Final Project Report

Nutrition Assistant Application

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1.INTRODUCTION

1.1 Project Overview

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.

This Nutrition API allow you to access over a limited food items to show its nutrition with the help of Application. You can automatically calculate the nutritional information for any food items, fruits, visualize nutrition lists that the fruits or food contain,. With our API, you can find many kinds of food and especially nutritions that the food contain.

1.2 Purpose

A key challenge in human nutrition is the assessment of usual food intake. This is of particular interest given recent proposals of eHealth personalized interventions. The adoption of mobile phones has created an opportunity for assessing and improving nutrient intake as they can be used for digitalizing dietary assessments and providing feedback. In the last few years, hundreds of nutrition-related mobile apps have been launched and installed by millions of users.

Hence this application may help people in knowing their diet plan and how healthy their intake of food differs from day to day also a good thing is that they can plan their diet in a good way.

2.LITERATURE SURVEY

2.1 Existing Problem

⇨Many nutrients are essential for good health.While it's possible to get most of them from a balanced diet, the typical Western diet is low in several very important nutrients.

⇨The advancement in the modern life style of eating food is also one of the reason to the to the emerging nutrient deficiency.

⇨Thus in order to get rid of this disease and increase the nutrient content in our body we need to monitor our daily routine using our nutrition assistant application.

2.2 Reference

Advancements in technology created too relaxed conditions for people around the world, which resulted in global obesity and obesity-related mortal diseases. So, it is no wonder that all kinds of diet and nutrition applications are in a constantly growing demand. Since starting a food and nutrition tracking app is a business decision that requires spending financial and time resources on , development, and promotion you need to know more than just the basics of how to build a diet assistant app that is both efficient for its users and profitable for you.

Just like any other web or mobile application, a nutrition meal planner app must have a certain functionality set and a number of basic features that help its users to improve their physical condition and make your health tracking platform differ from your main competitors.

Depending on the type of your diet and nutrition web application, it can include different types of users, such as nutrition experts, regular users, vendors, admins, etc. In addition, your diet service can offer more than just tracking food consumption, fitness activity, and calculating calories.

2.3 Problem Statement Definition

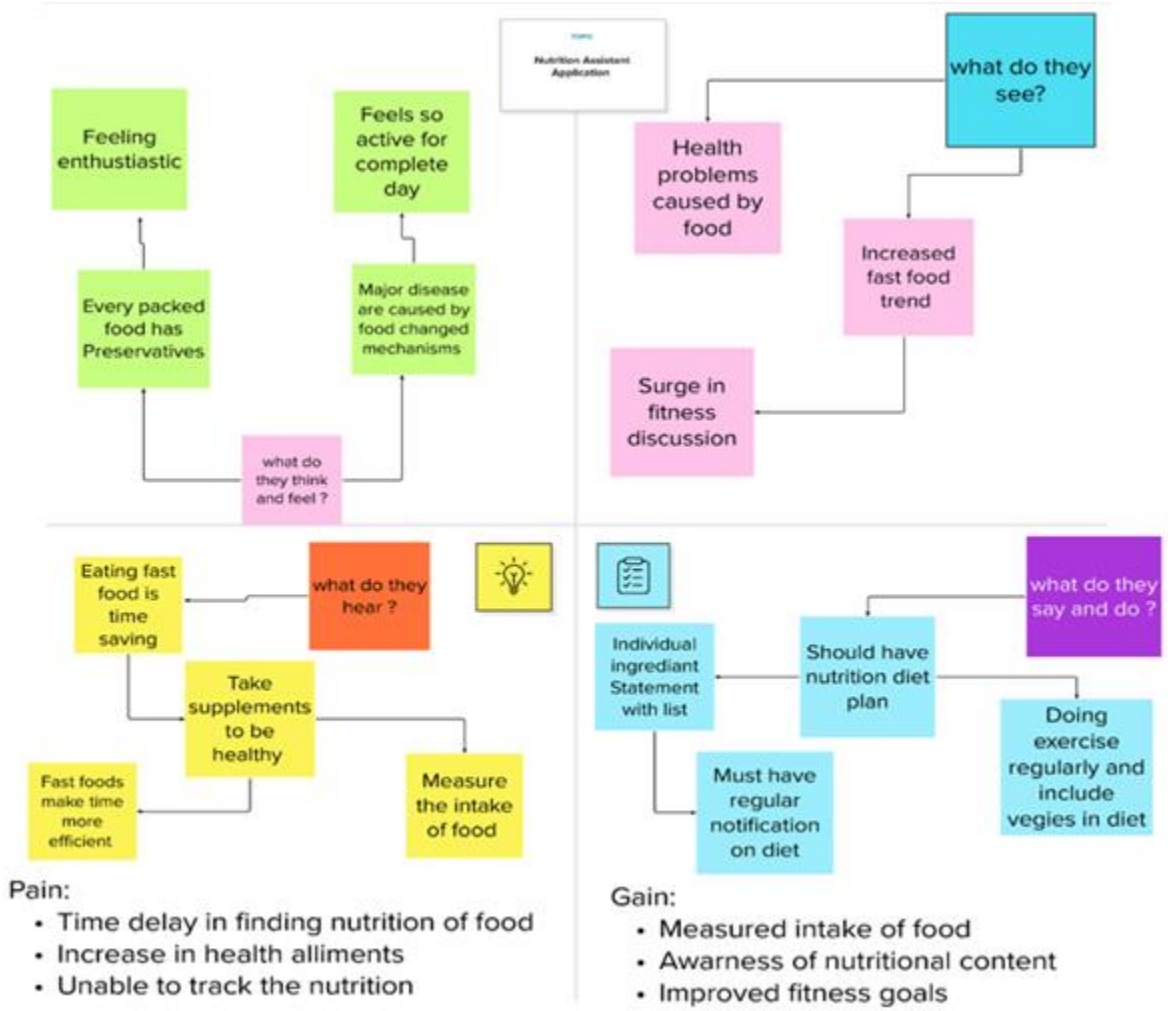
⇨currently nutrition quantity monitoring system is not up to the mark and many of them not noticing about it before the intake of food.

⇨Real time data access can be done by Nutrition Assistant Application and by cloud Technology

⇨This helps people to take a proper diet plan and avoid nutrition deficiency .

3. IDEATION & PROPOSED SOLUTION

3.1Empathy Map Canvas



3.2 Ideation & Brainstroming

Brainstorming

Idea Prioritization

3.3 Proposed Solution

Due to a lack of knowledge about healthy nutrition, the rate of obesity is rising quickly, posing threats 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, some food packaging has an added nutrition and calorie values, but it’s not very comfortable to refer. IDEA/SOLUTION DESCRIPTION : By scanning real-time photos of a product and examining its nutritional composition, people can quickly measure their calorie and nutrient intake, which will help them maintain healthier eating habits. Healthy eating can help avoid disease. The users of this software will receive sufficient nourishment, support for keeping a healthy lifestyle, and suggested diet programmes. NOVELITY/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 estimate food attributes such as ingredients and nutrition value by classifying the input image. SOCIAL IMPACT/CUSTOMER SATISFACTION : The Obesity rate will get reduced and people will be able to lead a healthy life. It helps to achieve and maintain a healthy weight balancing in their routine life. BUSINESS MODEL : The greatest strategy to develop this application is through social media. The use of this application will boost public confidence. It is very user-friendly, incredibly convenient, and also has a subscription if a user reaches certain services. 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 improve the dietary habits and helps in maintaining a healthy weight and healthy lifestyle.

