IBM DB2 as a database support

4.2 Non Functional Requirement



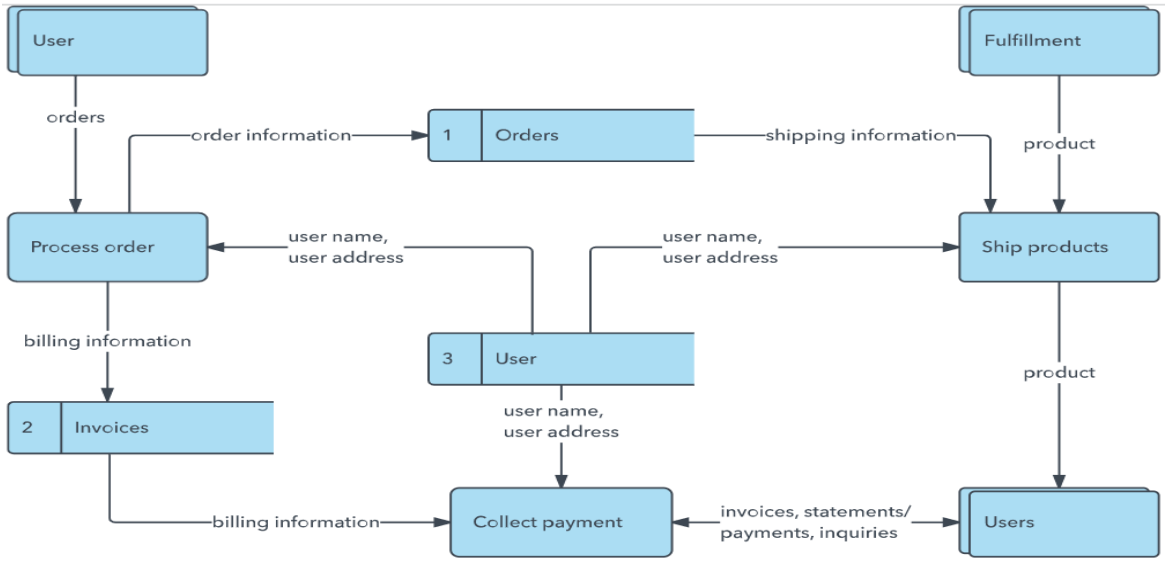
Non-functional Requirements:

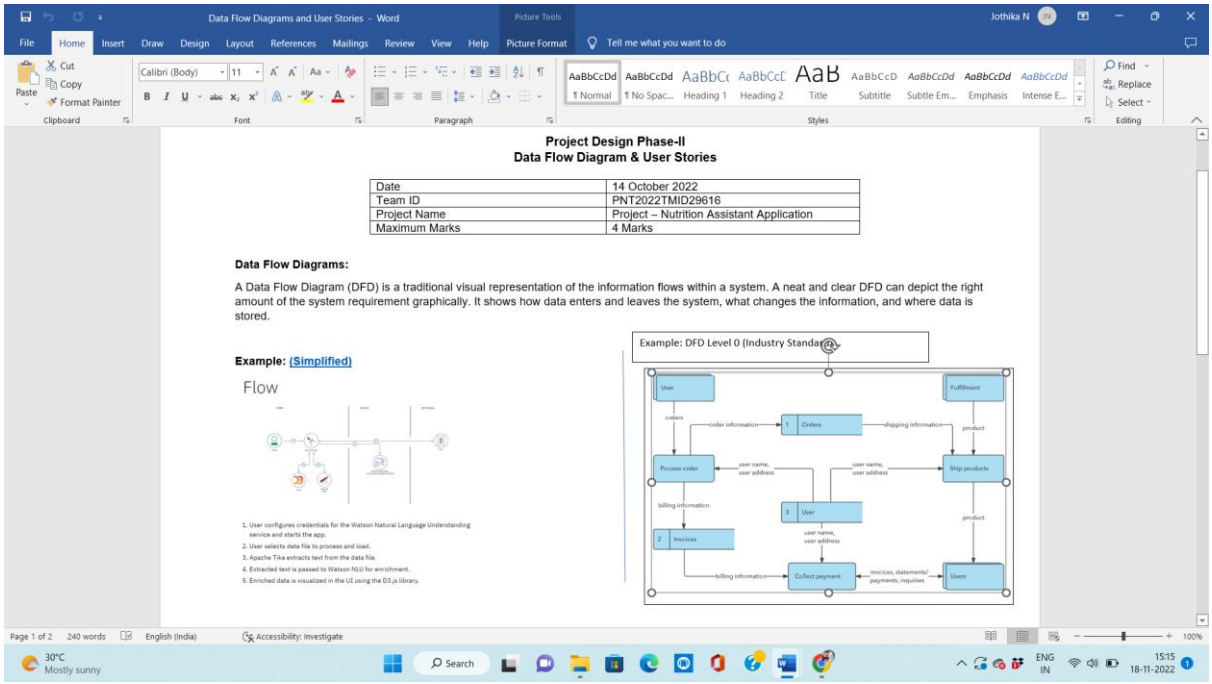
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usage of Python as a programming language Flask as a Python framework Docker as a software platform IBM cloud as a cloud storage IBM DB2 as a database support
NFR-2	Security	Maintain user credentials such as username and user details in a secure manner.
NFR-3	Reliability	Reliable as it includes accurate BMI calculation and efficient nutrient display.
NFR-4	Performance	Provision of relevant scanning of food and best diet plan which makes the user follow a healthy diet.
NFR-5	Availability	Easily accessible as the user requires only a smartphone with a good network connection.
NFR-6	Scalability	The database base can be updated accordingly. The input details can be changed by the authorized user anytime.

