Date	15 November 2022	
Team ID	PNT2022TMID15581	
Project name	Nutrition Assistant Application	

#### Homepage.html

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Healthchoice</title>
   <link rel="stylesheet" href="style.css" class="rel">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    k
       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"</pre>
       href="https://cdn.jsdelivr.net/npm/@fortawesome/fontawesome-
free@6.2.0/css/fontawesome.min.css">
    <!-- CSS only -->
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css"</pre>
rel="stylesheet"
       integrity="sha384-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi" crossorigin="anonymous">
</head>
<body>
    <nav class="header row container-fluid bg-light">
       <div class="title col-5">
            <h1>Healthchoice</h1>
       </div>
       <div class="nav-links col-5">
           <u1>
                <1i>>
                    <a href="registration.html">REGISTER</a>
               <1i>>
                    <a href="Login.html">LOGIN</a>
                <
                    <a href="https://spoonacular.com/food-api/image-analyzer-demo">UPLOAD
IMAGE</a>
                <
                    <a href="#">HISTORY</a>
```

```
</div>
    </nav>
    <div class="text-box p-4 ">
        <h1 class="my-5">
            NUTRITION ASSISTANT APPLICATION
        </h1>
            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.
        </div>
    <br>
    </section>
    <!----data-->
    <section class="data ">
        <h1 class="pb-5">
            Nutrition Food
        <div class="row ">
            <div class="data-col">
                Providing dieticians with the facility's meal and menu planning.
                    Obtaining dietary information and assessing the nutritional habits of
patients.
                    Recording individual risk factors or dietary restrictions that might
impact meal planning.
                    Coordinating meal plans with nutritionists and healthcare
professionals.
                    Performing ongoing nutrition assessments, including the measurement of
caloric intake and activity
                    levels.
                    Facilitating immediate interventions for signs of malnutrition,
allergic reactions, or refusal to
                    eat.
                    Assisting in meal distribution, ensuring correctly delivered, and
timely served meals.
                    Maintaining proper sterilization protocols in the clearing away and
cleaning of plates and utensils.
                    Safely discarding leftover portions to prevent the spread of disease.
```

Instructing patients and families on nutrition plans and healthy eating habits.

```
</div>
            <div class="col">
                <img src="Images/Benefits.jpg" width="300" height="250">
            </div>
       </div>
       <br>
        <div class="row">
            <div class="col">
                <img src="Images/healthy-food.jpg" width="300" height="250">
            <div class="data-cols p-4">
               Nutrient-dense foods are rich in vitamins, minerals and other nutrients
important for health, without
                too much saturated fat, added sugars and sodium. We're talking fruits,
vegetables, whole grains, non-fat
                and low-fat dairy, fish and seafood, unprocessed lean meat and skinless
poultry, nuts and legumes.Water
                is the best choice for quenching your thirst. etes, and obesity.
            </div>
       </div>
   </section>
   <section class="upload">
           Nutrition Benefits
        </h1>
       <br>
       <div class="m-auto">
            <div class="upload-col">
                <img src="Images/Benefits.jpg">
                <div class="layer">
                    <h3><i><b>Food is essential</b></i><br> It provides vital nutrients
for survival, and helps the body
                        function and stay healthy
                        A healthy diet throughout life promotes healthy pregnancy
outcomes, supports normal growth,
                        development and ageing, helps to maintain a healthy body weight,
and reduces the risk of chronic
                        disease leading to overall health and well-being.
                    </h3>
                </div>
            </div>
       </div>
   </section>
    </section>
   <div class="container-fluid bg-dark footer " data-wow-delay="0.1s">
        <div class="container py-5">
           <center class=" g-5">
```

#### Login.html