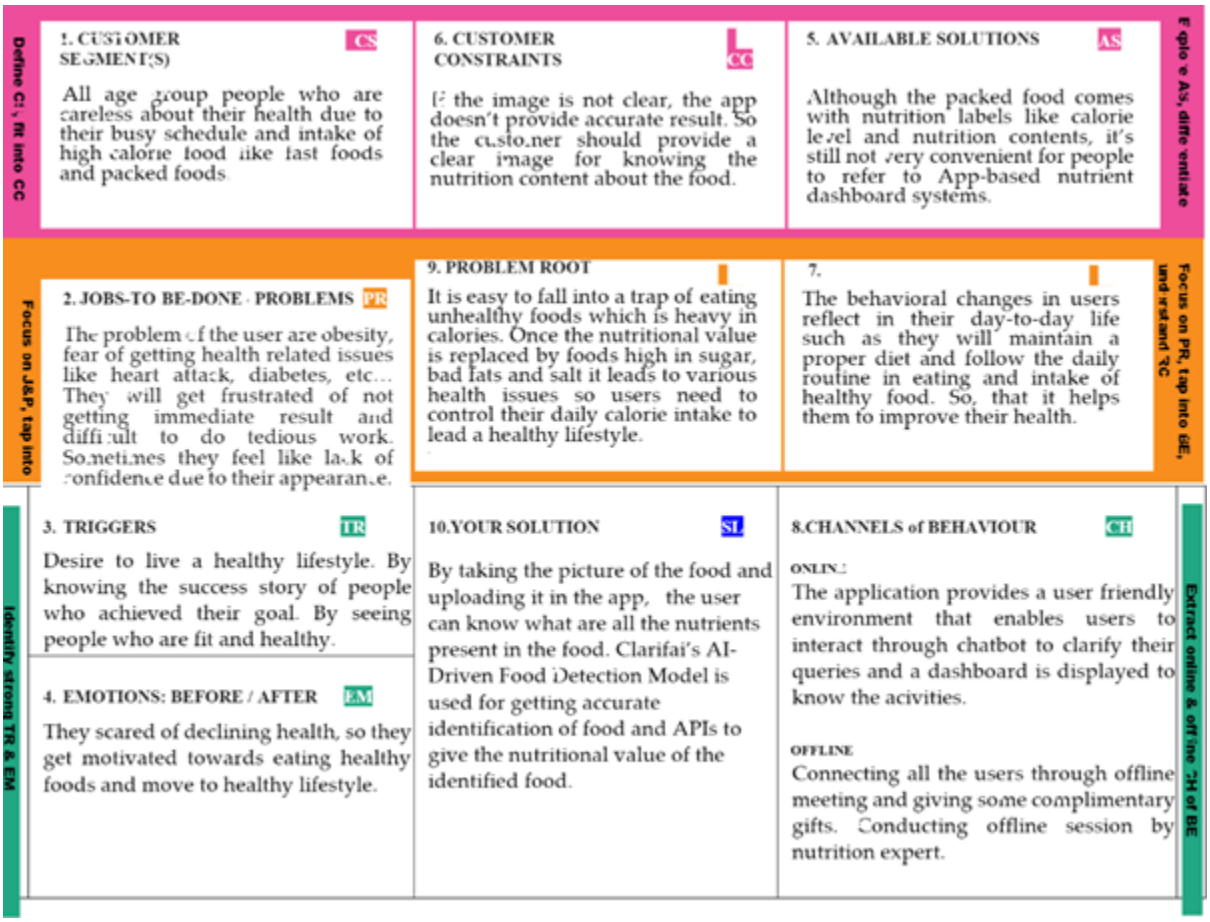
PROBLEM STATEMENT : Due to a lack of knowledge about healthy nutrition, the rate of obesity is rising quickly, posing threats to people's health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, some food packaging has an added nutrition and calorie values, but it’s not very comfortable to refer.

IDEA/SOLUTION DESCRIPTION : By scanning real-time photos of a product and examining its nutritional composition, people can quickly measure their calorie and nutrient intake, which will help them maintain healthier eating habits. Healthy eating can help avoid disease. The users of this software will receive sufficient nourishment, support for keeping a healthy lifestyle, and suggested diet programmes.

NOVELITY/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 estimate food attributes such as ingredients and nutrition value by classifying the input image.

SOCIAL IMPACT/CUSTOMER SATISFACTION : The Obesity rate will get reduced and people will be able to lead a healthy life. It helps to achieve and maintain a healthy weight balancing in their routine life.

3.4 Problem Solution Fit



4.REQUIREMENT ANALYSIS

4.1Fuctional Requirement

KEY FEATURES AND FUNCTIONALITY

Just like any other web or mobile application, a nutrition meal planner app must have a certain functionality set and a number of basic features that help its users to improve their physical condition andmake your health tracking platform differ from your main competitors The basic functionality set must include,but not be limited to:

- Profiles
- Search
- Food logging
- Barcode scanner
- Calorie calculator
- Changes tracker
- Recipe recommendations
- Meal planner
- Alerts
- Notifications
- Records
- Payment

Diet chart

Without an appropriate diet chart nutrition application may not be entirely useless, but it won't be maximum useful for its target audience, and thus won't bring a desired number of loyal users. Moreover, if your diet chart has flaws in its logics it may turn into a bad experience when people won't geta desired result they expect from using your diet application. Thus, make sure that your nutrition app is developed by specialists with an experience in creating different kinds of applications.

Healthy food recommendations

If you intend to build the besthealthy meal planning app you need to include such feature as recommendations on nutrition. These recommendations can be in a form of a live consulting with a chosen specialist who alsouses the app or it may be an automatically generated diet advicebuilt using Artificial Intelligence and Machine Learning technologies.

Water consumption feature

Proper water consumption playsan important role in healthy nutrition and weight loss. That is why you need to build a food and nutrition tracking tool with awater consumption feature. The logics of this feature may include a calculator that would recommend

daily quantities of water individually for each user basingon inputted parameters(age, weight, etc.)

Sugar and fat control features

Uncontrolled sugar consumption is one of the main causes of obesity and diabetes. Since today more people are interested in calculation 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.

The calorie tracking feature

When you make a food journal application for Android, IOS or any other mobile operating system, you need to include an advanced calorie tracking option into your health- related digital product.

Physical activity observation

This feature will require an additional gadget similar to Mi Band that tracks steps, sleeping activity, heart rate, etc. and delivers all gathered data to the application, so users see their information in a convenient format.