5. PROJECT DESIGN

5.1 Data Flow Diagrams





Data Flow Diagrams and User Stories - Word

Project Design Phase-II
Data Flow Diagram & User Stories

Date	14 October 2022
Team ID	PNT2022TMID29616
Project Name	Project – Nutrition Assistant Application
Maximum Marks	4 Marks

Data Flow Diagrams:

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.

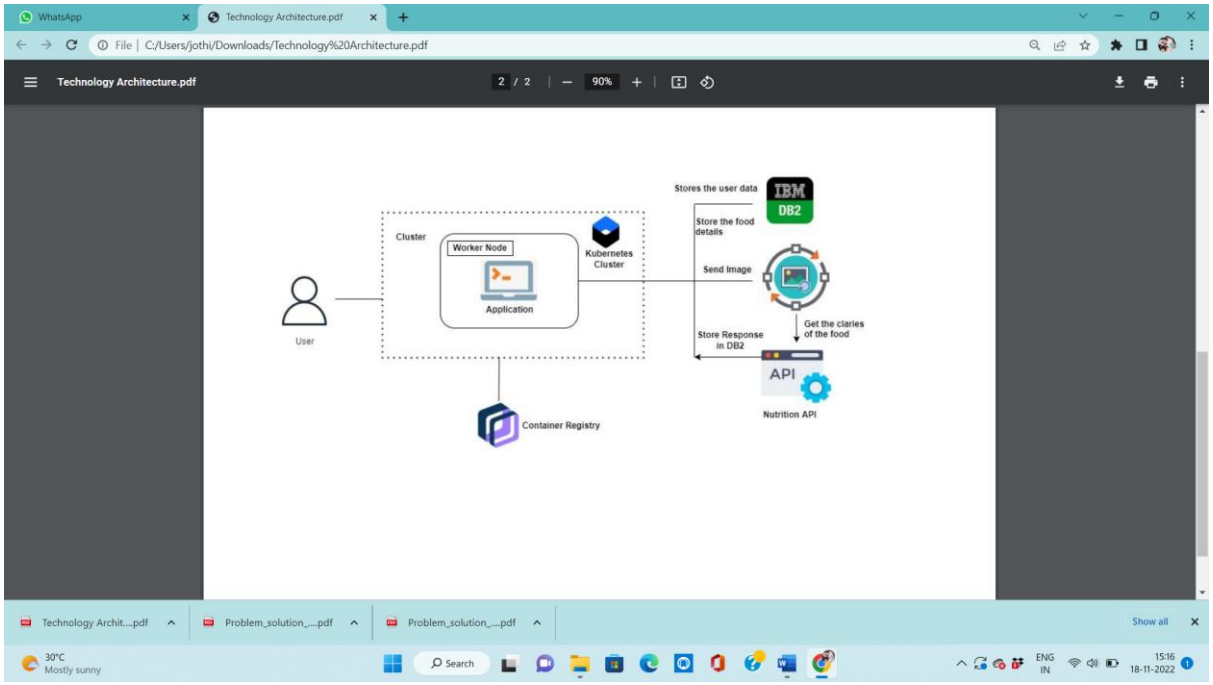
Example: (Simplified)

Flow

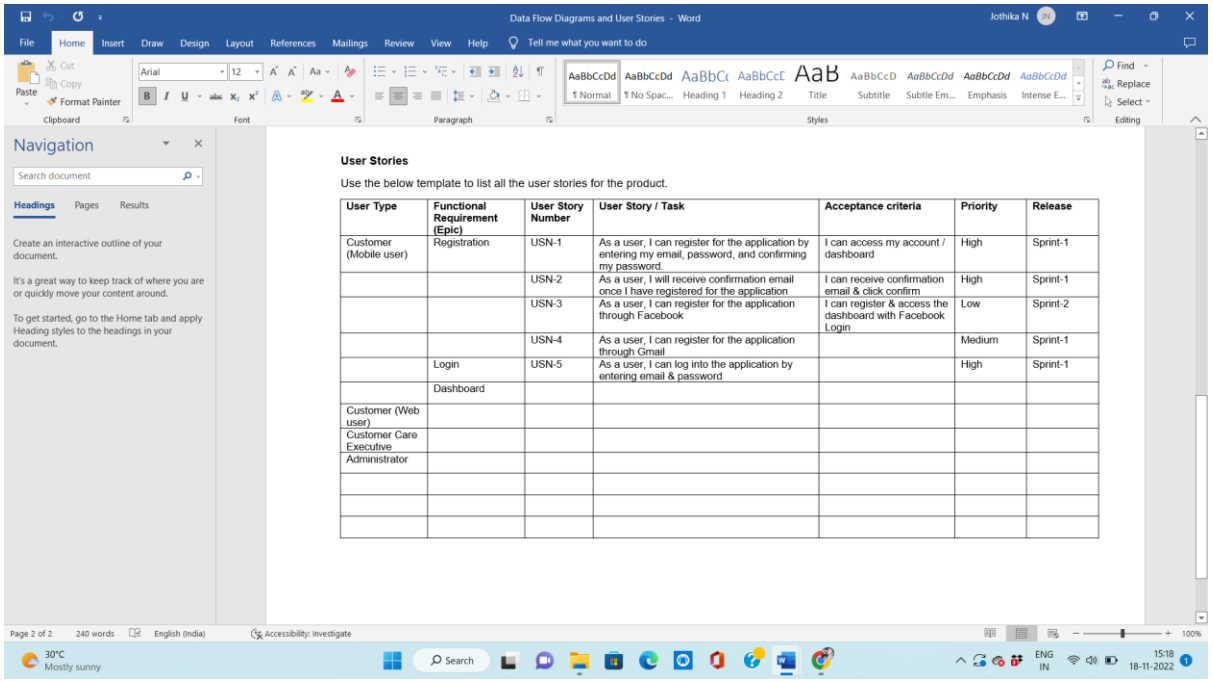
1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