```
<!DOCTYPE html>
<!-- Coding By CodingNepal - youtube.com -->
<html lang="en" dir="ltr">
 <head>
    <meta charset="utf-8">
    <title>Animated Login Form | CodingNepal</title>
    <link rel="stylesheet" href="css/Login.css">
  </head>
  <body>
    <div class="center">
     <h1>Login</h1>
      <form method="post">
        <div class="txt_field">
          <input type="text" required>
          <span></span>
          <label>Username
        </div>
        <div class="txt_field">
          <input type="password" required>
          <span></span>
          <label>Password</label>
        </div>
        <div class="pass">Forgot Password?</div>
        <input type="submit" value="Login">
        <div class="signup_link">
          Not a member? <a href="#">Register now</a>
        </div>
      </form>
    </div>
  </body>
</html>
```

### Registration.html

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
 <head>
   <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="css/registration.css">
  </head>
<body>
 <div class="wrapper">
   <h2>Registration</h2>
   <form action="#">
     <div class="input-box">
       <input type="text" placeholder="Enter your name" required>
     </div>
     <div class="input-box">
       <input type="email" placeholder="Enter your email" required>
     <div class="input-box">
       <input type="password" placeholder="Create password" required>
     </div>
     <div class="input-box">
       <input type="password" placeholder="Confirm password" required>
     </div>
     <div class="input-box button">
       <input type="Submit" value="Register Now">
     </div>
     <div class="text">
        <h3>Already have an account? <a href="Login.html">Login now</a></h3></h3>
     </div>
   </form>
 </div>
</body>
</html>
```

# Login.css

```
@import
url('https://fonts.googleapis.com/css2?family=Noto+Sans:wght@700&family=Poppins:wght@400;5
00;600&display=swap');
*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    font-family: "Poppins", sans-serif;
}
body{
    margin: 0;
    padding: 0;
    background: linear-gradient(120deg,#2980b9, #8e44ad);
```

```
height: 100vh;
  overflow: hidden;
.center{
 position: absolute;
 top: 50%;
 left: 50%;
 transform: translate(-50%, -50%);
 width: 400px;
 background: white;
 border-radius: 10px;
 box-shadow: 10px 10px 15px rgba(0,0,0,0.05);
.center h1{
 text-align: center;
 padding: 20px 0;
 border-bottom: 1px solid silver;
.center form{
 padding: 0 40px;
 box-sizing: border-box;
form .txt_field{
 position: relative;
 border-bottom: 2px solid #adadad;
 margin: 30px 0;
.txt_field input{
 width: 100%;
 padding: 0 5px;
 height: 40px;
 font-size: 16px;
 border: none;
 background: none;
 outline: none;
.txt_field label{
 position: absolute;
 top: 50%;
  left: 5px;
 color: #adadad;
 transform: translateY(-50%);
  font-size: 16px;
 pointer-events: none;
  transition: .5s;
.txt_field span::before{
 content: '';
  position: absolute;
 top: 40px;
 left: 0;
 width: 0%;
 height: 2px;
  background: #2691d9;
```

```
transition: .5s;
.txt field input:focus ~ label,
.txt_field input:valid ~ label{
 top: -5px;
  color: #2691d9;
.txt_field input:focus ~ span::before,
.txt_field input:valid ~ span::before{
  width: 100%;
.pass{
  margin: -5px 0 20px 5px;
  color: #a6a6a6;
  cursor: pointer;
.pass:hover{
  text-decoration: underline;
input[type="submit"]{
  width: 100%;
  height: 50px;
  border: 1px solid;
  background: #2691d9;
  border-radius: 25px;
  font-size: 18px;
  color: #e9f4fb;
  font-weight: 700;
  cursor: pointer;
  outline: none;
input[type="submit"]:hover{
  border-color: #2691d9;
  transition: .5s;
.signup_link{
  margin: 30px 0;
  text-align: center;
  font-size: 16px;
  color: #666666;
.signup_link a{
  color: #2691d9;
  text-decoration: none;
.signup_link a:hover{
  text-decoration: underline;
```