5.PROJECT DESIGN

5.1 Data Flow Diagrams

Diagram 1

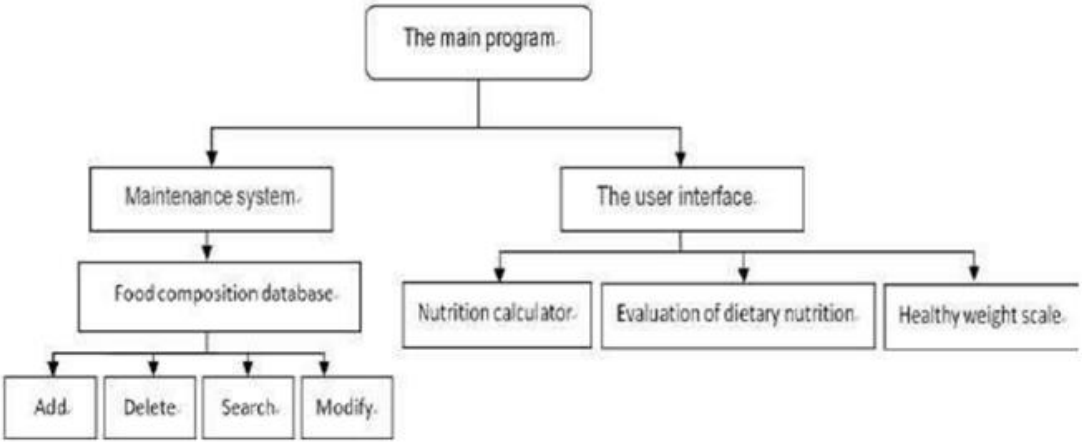
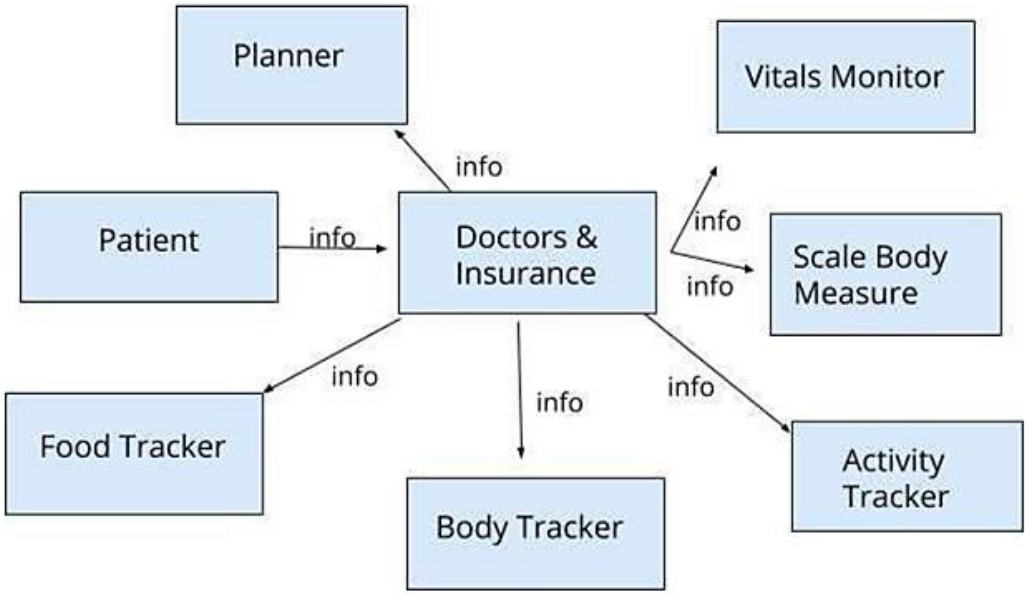


Diagram 2



5.2 Solution & Technical Architecture

Technical Architecture:

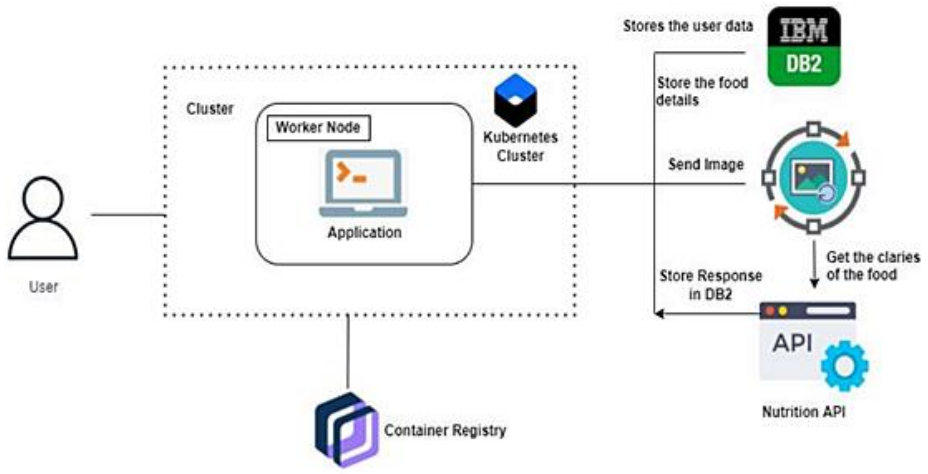


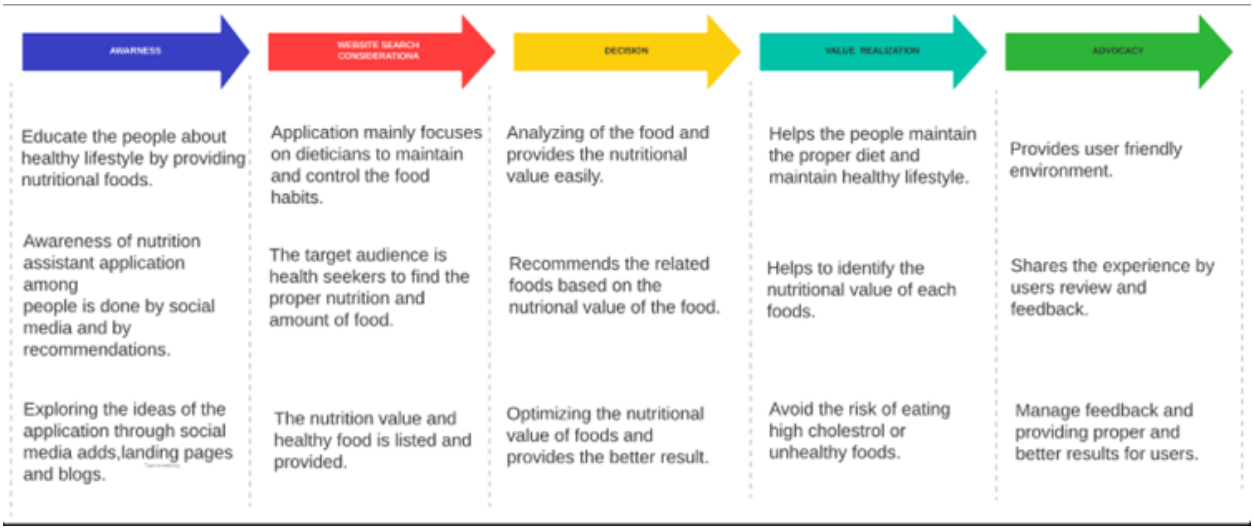
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	user interaction with application e.g. Chatbot	HTML, CSS, Bootstrap JavaScript
2.	Application Logic	Logic for a process in the application	Python - Flask
3.	Email Service	For verify user and mail ads	SendGrid
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	Infrastructure (Server / Cloud)	Application Deployment on Cloud System	Docker, Cloud Foundry, Kubernetes,etc

