

INTRODUCTION

Nutrition Assistant Application

Project Description:

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 f

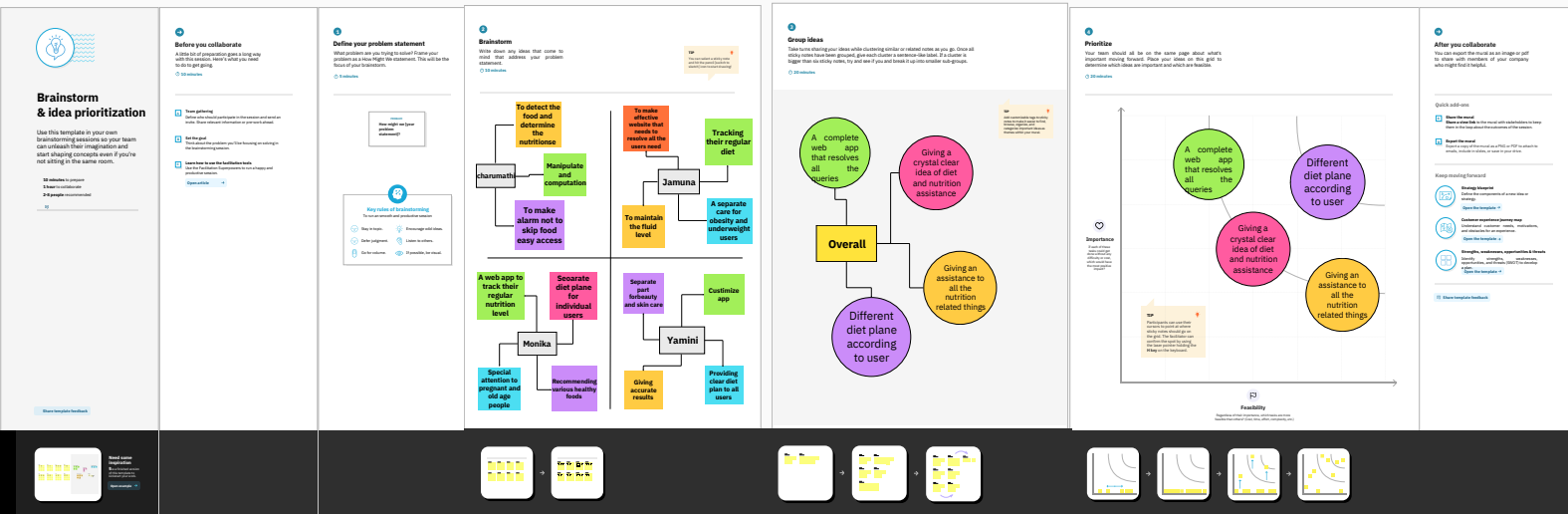
IDEATION AND PROPOSED SOLUTION

Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to help teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenge

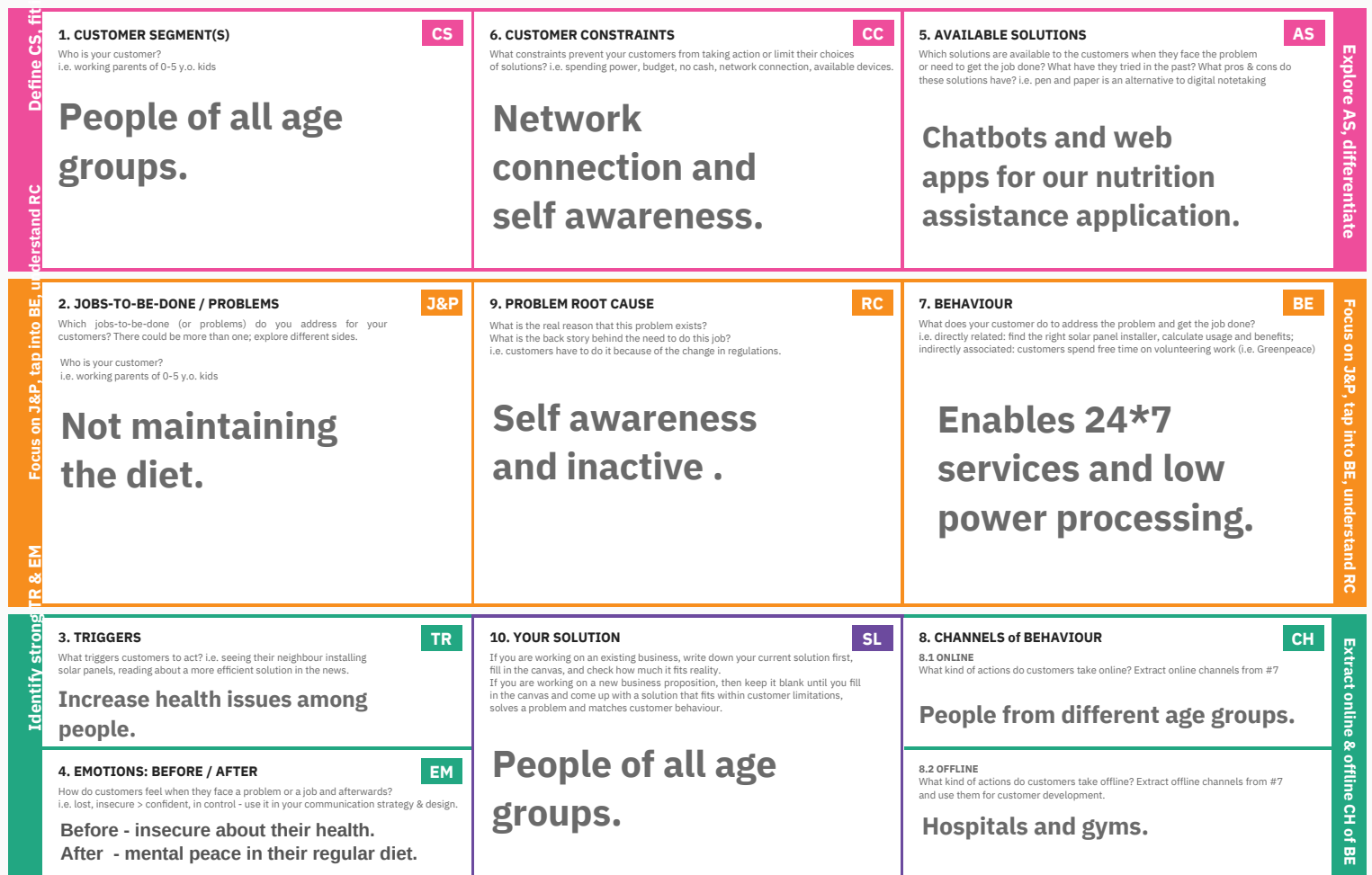


REQUIREMENT ANALYSIS



Problem-Solution fit canvas 2.0

Purpose / Vision



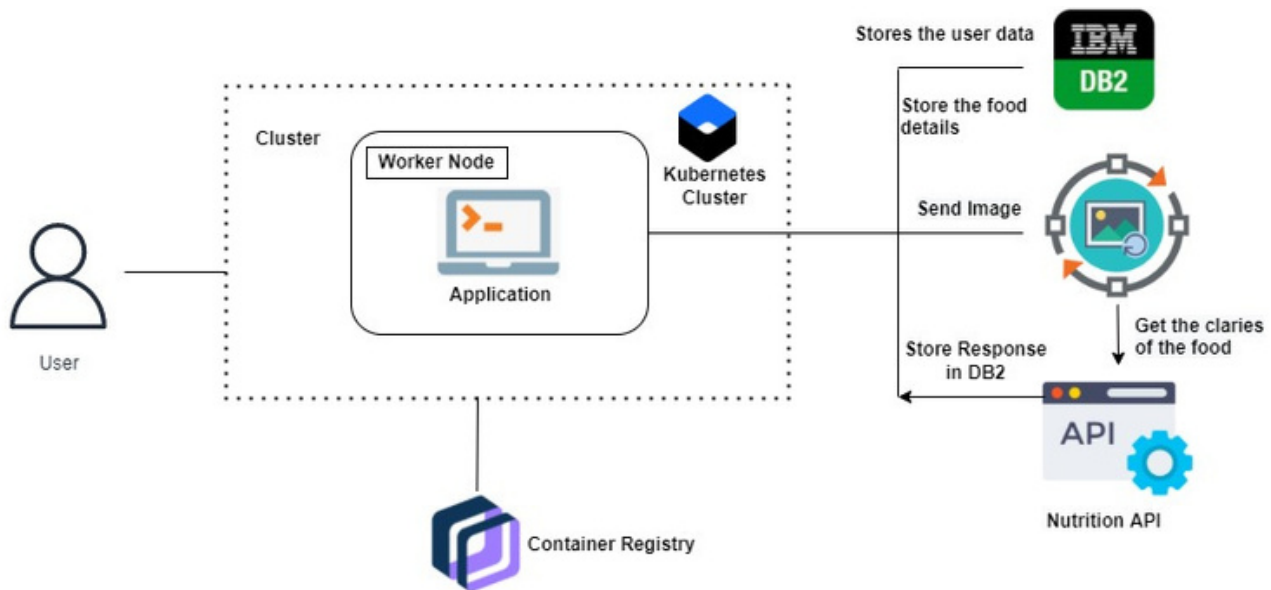
Literature Survey

S.NO	TITLE	PROPOSED WORK	SOFTWARE USED	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
1	Personalized Dietary Assistant-an intelligent space application	Observes the daily consumption habits of users & applies data mining to learn the personal taste.	Distributed intelligent networked neVICES(DINDS)	Data mining Artificial intelligence	Complex to calculate the entire nutritional value.
2	Plan-Cook-Eat:A “Plane-cook -eat” Meal planner A progressive web app with optimal application that macronutrian generates meal plan distribution of complaint to the calories based on necessary total daily energy macronutrient expenditure.distribution of daily calories based on individuals total daily energy expenditure (TDEE).		<ul style="list-style-type: none"> •AQEL- A nutrition app quality evaluation tool. •DataSources:FoodDb,Philippine FoodComposition Table,MyFoodData,USDA food composition data 	<ul style="list-style-type: none"> • Artificial Intelligence. • Data analysis. 	Generation of meal plan with optimal macronutrient distribution of daily calori.

S.NO	TITTLE	PROPOSED WORK	SOFTWARE USED	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
3	Profile Based System for Nutritional Information Management	Nutritional control by identifying the person's Shopping profile & uses the information to suggest the recommended food.	<ul style="list-style-type: none"> •Mobile Application •server 	Information technology	Automated way to assist users to control food-intake.