Example: DFD Level 0 (Industry Standard)

5.2 Solution & Technical Architecture



5.3 User Stories



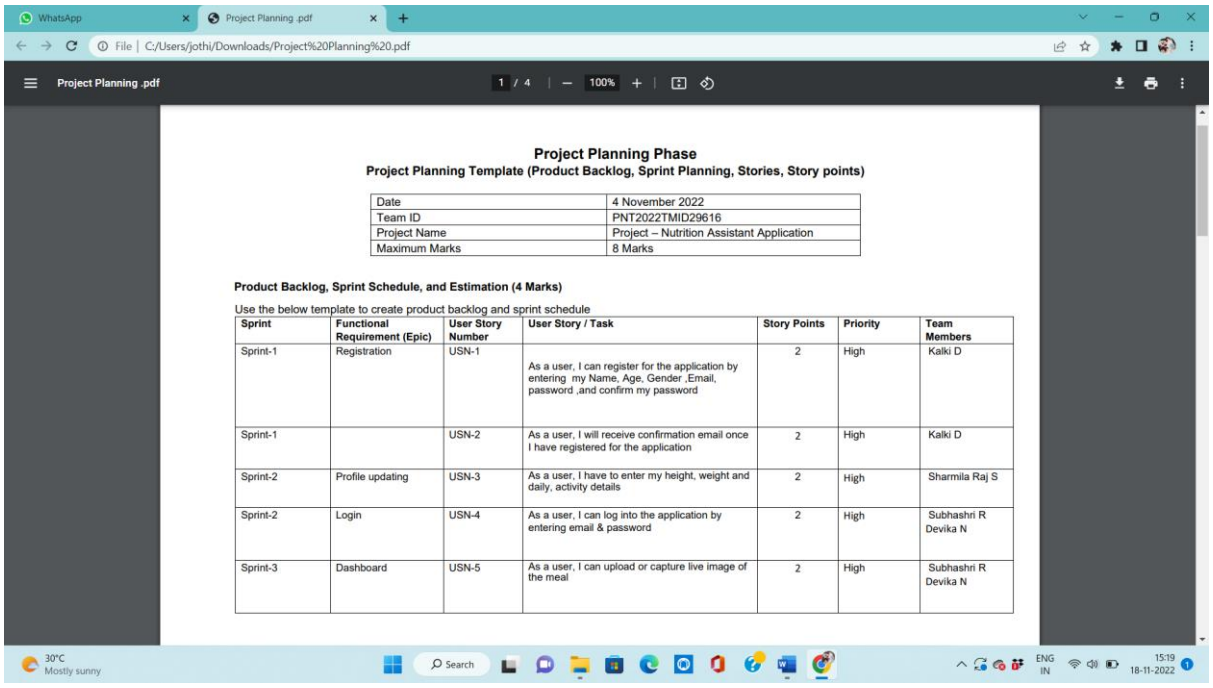
User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard					
Customer (Web user)						
Customer Care Executive						
Administrator						

6. PROJECT PLANNING AND SCHEDULING

6.1 Sprint Planning & Estimation



Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

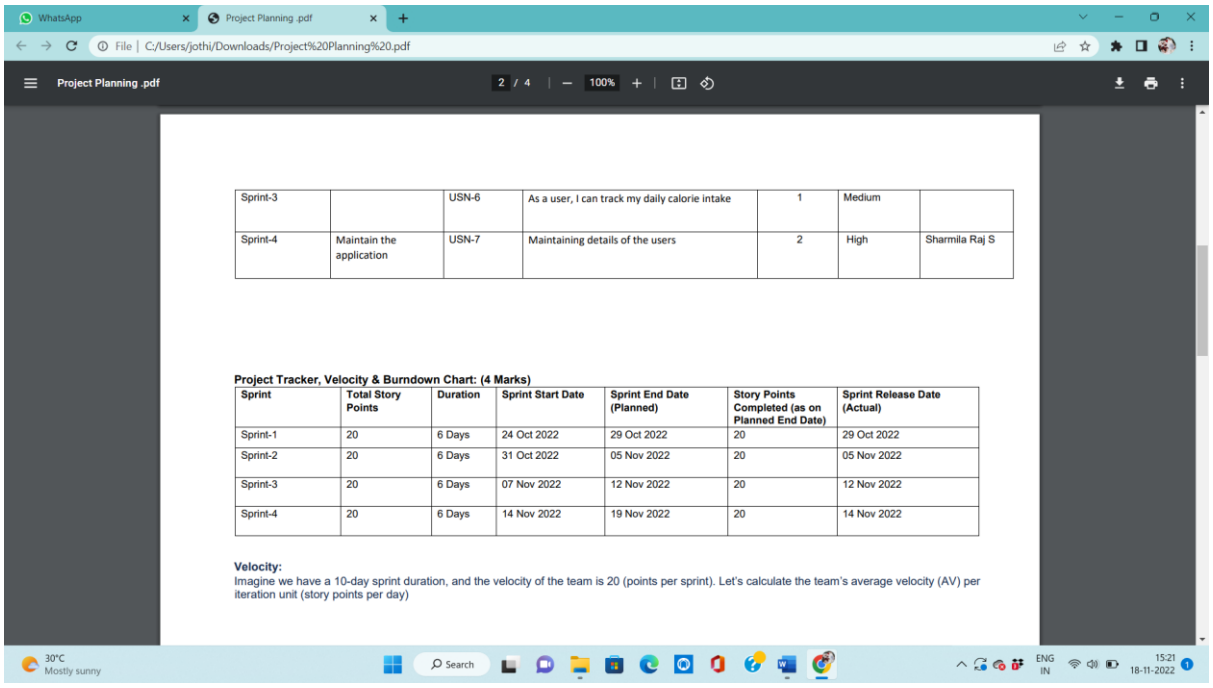
Date	4 November 2022
Team ID	PNT2022TMID29616
Project Name	Project – Nutrition Assistant Application
Maximum Marks	8 Marks