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used Web technologies	HTML , JS , Python , Flask
2.	Security Implementations	User verification through Email Service	Sendgrid
3.	Scalable Architecture	Run the app in Local and Cloud System	Docker and Kubernetes
4.	Availability	Justify the availability of application.	Docker , IBM Cloud
5.	Performance	Design consideration for the performance of the application (number of requests etc)	IBM Cloud , Kubernetes Cluster , Container Registry

5.3 Customer Journey



6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Setting Up Application Environment	USN-1	To create lots of environments. Create or enrolment to the IBM cloud, Docker CLI installation, create an account in SendGrid and Nutrition API, etc.,	4	High	Madhesh K
Sprint-1	Registration	USN-2	As a user, I can register for the application by entering my email, password, and confirming my password.	4	High	Vishnu Brahman S
Sprint-1		USN-3	As a user, I will receive confirmation email once I have registered for the application	2	Medium	Sabarish G
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Rahuldravid M
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	4	High	Madhesh K, Sabarish G
Sprint-2	Profile	USN-6	As a User, I can view and change my profile settings.	2	Medium	Vishnu Brahman S,Rahuldravid
Sprint-2	Upload image	USN-7	As a User, I can upload the food picture to know about it details	4	Medium	Vishnu Brahman S,Rahuldravid
Sprint-3	Prediction result page for food items.	USN-8	Displays the result of the uploaded food picture	7	High	Madhesh K, Sabarish G
Sprint-4	View history of food items.	USN-9	Gives a Consolidated view of previously searched food items.	4	Medium	Vishnu Brahman S,Rahuldravid

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	5 Days	25 Oct 2022	30 Oct 2022	20	27 Oct 2022
Sprint-2	20	5 Days	1 Nov 2022	05 Nov 2022	20	2Nov 2022
Sprint-3	20	5 Days	07 Nov 2022	12 Nov 2022	20	11 Nov 2022
Sprint-4	20	5 Days	13 Nov 2022	18Nov 2022	20	18 Nov 2022

6.2 Sprint Delivery Schedule

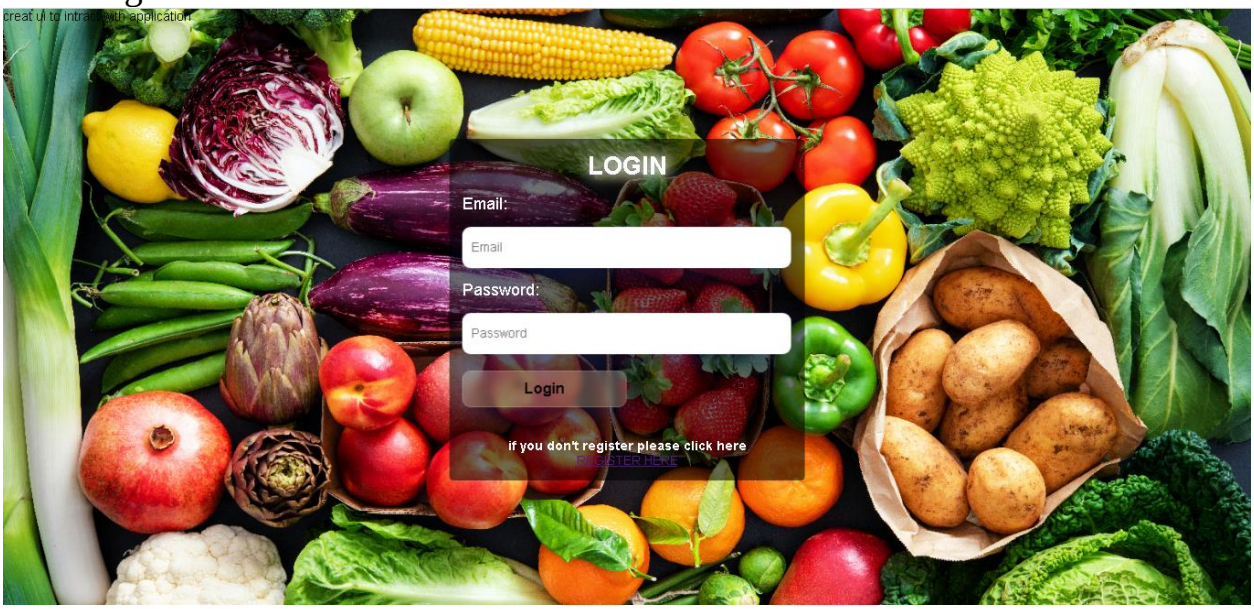
TITLE	DESCRIPTION	DATE
Literature Survey & Information Gathering	Literature survey on the selected project & gathering information by referring the, technical papers,research publications etc.	1 SEPTEMBER 2022
Prepare Empathy Map	Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements	7 SEPTEMBER 2022
Ideation	List the by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.	8 SEPTEMBER 2022
Proposed Solution	Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, social impact, scalability of solution, etc.	9 SEPTEMBER 2022
Problem Solution Fit	Prepare problem - solution fit document.	3 OCTOBER 2022

Solution Architecture	Prepare solution architecture document.	15OCTOBER 2022
Customer Journey	Prepare the customer journey interactions & experiences with the application.	17 OCTOBER 2022
Data Flow Diagrams	Draw the data flow diagrams and submit for review.	18 OCTOBER 2022
Technology Architecture	architecture diagram.	20 OCTOBER 2022
Prepare Milestone & Activity List	Prepare the milestones & activity list of the project.	22 OCTOBER 2022
Project Development - Delivery of Sprint-1, 2, 3	Develop & submit the developed code by testing it.	4 NOVEMBER
Project Development - Delivery of Sprint-4	Develop & submit the developed code by testing it.	IN PROGRESS..