4	Alexa,What should I Eat? A personalized Virtual nutrition coach for Native American Diabetes Patient	to design an Amazon skill to extend the capability of Amazon alexa to support diabetics for NA users.	<ul style="list-style-type: none"> •Amazon Alexa software Development kit •ASR •NLU 	Artificial Intelliegence.	Easy to accepted by the target audience with the help of speech-recognition

S.NO	TITTLE	PROPOSED WORK	SOFTWARE USED	TECHNOLOGY	ADVANTAGES/ DISADVANTAGES
5	Intelligent diabetes Assistant	The system collects & process the data more efficient for care team.	Intelligent Diabetes Assistant(IDA)	Machine Learning	Quick-evaluation of patient health.
6	Computers & E-health:Roles and new applications	Promoting the current & future roles of computers in supporting e-health.	Personal Health Assistant(PH A)	Data computing	Allow busy People to get Fast & Trusted healthcare at any time,anywhere

PROJECT DESIGN



Guidelines

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

PROJECT PLANNING AND SCHEDULING

Docker CLI Installation:

IBM gave the documentation link, for how to install the Docker and CLI installation. we followed the instructions given by the documentation and we installed the Docker Desktop application.

First to install “Docker Desktop Installer.exe” file from [www.Docker.com](https://www.docker.com)