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

Use the below template to create product backlog and sprint schedule

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 Name, Age, Gender ,Email, password ,and confirm my password	2	High	Kalki D
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	2	High	Kalki D
Sprint-2	Profile updating	USN-3	As a user, I have to enter my height, weight and daily, activity details	2	High	Sharmila Raj S
Sprint-2	Login	USN-4	As a user, I can log into the application by entering email & password	2	High	Subhashri R Devika N
Sprint-3	Dashboard	USN-5	As a user, I can upload or capture live image of the meal	2	High	Subhashri R Devika N

6.2 Sprint Delivery Schedule



Sprint-3		USN-6	As a user, I can track my daily calorie intake	1	Medium	
Sprint-4	Maintain the application	USN-7	Maintaining details of the users	2	High	Sharmila Raj S

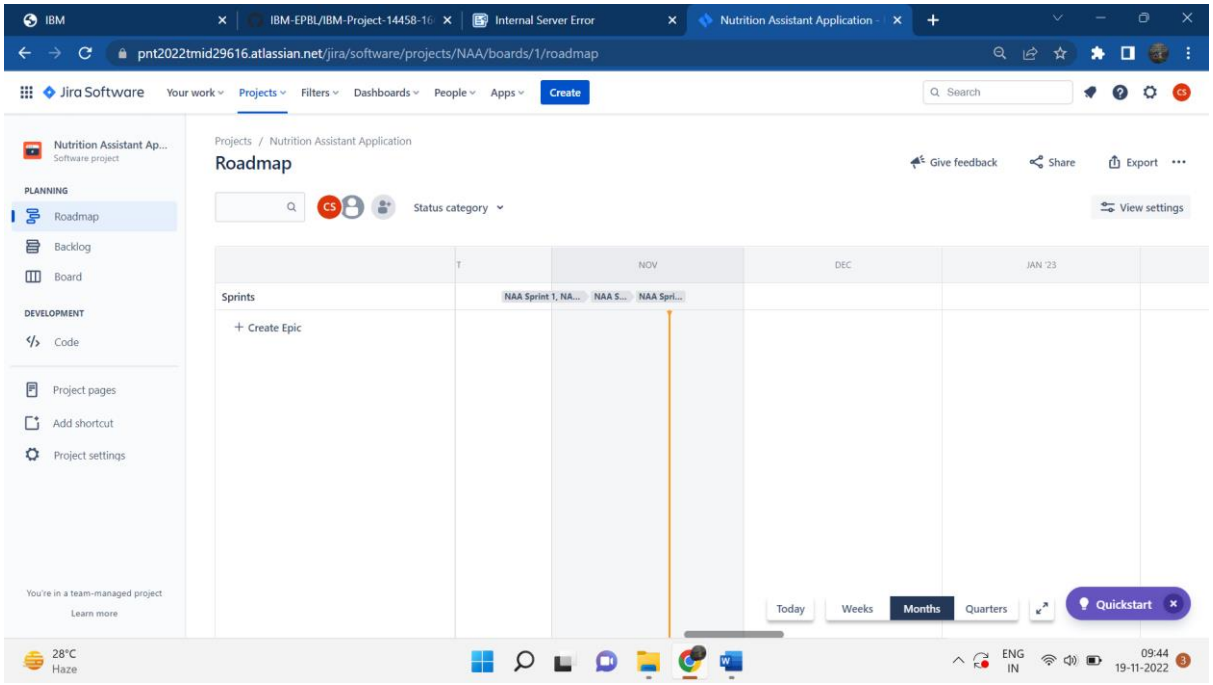
Project Tracker, Velocity & Burndown Chart: (4 Marks)

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

Velocity:

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

6.3 Reports from JIRA



7.CODING & SOLUTIONING

7.1 Feature 1

Welcome.html

To the project, we incorporated an email service. This service sends email messages with nutrition-related information directly to customers' inboxes.

```
def custom_send_mail(email, data):

    sg =
sendgrid.SendGridAPIClient(SENDGRID_API_KEY)
```

```
    from_email =
Email("nutritioninyourlife.foryoy@gmail.com")
    to_email = To(email)   # Change to your recipient
    subject = "Nutrition is a basic human need and a
prerequisite for healthy life"
    content = Content("text/plain",
                      f"'{data}'")
    mail = Mail(from_email, to_email, subject, content)
    # Get a JSON-ready representation of the Mail object
    mail_json = mail.get()
    sg.client.mail.send.post(request_body=mail_json)
```

7.2 Feature 2

app.py

We store the nutrition-related information on the database, so users can access the data when they need it. **Adding result into database,**