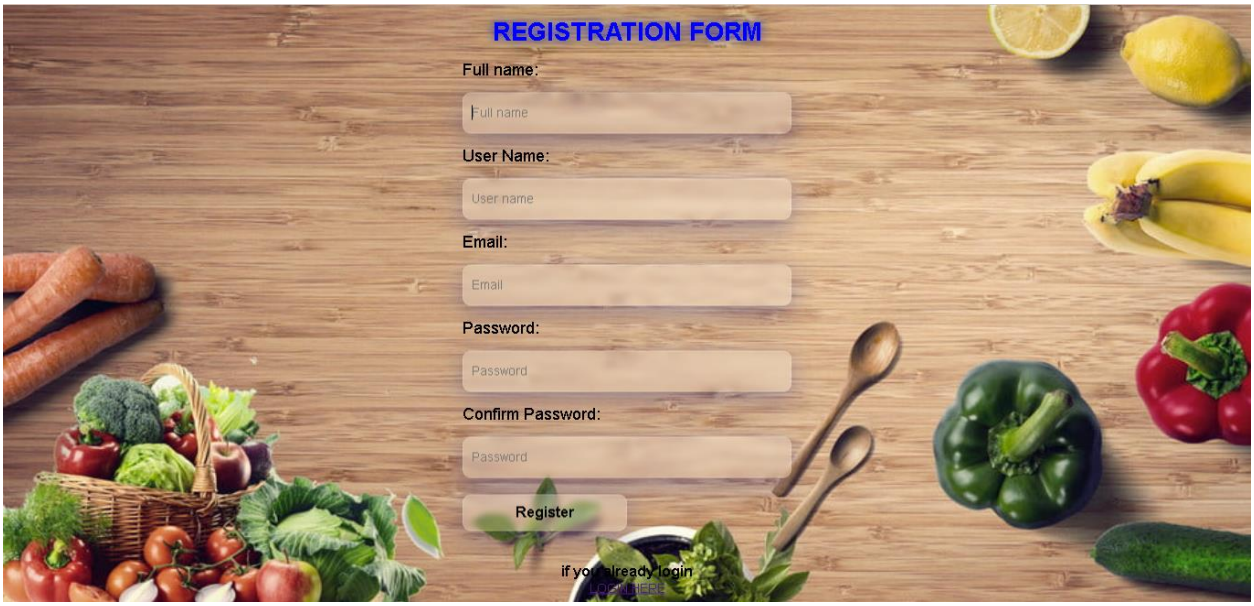
7. CODING & SOLUTIONING

7.1 Feature 1

User Login

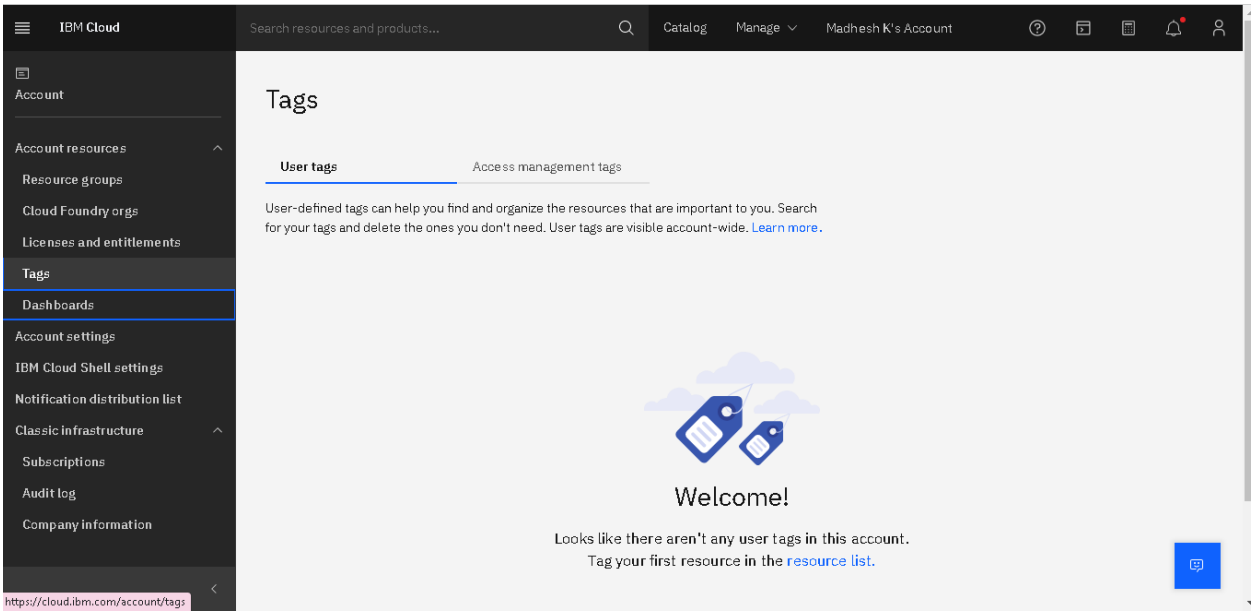


User Registration



7.2 Feature 2

Publish data to cloud



Program

```
<html>
<head>
   <meta name="viewport" content="with=device-width, initial-scale=1.0">
   <title>
      Nutrition Assistant Application
   </title>
   <link rel="stylesheet" href="Madhesh.css">
   <link rel="preconnect" href="https://fonts.googleapis.com">
   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
   <link

href="https://fonts.googleapis.com/css2?family=Poppins:ital,wght@0,100;0,200;0,300;0,400;0,500;1,100&
display=swap"
      rel="stylesheet">
   <link rel="stylesheet"
      href="https://cdn.jsdelivr.net/npm/@fortawesome/fontawesome-
free@6.2.0/css/fontawesome.min.css">
</head>


<body>
   <section class="header">
      <div class="title">
         <h1>NUTRITION ASSISTANT</h1>
      </div>
      <nav>


         <div class="nav-links">


            <ul>
               <li>
                  <a href="register.html">REGISTER</a>
               </li>
               <li>
                  <a href="login.html">LOGIN</a>
               </li>
               <li>
                  <a href="upload image.html">UPLOAD IMAGE</a>
               </li>
               <li>
                  <a href="#">HISTORY</a>
               </li>
```

```
        </ul>
      </div>

    </nav>`
    <nav>
      <div class="container">
        <video src="/images/foodvideo.mp4" autoplay muted loop></video>
    </nav>
    <br>
    <div class="text-box">
      <h1>
        Nutrition app
      </h1>
      <p>
        A nutrition specialist known as a nutrition assistant uses diagnostic techniques to spot nutritional

        deficiencies in patients.
        <br> To ensure that patients receive the right nutrition, they collaborate closely with dietitians and

        nutritionists.
        <br> After evaluating all risk factors, nutritionists must interview their patients to ascertain their

        needs before providing the best meal plans.


      </p>
    </div>
    <br>
</section>

<section class="data">
    <h1>
      Nutrition Food
    </h1>
    <div class="row">


      <div class="data-col">
        <p>
          supplying the menu and food planning for the facility to dieticians.
          obtaining dietary data and evaluating patients' eating practises.
          keeping track of any dietary restrictions or risk factors that may have an impact on meal

          preparation.
```

coordinating diets with nutritionists and medical experts.

carrying out regular nutrition assessments, which comprise calculating calorie intake and activity

levels.

facilitating quick responses to hunger, allergies, or unwillingness to eat symptoms.

assisting with lunch distribution, making sure meals are delivered accurately and served on time.

maintaining appropriate sterilisation procedures when putting plates and cutlery away and washing

them.

safely throwing away leftovers to stop the spread of disease.

teaching patients and their families about diet planning and wholesome eating practises.

