REPORT DOCUMENT

PROJECT TITLE

NUTRITION ASSISTANT APPLICATION

Category:**cloud app development**

BY

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INTRODUCTION

1.1 Project Overview

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

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

Work Flow of the Project:

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

Software Required:

Python, Flask , Docker

System Required:

8GB RAM,Intel Core i3,OS-Windows/Linux/MAC ,Laptop or Desktop

1.2   PURPOSE

- The app helps you set goals, monitor your weight trends,and track your intake based on the specific diet plan you select.

- The goals like desired weight goal,body type,food habits and perferred food items

- It also offers detailed nutrient information for each ingretients in your food log and a daily analysis to help keep you on track

- Nutrition apps are effective in changing eating behaviour and diet – related health risk factors

- This apps suggest them with a proper diet accordingy.

CODING & SOLUTIONING

FEATURE 1

- ➢ Portable
- ➢ Scalable

FEATURE 2

- ➢ Easy to understand
- ➢ Attractive

RESULT:

The project of Nutrition assistant application successfully executed.

ADVANTAGES :

- ➕ It also offers detailed nutrient information for each ingretients in your food log and a daily analysis to help keep you on track
- ➕ Nutrition apps are effective in changing eating behaviour and diet – related health risk factors

DISADVANTAGES :

- ➕ Time consuming food entry systems
- ➕ Inaccurate information,Obsessive behaviour

CONCLUSION:

Good nutrition promotes not only better physical health and reduced susceptibility to disease, but has also been demonstrated to contribute to congnitive development and academic success.one of the most basic function of such an app is to guide its users towards a healthy diet and assist them to achieve their health goals.

FUTURE SCOPE :

- This application helps many peoples to reduce us weights and take healthy foods to make strong life.

- which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle.

APPENDIX:

SOURCE CODE

LOGIN.HTML

```html
<!DOCTYPE html>

<html lang="en" >

<head>

 <meta charset="UTF-8">

 <meta name="viewport" content="width=device-width, initial-scale=1.0">

 <title>HTML5 Login Form with validation Example</title>

 <linkrel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css">

<link rel="stylesheet" href="./style.css">

</head>
```

```html
<body><center>

<!-- partial:index.partial.html -->

<div id="login-form-wrap">

  <h2>Login</h2>

  <form id="login-form">

    <p>

    <input type="text" id="username" name="username" placeholder="Username" required><i class="validation"><span></span><span></span></i>

    </p>

    <p>

    <input type="email" id="email" name="email" placeholder="Email Address" required><i class="validation"><span></span><span></span></i>

    </p>

    <p>

    <input type="submit" id="login" value="Login">

    </p>

  </form>

  <div id="create-account-wrap">

    <p>Not a member? <a href="C:\sprint 1\templates\registration page.html">Create Account</a><p>

  </div><!--create-account-wrap-->

</div><!--login-form-wrap-->

<!-- partial -->

</center>
```

```
</body>

</html>
```

REGISTRATION.HTML

```html
<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<style>

body {

  font-family: Arial, Helvetica, sans-serif;

  background-color: black;

}


* {

  box-sizing: border-box;

}


/* Add padding to containers */

.container {

  padding: 16px;

  background-color: white;

}
```

```css
/* Full-width input fields */

input[type=text], input[type=password] {

  width: 100%;

  padding: 15px;

  margin: 5px 0 22px 0;

  display: inline-block;

  border: none;

  background: #f1f1f1;

}


input[type=text]:focus, input[type=password]:focus {

  background-color: #ddd;

  outline: none;

}


/* Overwrite default styles of hr */

hr {

  border: 1px solid #f1f1f1;

  margin-bottom: 25px;

}


/* Set a style for the submit button */

.registerbtn {
```

```css
  background-color: #04AA6D;

  color: white;

  padding: 16px 20px;

  margin: 8px 0;

  border: none;

  cursor: pointer;

  width: 100%;

  opacity: 0.9;

}


.registerbtn:hover {

  opacity: 1;

}


/* Add a blue text color to links */

a {

  color: dodgerblue;

}


/* Set a grey background color and center the text of the "sign in" section */

.signin {

  background-color: #f1f1f1;

  text-align: center;
```

```
    }

  </style>

</head>

<body>


<form action="/action_page.php">

  <div class="container">

    <h1>Register</h1>

    <p>Please fill in this form to create an account.</p>

    <hr>


    <label for="email"><b>Email</b></label>

    <input type="text" placeholder="Enter Email" name="email" id="email" required>


    <label for="psw"><b>Password</b></label>

    <input type="password" placeholder="Enter Password" name="psw" id="psw" required>


    <label for="psw-repeat"><b>Repeat Password</b></label>

    <input type="password" placeholder="Repeat Password" name="psw-repeat" id="psw-repeat" required>

    <hr>

    <p>By creating an account you agree to our <a href="#">Terms & Privacy</a>.</p>
```

```html
<button type="submit" class="registerbtn">Register</button>

</div>


<div class="container signin">

<p>Already have an account? <a href="#">Sign in</a>.</p>

</div>

</form>

</body></html>
```

MAIN .PY

```python
from
cryptography.hazmat
.backends import
default_backend
                    from flask import Flask, render_template, request, session, redirect

                    from markupsafe import escape

                    ALLOWED_EXTENSIONS = {'png', 'jpg', 'jpeg', 'jfif'}

                    conn = ibm_db.connect(
                        "DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-
                    9822b9fb237b.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT"

                    "=32731;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UI
                    D=qxm31937;PWD=m7RdWnmWW3Y6zKiR",
                        '', '')

                    print(conn)
```
Github - https://github.com/IBM-EPBL/IBM-Project-3522-1658573139