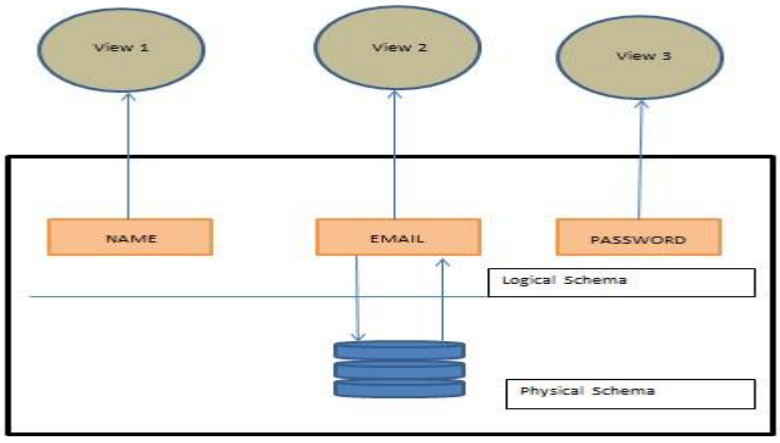
```
insert_sql = "INSERT INTO PERSON VALUES (?,?,?,?)"
 prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prep_stmt, 1, session['name'])
 ibm_db.bind_param(prep_stmt, 2, session['email'])
 ibm_db.bind_param(prep_stmt, 3, complete_value)
 ibm_db.bind_param(prep_stmt, 4, current_time)
```

```
ibm_db.execute(prep_stmt)
```

Getting information from the database

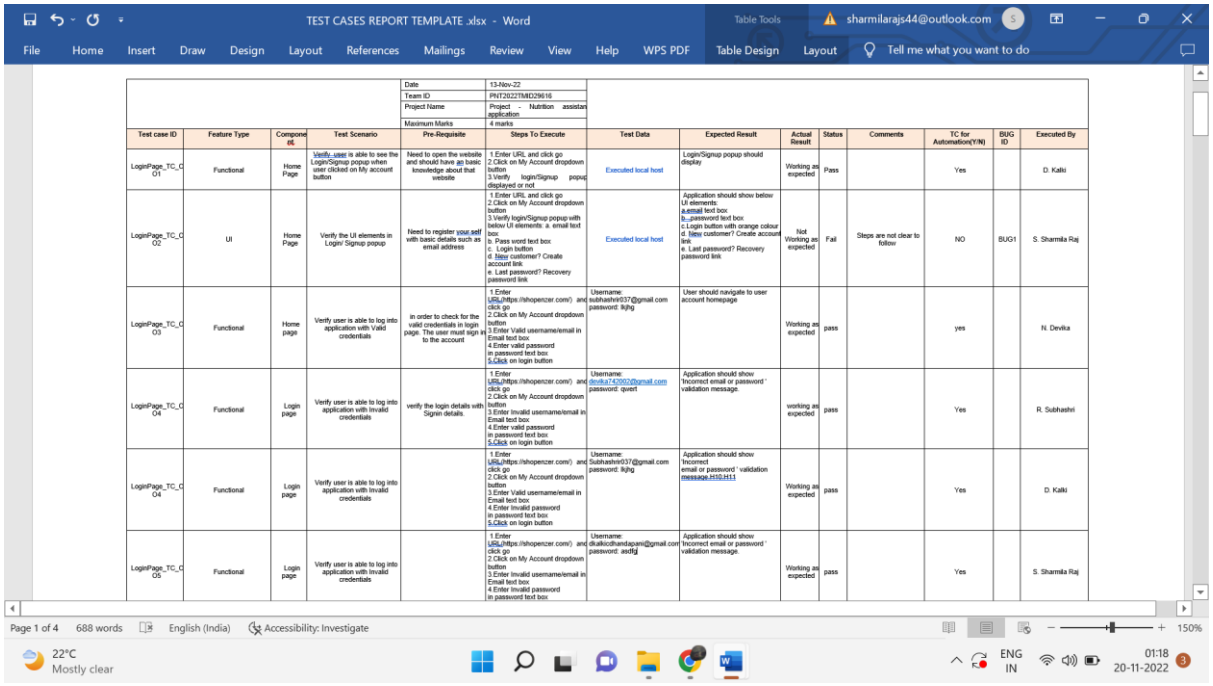
```
def get_history():
    history = []
    sql = f"SELECT * FROM PERSON WHERE email = '{session['email']}'"
    stmt = ibm_db.exec_immediate(conn, sql)
dictionary = ibm_db.fetch_both(stmt)
while dictionary:
        history.append(dictionary)
        dictionary = ibm_db.fetch_both(stmt)
    return history
```