#### Registration.css

```
@import
url('https://fonts.googleapis.com/css?family=Poppins:400,500,600,700&display=swap');
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Poppins', sans-serif;
body{
  min-height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
  background: linear-gradient(120deg,#2980b9, #8e44ad);
.wrapper{
  position: relative;
  max-width: 430px;
  width: 100%;
  background: #fff;
  padding: 34px;
  border-radius: 6px;
  box-shadow: 0 5px 10px rgba(0,0,0,0.2);
.wrapper h2{
  position: relative;
  font-size: 22px;
  font-weight: 600;
  color: #333;
.wrapper h2::before{
  content: '';
  position: absolute;
  left: 0;
  bottom: 0;
  height: 3px;
  width: 28px;
  border-radius: 12px;
  background: #4070f4;
.wrapper form{
  margin-top: 30px;
.wrapper form .input-box{
  height: 52px;
  margin: 18px 0;
form .input-box input{
  height: 100%;
  width: 100%;
  outline: none;
```

```
padding: 0 15px;
  font-size: 17px;
  font-weight: 400;
  color: #333;
 border: 1.5px solid #C7BEBE;
 border-bottom-width: 2.5px;
 border-radius: 6px;
 transition: all 0.3s ease;
.input-box input:focus,
.input-box input:valid{
 border-color: #4070f4;
form .policy{
 display: flex;
  align-items: center;
form h3{
 color: #707070;
 font-size: 14px;
 font-weight: 500;
 margin-left: 10px;
.input-box.button input{
  color: #fff;
 letter-spacing: 1px;
 border: none;
 background: #4070f4;
 cursor: pointer;
.input-box.button input:hover{
 background: #0e4bf1;
form .text h3{
color: #333;
width: 100%;
text-align: center;
form .text h3 a{
  color: #4070f4;
 text-decoration: none;
form .text h3 a:hover{
 text-decoration: underline;
```

```
margin:0;
   padding:0;
   font-family: 'Poppins', sans-serif;
    body{
        background-repeat: no-repeat;
        background-size: auto;
        background-position: center;
        background-size: 500%;
        background-color: #f2f5f7;
   header{
        min-height:100vh;
       width:100%;
    }
    .title{
        text-align: left;
    .title h1{
   display: inline-block;
   padding-top: 2%;
   padding-left: 5%;
   font-size: 30px;
   font-weight: 900;
   font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande', 'Lucida Sans',
Arial, sans-serif;
   color: #083ef1;
   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;
    font-family: 'Trebuchet MS', 'Lucida Sans Unicode', 'Lucida Grande';
.nav-links ul li a{
    color:rgb(248, 7, 156);
    text-decoration: none;
    font-size: 13px;
.nav-links ul li::after{
    content: '';
    width: 0%;
    height:2px;
    background: #f546e6;
    display: block;
    margin: auto;
    transition: 0.5s;
.nav-links ul li:hover::after{
width: 80%;
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;
    background: #f2f5f7;
.text-box h1{
   font-size: 40px;
```

```
color:#0b75ee;
 .text-box p{
    margin: 10px 0 30px;
    font-size: 15px;
    color: black;
 }
 .text-box img{
    border-radius: 30px;
 }
 .data{
    width:80%;
    margin: auto;
    text-align: center;
    padding-top: 600px;
 }
 .row{
    margin-top: 5%;
    display: flex;
   justify-content: space-between;
 .data-col{
flex-basis: 50%;
background:#fff3f3;
border-radius: 10px;
margin-bottom: 10%;
box-sizing: border-box;
.data-col:hover{
box-shadow: 0 0 20px 0px rgba(0,0,0,0.2);
.course-col{
    width: 40%;
.course-col img{
    border-radius: 30px;
.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;
.footer {
   color: #030000;
.footer .btn.btn-link {
   display: block;
   margin-bottom: 5px;
   padding: 10;
   text-align: left;
   color: #080808;
   font-weight: normal;
   text-transform: capitalize;
   transition: .3s;
.footer .btn.btn-link::before {
   position: relative;
   content: "\f105";
   font-weight: 900;
   color: #0c0c0c;
   margin-right: 10px;
.footer .btn.btn-link:hover {
   color: var(--light);
   letter-spacing: 1px;
   box-shadow: none;
.footer .copyright {
   padding: 25px 0;
   font-size: 15px;
   border-top: 1px solid rgba(256, 256, 256, .1);
   text-align: center;
.footer .copyright a {
   color: lawngreen;
.footer .copyright a:hover {
   color: black;
.container-fluid bg-dark footer{
   background-color: black;
```