</p>

<img src="/images/img1.jpg" width="300" height="250">

<img src="/images//img2.webp" width="300" height="250">

Foods that are nutrient-dense are high in vitamins, minerals, and other nutrients that are crucial for health without having excessive

amounts of saturated fat, added sugars, or sodium. Fruits, vegetables,

whole grains, non-fat and low-fat dairy, fish, seafood, unprocessed lean meat, skinless chicken, nuts,

and legumes are all included in this list. The best option for quenching thirst is water. obesity and

etes.

</section>

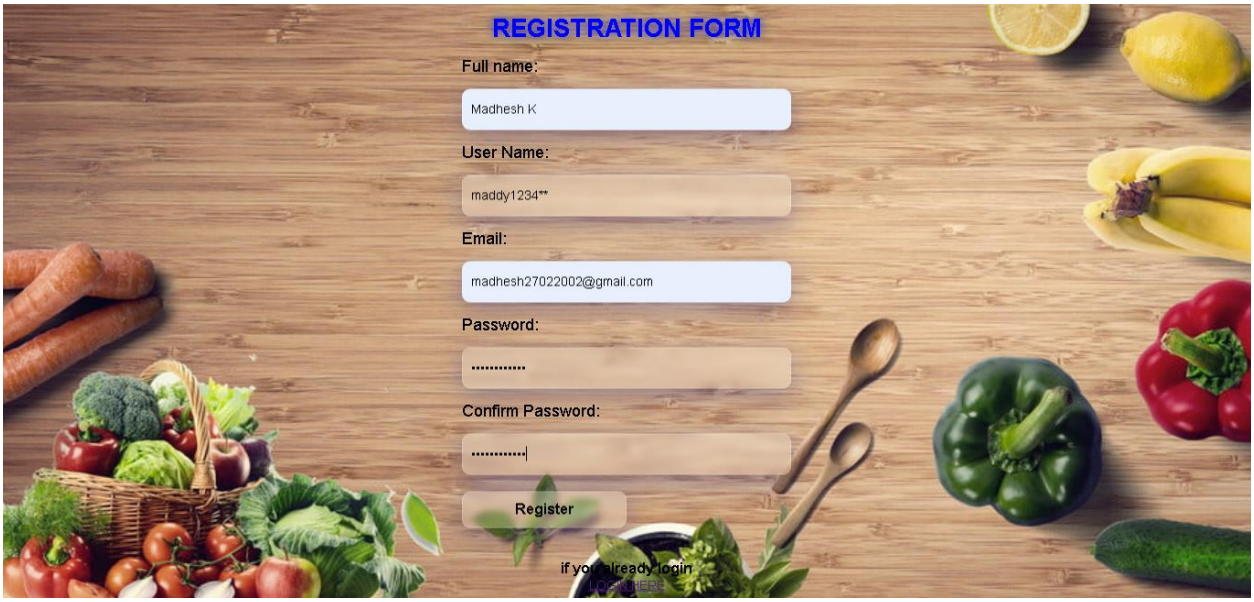
<section class="upload">

```
      <h1>
        Nutrition Benifits
      </h1>
      <br>


      <div class="row">
        <div class="upload-col">
          <img src="./images/sec_bg_img.jpg" alt="img3" width="100%">
          <div class="layer">
            <h3>Nutrition<br>
              Without having too much saturated fat, added sugar, or sodium, nutrient-dense foods are high
in
              vitamins, minerals, and other substances vital to health. Fruits, vegetables, whole grains,
              dairy products without added fat and those with reduced fat, fish and seafood, unprocessed
lean
              meat and skinless chicken, nuts, and legumes are all included. The finest beverage to quench
              your thirst is water. obese people and etes.
            </h3>
          </div>
        </div>
      </div>
    </section>


    </section>
</body>
```