7.3 Database Schema



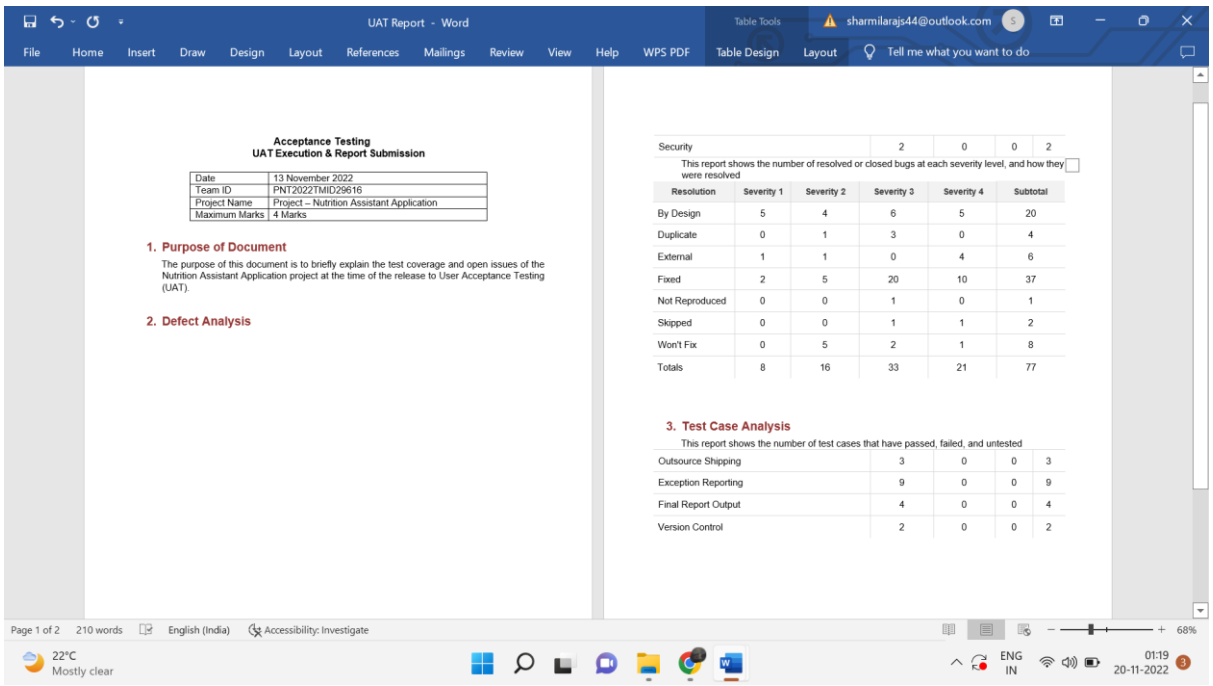
8.TESTING

8.1 TEST CASES



				Date	13-Nov-22							
				Team ID	PNT2022TMID29616							
				Project Name	Project - Nutrition assistant application							
				Maximum Marks	4 marks							
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_C O1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button	Need to open the website and should have an basic knowledge about that website	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Signup popup displayed or not	Executed local host	Login/Signup popup should display	Working as expected	Pass		Yes		D. Kalki
LoginPage_TC_C O2	UI	Home Page	Verify the UI elements in Login/ Signup popup	Need to register your self with basic details such as email address	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Signup popup with below UI elements: a. email text box b. Pass word text box c. Login button d. New customer? Create account link e. Last password? Recovery password link	Executed local host	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	Not Working as expected	Fail	Steps are not clear to follow	NO	BUG1	S. Sharmila Raj
LoginPage_TC_C O3	Functional	Home page	Verify user is able to log into application with Valid credentials	in order to check for the valid credentials in login page. The user must sign in to the account	1.Enter URL(https://shopencer.com/) 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: subhashri037@gmail.com password: lkjhg	User should navigate to user account homepage	Working as expected	pass		yes		N. Devika
LoginPage_TC_C O4	Functional	Login page	Verify user is able to log into application with Invalid credentials	verify the login details with Signin details	1.Enter URL(https://shopencer.com/) and click go 2.Click on My Account dropdown button 3.Enter Invalid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: devika742002@gmail.com password: qwert	Application should show 'Incorrect email or password ' validation message.	working as expected	pass		Yes		R. Subhashri
LoginPage_TC_C O4	Functional	Login page	Verify user is able to log into application with Invalid credentials		1.Enter URL(https://shopencer.com/) and click go 2.Click on My Account dropdown button 3.Enter Valid username/email in Email text box 4.Enter Invalid password in password text box 5.Click on login button	Username: Subhashri037@gmail.com password: lkjhg	Application should show 'Incorrect email or password ' validation message.H10,H11	Working as expected	pass		Yes		D. Kalki
LoginPage_TC_C O5	Functional	Login page	Verify user is able to log into application with Invalid credentials		1.Enter URL(https://shopencer.com/) and click go 2.Click on My Account dropdown button 3.Enter Invalid username/email in Email text box 4.Enter Invalid password in password text box	Username: dkalkidhandapani@gmail.com password: asdfg	Application should show 'Incorrect email or password ' validation message.	Working as expected	pass		Yes		S. Sharmila Raj

8.2 USER ACCEPTANCE TESTING



Acceptance Testing
UAT Execution & Report Submission

Date	13 November 2022
Team ID	PNT2022TMID29616
Project Name	Project – Nutrition Assistant Application
Maximum Marks	4 Marks

1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the Nutrition Assistant Application project at the time of the release to User Acceptance Testing (UAT).

2. Defect Analysis

Security	2	0	0	2

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	5	4	6	5	20
Duplicate	0	1	3	0	4
External	1	1	0	4	6
Fixed	2	5	20	10	37
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	8	16	33	21	77