#### Index.js

```
/*!
* Start Bootstrap - One Page Wonder v6.0.5 (https://startbootstrap.com/theme/one-page-
wonder)
* Copyright 2013-2022 Start Bootstrap
* Licensed under MIT (https://github.com/StartBootstrap/startbootstrap-one-page-
wonder/blob/master/LICENSE)
*/
// This file is intentionally blank
// Use this file to add JavaScript to your project
```

#### App.py

```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import re
app = Flask(__name__)
app.secret_key = 'a'
conn = ibm_db.connect("",'','')
@app.route('/')
def homer():
    return render_template('home.html')
@app.route('/login',methods =['GET', 'POST'])
def login():
   global userid
   msg = ''
    if request.method == 'POST' :
        username = request.form['username']
        password = request.form['password']
        sql = "SELECT * FROM users WHERE username =? AND password=?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print (account)
        if account:
            session['loggedin'] = True
            session['id'] = account['USERNAME']
            userid= account['USERNAME']
            session['username'] = account['USERNAME']
```

```
msg = 'Logged in successfully !'
            msg = 'Logged in successfully !'
            return render_template('dashboard.html', msg = msg)
        else:
            msg = 'Incorrect username / password !'
    return render_template('login.html', msg = msg)
@app.route('/register', methods =['GET', 'POST'])
def registet():
   msg = ''
   if request.method == 'POST' :
        username = request.form['username']
        email = request.form['email']
        password = request.form['password']
        sql = "SELECT * FROM users WHERE username =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.execute(stmt)
        account = ibm db.fetch assoc(stmt)
        print(account)
        if account:
            msg = 'Account already exists !'
        elif not re.match(r'[^0]+@[^0]+\.[^0]+, email):
            msg = 'Invalid email address !'
        elif not re.match(r'[A-Za-z0-9]+', username):
            msg = 'name must contain only characters and numbers !'
        else:
            insert_sql = "INSERT INTO users VALUES (?, ?, ?)"
            prep_stmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(prep_stmt, 1, username)
            ibm_db.bind_param(prep_stmt, 2, email)
            ibm_db.bind_param(prep_stmt, 3, password)
            ibm_db.execute(prep_stmt)
            msg = 'You have successfully registered !'
   elif request.method == 'POST':
        msg = 'Please fill out the form !'
    return render_template('register.html', msg = msg)
@app.route('/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
   return render_template('home.html')
if __name__ == '__main__':
  app.run(host='0.0.0.0')
```

### Sendgrid.py

```
import smtplib
import sendgrid
import os
from sendgrid import SendGridAPIClient
from sendgrid.helpers.mail import Mail, Email, To, Content
SUBJECT = "Interview Call"
s = smtplib.SMTP('smtp.gmail.com', 587)
def sendmail(TEXT,email):
   print("sorry we cant process your candidature")
   s = smtplib.SMTP('smtp.gmail.com', 587)
   s.starttls()
   s.login("ranush.krishna@gmail.com", "VsS6tLfzAyq5@Md12")
   message = 'Subject: {}\n\n{}'.format(SUBJECT, TEXT)
   s.sendmail("ranush.krishna@gmail.com", email, message)
   s.quit()
def sendgridmail(user,TEXT):
   sg = sendgrid.SendGridAPIClient('SG.80Jq4jzMQHO-
from_email = Email("ranush.krishna@gmail.com") # Change to your verified sender
   to_email = To(user) # Change to your recipient
   subject = "Sending with SendGrid is Fun"
   content = Content("text/plain",TEXT)
   mail = Mail(from_email, to_email, subject, content)
   # Get a JSON-ready representation of the Mail object
   mail_json = mail.get()
   # Send an HTTP POST request to /mail/send
   response = sg.client.mail.send.post(request body=mail json)
   print(response.status code)
   print(response.headers)
message = Mail(
   from_email='ranush.krishna@gmail.com',
   to_emails='to@example.com',
   subject='Sending with Twilio SendGrid is Fun',
   html_content="")
try:
   sg = SendGridAPIClient(os.environ.get('SG.80Jq4jzMQHO-
Pp0cBH52iw.IAxhwtYSYE9it6wCwV4i5T NDhamZghvmF02p0WusyU'))
   response = sg.send(message)
   print(response.status_code)
   print(response.body)
   print(response.headers)
except Exception as e:
   print(e.message)
```