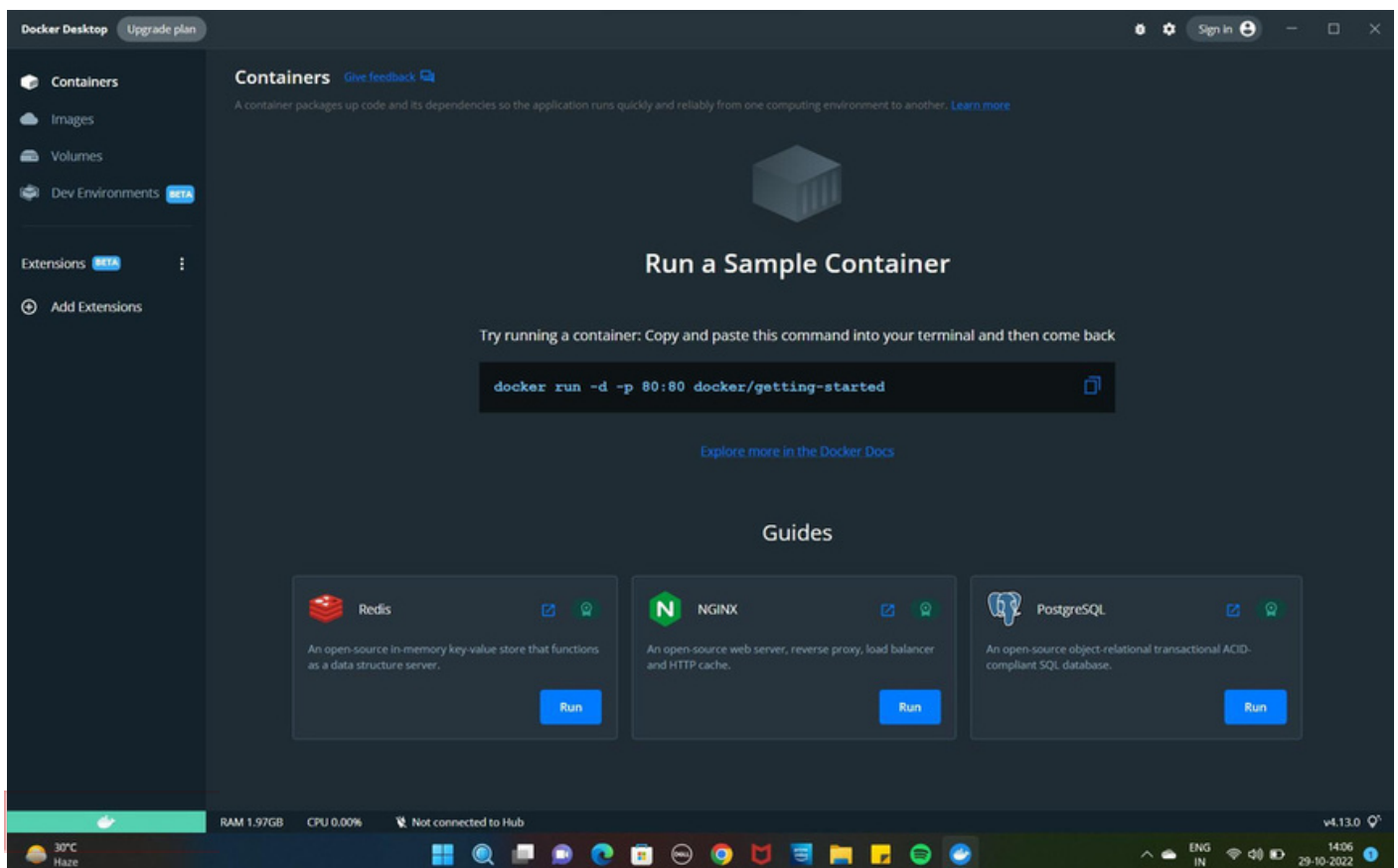
After downloaded the above file, follow the given below process:

Double-click Docker Desktop Installer.exe to run the installer.

Follow the instructions on the installation wizard to authorize the installer and proceed with the install.

When the installation is successful, click **Close** to complete the installation process.

Here is the Screenshot for the Docker installation, given Below:



Marked a small rectangle left corner to showing that the engine is running.

ADVANTAGES AND DISADVANTAGES

Advantages:

- Very precise and accurate results
- Reflects intake of previous day.so it can easily monitored.
- Used to correlate precise intake of food and biomarker levels.
- BMI also present for additional information.

Disadvantages :

- It'll not reach the most illiterate people.
- Need awareness and campaigns.

GITHUB AND PROJECT DEMO LINK

<https://youtu.be/oN83GOltEy4>

SOURCE CODE

```
<iframe width="560" height="315"  
src="https://www.youtube.com/embed/oN83GOltEy4"  
title="YouTube video player" frameborder="0"  
allow="accelerometer; autoplay; clipboard-write;  
encrypted-media; gyroscope; picture-in-picture"  
allowfullscreen></iframe>
```