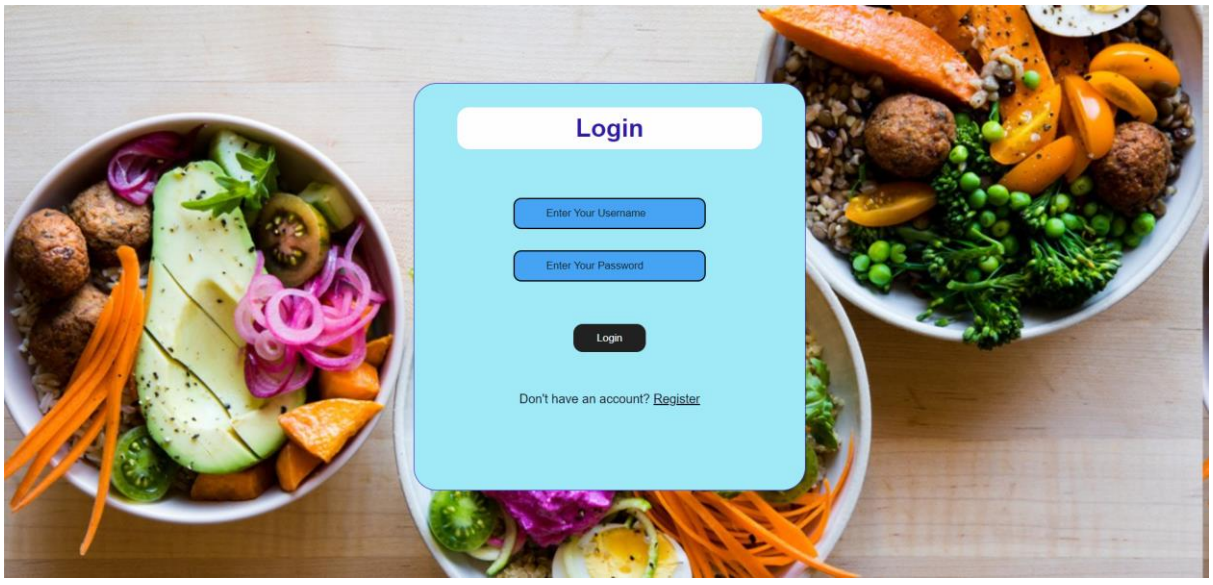
3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Outsource Shipping	3	0	0	3
Exception Reporting	9	0	0	9
Final Report Output	4	0	0	4
Version Control	2	0	0	2

9.RESULTS

9.1 PERFORMANCE METRICS



Home About Us Upload Logout

Why Nutrition matters?

People with healthy eating patterns live longer and are at lower risk for serious health problems such as heart disease, type 2 diabetes, and obesity. For people with chronic diseases, healthy eating can help manage these conditions and prevent complications.

Choose The Right Path

While fast food may be convenient, healthy food is better for maintaining your weight, getting the right amount of essential nutrients in your diet and keeping yourself healthy. You can even eat healthy for less than it costs to eat fast food with proper planning and some time spent preparing and cooking your food.

You Are What You Eat

Eating a healthy diet is difficult without access to nutritious food. Each year, chronic diseases account for 70% of all deaths in the United States. Poor diets lead to chronic illnesses such as heart disease, type 2 diabetes, and obesity.

Health Requires Healthy Food

Health is not about the weight you lose, But about the wait you gain!

Nutrition is the biochemical and physiological process by which an organism uses food to support its life

Follow us

Links

Home
About Us
Upload

Support

Contact
Support Center
Feedback

Contact

9500695969
nutro@gmail.com
GEC Circle, Chennai

Home About Us Upload Logout

Why Nutrition matters?

People with healthy eating patterns live longer and are at lower risk for serious health problems such as heart disease, type 2 diabetes, and obesity. For people with chronic diseases, healthy eating can help manage these conditions and prevent complications.

Choose The Right Path

While fast food may be convenient, healthy food is better for maintaining your weight, getting the right amount of essential nutrients in your diet and keeping yourself healthy. You can even eat healthy for less than it costs to eat fast food with proper planning and some time spent preparing and cooking your food.

You Are What You Eat

Eating a healthy diet is difficult without access to nutritious food. Each year, chronic diseases account for 70% of all deaths in the United States. Poor diets lead to chronic illnesses such as heart disease, type 2 diabetes, and obesity.

Health Requires Healthy Food

Health is not about the weight you lose, But about the wait you gain!

Nutro Assistant

Welcome to nutro!!

hi hello help

hi

How may I help you?

Give ideas to loose weight

Give ideas to gain weight

Give ideas to gain weight

These foods can help you increase your weight in a healthy way.

- Homemade protein smoothies
  - Milk
  - Rice

Type something...

Built with IBM Watson®

Nutrition is the biochemical and physiological process by which an organism uses food to support its life

Follow us

Links

Home
About Us
Upload

Support

Contact
Support Center
Feedback

Our Story

Welcome to NUTRO!!!

Nutrition assistants help dieticians with providing proper nutrition at healthcare facilities. They determine patient's nutritional needs, assess risk factors, and plan meals and menus. They also ensure proper sterilization of plates and utensils.

By showcasing warmth, graciousness, efficiency, skill, professionalism, and integrity in our work, we will continually serve our consumers with exceptional service. To have every customer who comes through our doors leave impressed by their experience at Welcome to NUTRO!!! and excited to come back again.

Our Goals

Healthy foods are those that provide you with the nutrients you need to sustain your body's well-being and retain energy. Water, carbohydrates, fat, protein, vitamins, and minerals are the key nutrients that make up a healthy, balanced diet. Nutritional support, when used appropriately, has a number of clinical benefits, including improved intake and nutritional status, functional recovery, fewer complications and reduced mortality.

Home About Us Upload Logout

What are you eating?

Snap a photo of your food & upload for a nutritional breakdown.