8.TESTING

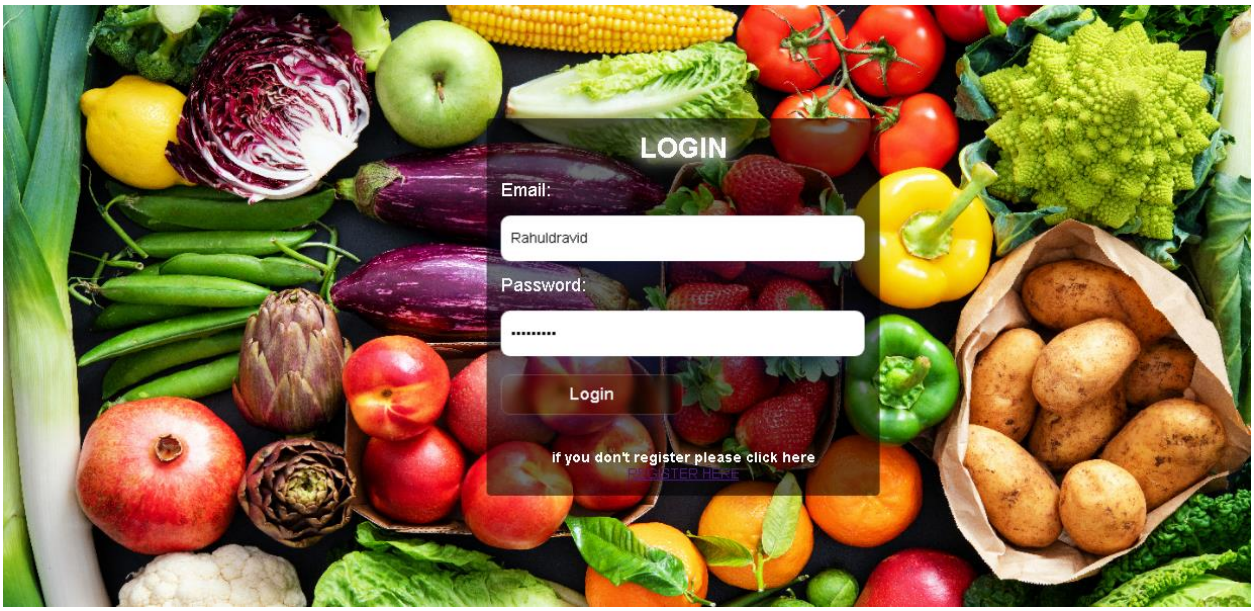
8.1 Test Cases

User entering details for first time registration



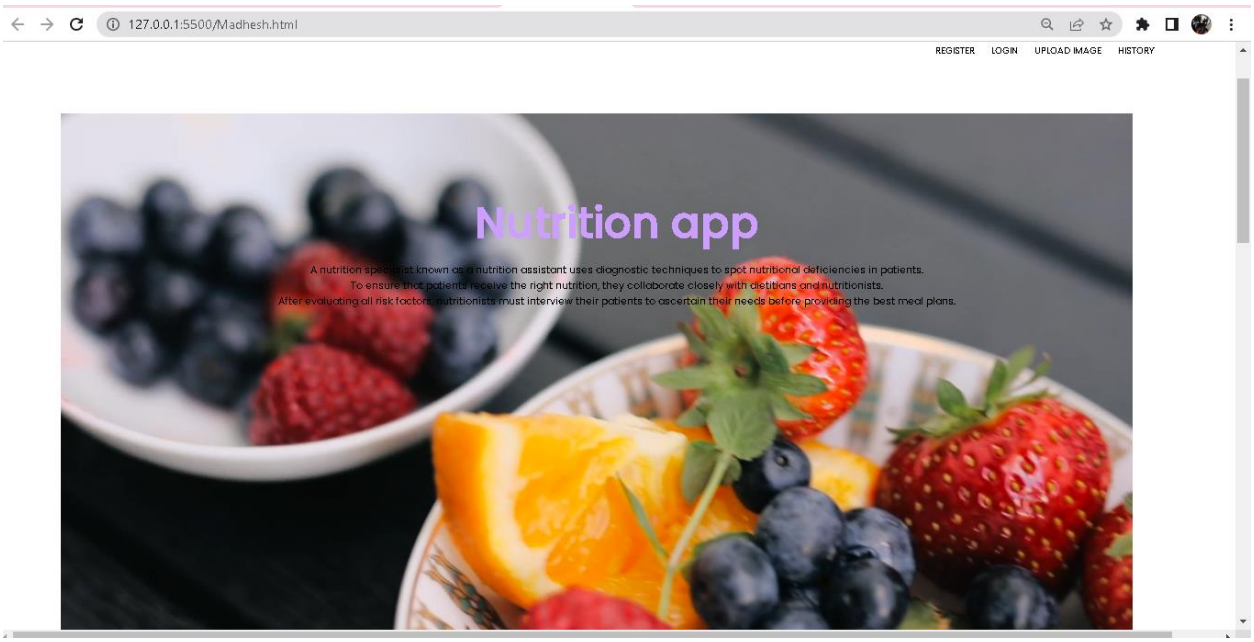
8.2 User Acceptance Testing

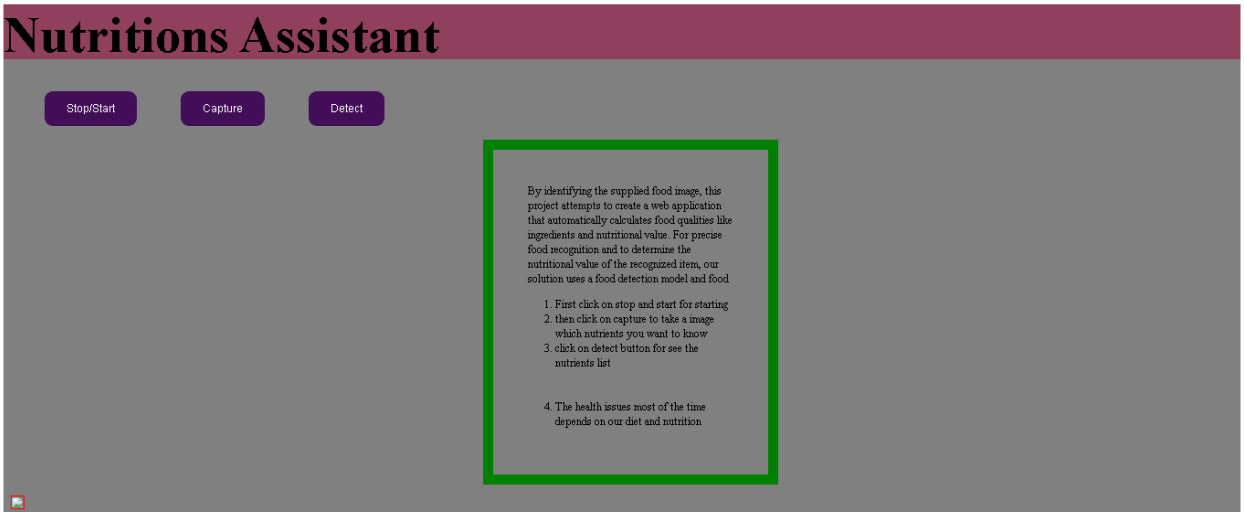
Login test case



9.RESULTS

9.1 Performance Metrics





10.ADVANTAGES & DISADVANTAGES

ADVANTAGES	DISADVANTAGES
Provide children with a positive start to the day	A potential disadvantage of nutrition therapy is the cost of the appointments
Improve the learning abilities of children and youth	In some cases,visits with a dietitian may not be covered by insurance
Decrease disruptive behaviour in the classroom	The fact that the school system is so burdened with responsibility that is finds it almost impossible to places the endless needs of whining pupils
Provide a change for children to improve social skills	All kind of people cannot be benefited by this application
Help children to learn healthy eating habits that will last them a lifetime	In reality each people will have different dietary requirements that will affect their specifi nutrition plan

11.CONCLUSION

Smartphone applications are increasingly being used to support nutrition improvement in community settings. However, there is a scarcity of practical literature to support researchers and practitioners in choosing or developing health applications. This work maps the features, key content, theoretical approaches, and methods of consumer testing of applications intended for nutrition improvement in community settings. A systematic, scoping review methodology was used to map published, peer-reviewed literature reporting on applications with a specific nutrition-improvement focus intended for use in the community setting. Self monitoring trials, nutrition improvement trials, application description articles, and qualitative application development studies.

People becoming conscious about their diets and fitness goals, there is a wide scope of diet and fitness apps thriving in the app world. Therefore, this time is pretty much perfect to create a diet and fitness app of your own and enter the market with a unique idea in order to lure the audience towards your app. For developing a healthcare app, you must be sure of hiring the best team of experts who have prior experience in the same field and can guide you through the development process.

12.FUTURE SCOPE

Future enchancements could be implementing a better system which is better in case of efficiency as well as accuracy.Diet monitoring may help lot of people to be physically healthy even if they are focussed in other commitments in thier life.Improving the accuracy level and implementing variety of diet plan according to different people accross the world helps the application to grow to next level.