Choose File pancakes.jpeg

Open image

CLICK HERE TO PREDICT THE NUTRITIONAL CONTENTS

Nutrition is the biochemical and physiological process by which an organism uses food to support its life

Follow us

Links

Home
About Us
Upload

Support

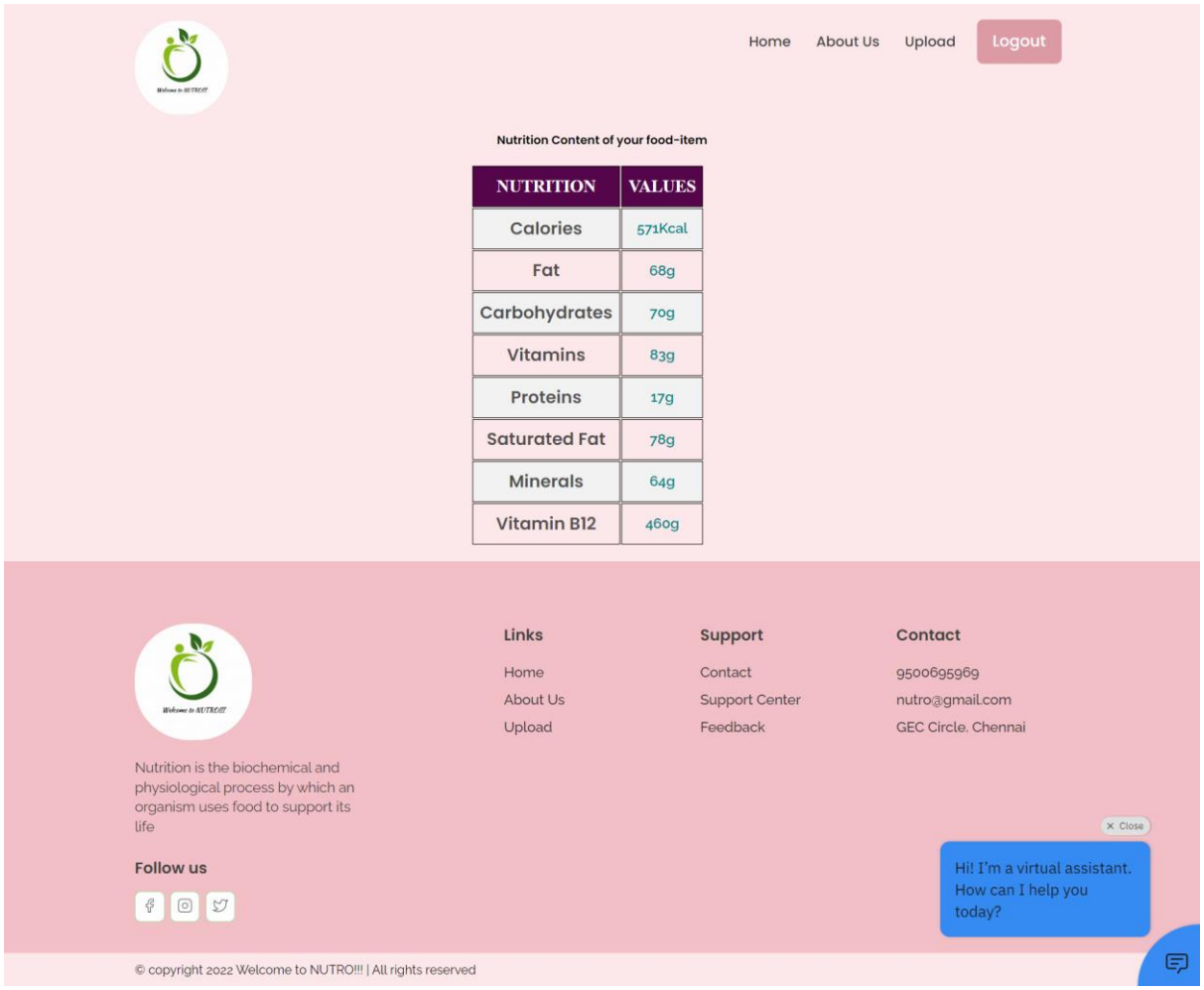
Contact
Support Center
Feedback

Contact

9500695969
nutro@gmail.com
GEC Circle, Chennai

× Close

Hi! I'm a virtual assistant. How can I help you today?



10.ADVANTAGES AND DISADVANTAGES

10.1 ADVANTAGES

- It helps us to be healthy.
- It assists us to take nutritious food.
- It assists us to know the nutrients content in the food we take.
- It makes us to avoid to go to gym.
- User Friendly Web-Application.

10.2 DISADVANTAGES

- It does not assists illiterates to take nutritious food.

11. CONCLUSION

Good nutrition is fundamental for children's current and future health, as well as their development and learning. The benefits of developing healthy dietary and lifestyle patterns from an early age onwards can positively impact on people's nutrition and health throughout their adult lives, and enhance the productivity of individuals and nations. Nutrition is an important element in an overall strategy aimed at improving food security and preventing all forms of malnutrition. Schools (from pre-school to secondary) are ideal settings for promoting lifelong healthy eating habits and lifestyles.

12. FUTURE SCOPE

Associations and effects of foods and nutrients on health. Dietary patterns and health. Molecular nutrition. Health claims on foods. The scope of a study explains the extent to which the research area will be explored in the work and specifies the parameters within the study will be operating. Basically, this means that you will have to define what the study is going to cover and what it is focusing on. Project scope is a way to set boundaries on your project and define exactly what goals, deadlines, and project deliverables you'll be working towards. By

clarifying your project scope, you can ensure you hit your project goals and objectives without delay or overwork. Defining your project scope isn't a one-person job. Future Scope is for the Undergraduates, Graduates and the Working Professionals. They may want to review or reconsider their future options and goals in terms of its suitability now; may be with a different perspective of their options in terms of time, resources, inclination etc.

13.APPENDIX

13.1 SOURCE CODE

Source Code :

https://github.com/IBM-EPBL/IBM-Project-14458-1664181923

13.2 DEMO LINK

Demo Video : https://youtu.be/TUfiOzAxs2c