13.APPENDIX

Source Code
HTML code

```
<html>

<head>
  <meta name="viewport" content="width=device-width, initial-
scale=1">
  <style>
    * {
      padding: 0;
      margin: 0;
      font-family: sans-serif;
    }

    body {
      background: url("./images/bg-img.jpg") no-repeat;
      background-size: cover;
    }

    .registration-form {
      background-color: rgba(0, 0, 0, 0.555);
      padding: 1rem;
      border-radius: 5px;
      position: absolute;
      top: 50%;
      left: 50%;
      transform: translate(-50%, -50%);
      width: 400px;

    .registration-form h1 {
      font-size: 30px;
      text-align: center;
      text-transform: uppercase;
      margin: 0 4px;
      display: flex;
```

```
        justify-content: center;
        cursor: pointer;
        border-radius: 20px;
        color: rgb(253, 253, 255);
        text-shadow: 0 0 15px rgb(255, 255, 255), 0 0 25px rgb(255,
255, 222);
        animation: animate 1.5s linear infinite;
    }

    .registration-form p {
        font-size: 20px;
        margin: 15px 0;
        color: rgb(255, 255, 255);
    }

    .registration-form input {
        font-size: 16px;
        padding: 15px 10px;
        width: 100%;
        border: 0;
        border-radius: 5px;
        outline: none;
        background: white;
        box-shadow: 0 8px 32px 0 rgba(31, 38, 135, 0.37);
        backdrop-filter: blur(4px);
        -webkit-backdrop-filter: blur(4px);
        border-radius: 10px;
        border: 1px solid rgba(255, 255, 255, 0.18);
    }

    .registration-form button {
        font-size: 18px;
        font-weight: bold;
        margin: 20px 0;
        padding: 10px 15px;
        width: 50%;
        border: 0;
        border-radius: 5px;
```

```
            background-color: #fff;
            background: rgba(255, 255, 255, 0.25);
            box-shadow: 0 8px 32px 0 rgba(31, 38, 135, 0.37);
            backdrop-filter: blur(4px);
            -webkit-backdrop-filter: blur(4px);
            border-radius: 10px;
            border: 1px solid rgba(255, 255, 255, 0.18);
        }

        .registration-form button:hover {
            cursor: pointer;
            background-color: transparent;
            color: rgb(255, 255, 255);
        }

        .alreadylogin {
            text-align: center;
            font-size: 18px;
        }

        .alreadylogin h3 {
            text-align: center;
            font-size: 15px;
            color: white;
        }

        .alreadylogin a {
            font-size: 15px;
        }

        .alreadylogin a:hover {
            color: blue;
        }
    </style>
    <title>
        Login page
    </title>
</head>
```

```
<body>
  <div class="registration-form">
    <h1>
      Login
    </h1>
    <form action="#" >

      <p>
        Email:
      </p>
      <input type="email" name="email" placeholder="Email"
id="email">
      <p>
        Password:
      </p>
      <input type="password" name="password"
placeholder="Password" id="password">
      <br>
      <button type="button" onclick="log()">
        Login
      </button>
    </form>
    <br>
    <div class="alreadylogin">
      <h3>if you don't register please click here </h3><a
href="register.html">REGISTER HERE</a>
    </div>
  </div>
  </div>

  <div class="square"></div>

  <script>
    function log() {
      let email = document.getElementById('email').value;
      let pass = document.getElementById('password').value;
      if(email === 'madhesh01@gmail.com' && pass === '12345')
```

```
            location.href = 'Madhesh.html'
        }
    </script>
</body>

</html>
```

CSS CODE

```
*{
    margin:0;
    padding:0;
    font-family: 'Poppins', sans-serif;
    }
    #myVideo {
        position: fixed;
        right: 0;
        bottom: 0;
        min-width: 100%;
        min-height: 90%;
    }
    body{
        background-image: url(images/background.jpg);
        background-repeat: no-repeat;
        background-size: auto;
        background-position: center;
        background-size: 500%;


    }
    header{
        min-height:100vh;
        width:100%;

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

```
}


.title h1{

padding-top: 2%;
padding-left: 2%;
font-size: 30px;
font-weight: 900;
font-family: 'Times New Roman', Times, serif;
color: #CF9FFF;
text-align-last: left;
}


nav-links{
    flex:1;
    text-align:right;
    position: relative;
    float: right;

}
.nav-links ul li{
    list-style: none;
    display: inline-block;
    padding: 8px 10px;
    position: relative;

}
.nav-links ul li a{
    color:black;
    text-decoration: none;
    font-size: 13px;

}
.nav-links ul li::after{
    content: '';
    width: 0%;
```

```
    height:2px;
    background: #CF9FFF;
    display: block;
    margin: auto;
    transition: 0.5s;
}
.nav-links ul li:hover::after{
width: 80%;

}
.container{
    position:relative;
    width:100vw;
    height:100vh;

}
.container video{
    width: 110%;
    height:100%;
    position: relative;


}
nav{
    display:flex;
    padding:2% 6%;
    justify-content: space-between;
    align-items: center;
    float:right;
}
nav img{
    width:150px;
    border-radius: 50px;
    padding-right: 800px;
    padding-left: 30px;
}
```

```
.text-box{
    width:90%;
    color:black;
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%,-50%);
    text-align: center;
}
.text-box h1{
    font-size: 62px;
    color:#CF9FFF;
 }
 .text-box p{
    margin: 10px 0 30px;
    font-size: 15px;
    color: black;
 }
 .text-box img{
    border-radius: 30px;
 }

 .data{
    margin: auto;
    text-align: center;
    padding-top: 600px;

 }
 .row{
    margin-top: 5%;
    display: flex;
    justify-content: center;
 }
 .data-col{
flex-basis: 50%;
background:#fff3f3;
border-radius: 10px;
```

```
margin-bottom: 10%;
padding: 20px 20px;
box-sizing: border-box;
 }
.data-col:hover{
box-shadow: 0 0 20px 0px rgba(0,0,0,0.2);
}
.course-col{
   width: 30%;
}
.course-col img{
   border-radius: 10px;
}
.course-col:hover{
   box-shadow: 0 0 20px 0px rgba(0,0,0,0.2);
}
.data-cols{
   flex-basis: 50%;
   background:#fff3f3;
   border-radius: 10px;
   margin-bottom: 10%;
   padding: 20px 20px;
   box-sizing: border-box;
    }
    .course-cols{
      width: 30%;
   }
   .course-cols img{
      border-radius:10px ;
   }
   .data-cols:hover{
   box-shadow: 0 0 20px 0px rgba(0,0,0,0.2);
   }
   .course-cols:hover{
      box-shadow: 0 0 20px 0px rgba(0,0,0,0.2);
   }
   .upload{
      width:80%;
```

```
        margin:auto;
        text-align: center;
        padding-top: 100px;
    }
    .upload-col{
        flex-basis: 80%;
        border-radius: 10px;
        margin-bottom: 30px;
        position: relative;
        overflow: hidden;
    }
    .upload p{
        text-align: left;
    }
    .upload img{
        width:100%;
        display: block;
    }
    .layer{
        background-color:transparent;
        height: 100%;
        width: 100%;
        position: absolute;
        top: 0;
        left: 0;
        transition: 0.5s;
}
.layer:hover{
    background-color:#fff3f3;
}
.layer h3{
    width:100%;
    font-weight: 500;
    color:black;
    font-size: 20px;
    bottom: 0;
    left: 50%;
    transform: translateX(-50%);
```

```
    position: absolute;
    opacity: 0;
    transition: 0.5s;
  }
  .layer:hover h3{
    bottom: 49%;
    opacity: 1;

  }
```

GITHUB LINK: https://github.com/IBM-EPBL/IBM-Project-29895-1660133049