## Sql\_set\_up.py

```
import sqlite3

conn = sqlite3.connect('nutrition_database.db')
print("Opened database successfully")

conn.execute('CREATE TABLE nutrition ( username TEXT, email TEXT, password TEXT )')
print("Table created successfully")
conn.close()
```

#### **OUTPUT:**

### Homepage:

Healthchoice

REGISTER LOGIN UPLOAD IMAGE HISTORY

#### **NUTRITION ASSISTANT APPLICATION**

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.

**Nutrition Food** 

4

#### **Nutrition Food**

Providing dieticians with the facility's meal and menu planning.

Obtaining dietary information and assessing the nutritional habits of patients. Recording individual risk factors or dietary restrictions that might impact meal planning. Coordinating meal plans with nutritionists and healthcare professionals. Performing ongoing nutrition assessments, including the measurement of caloric intake and activity levels. Facilitating immediate interventions for signs of malnutrition, allergic reactions, or refusal to eat. Assisting in meal distribution, ensuring correctly delivered, and timely served meals. Maintaining proper sterilization protocols in the clearing away and cleaning of plates and utensils. Safely discarding leftover portions to prevent the spread of disease. Instructing patients and families on nutrition plans and healthy eating habits.



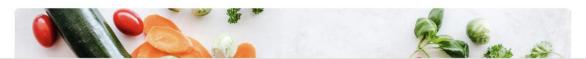


Nutrient-dense foods are rich in vitamins, minerals and other nutrients important for health, without too much saturated fat, added sugars



Nutrient-dense foods are rich in vitamins, minerals and other nutrients important for health, without too much saturated fat, added sugars and sodium. We're talking fruits, vegetables, whole grains, non-fat and low-fat dairy, fish and seafood, unprocessed lean meat and skinless poultry, nuts and legumes. Water is the best choice for quenching your thirst. etes, and obesity.

### **Nutrition Benefits**



## **Nutrition Benefits**

Food is essential

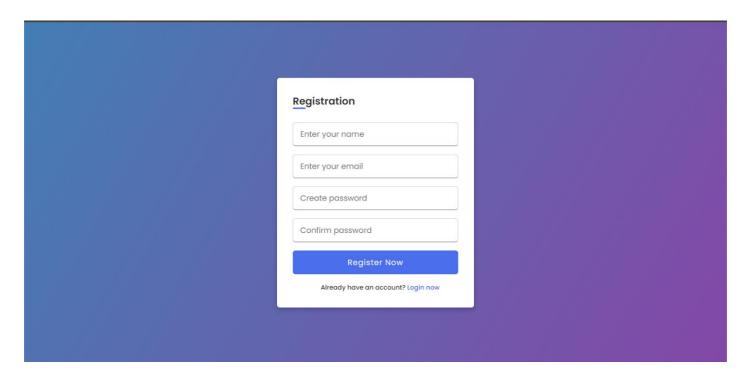
It provides vital nutrients for survival, and helps the body function and stay healthy A healthy diet throughout life promotes healthy pregnancy outcomes, supports normal growth, development and ageing, helps to maintain a healthy body weight, and reduces the risk of chronic disease leading to overall health and well-being.



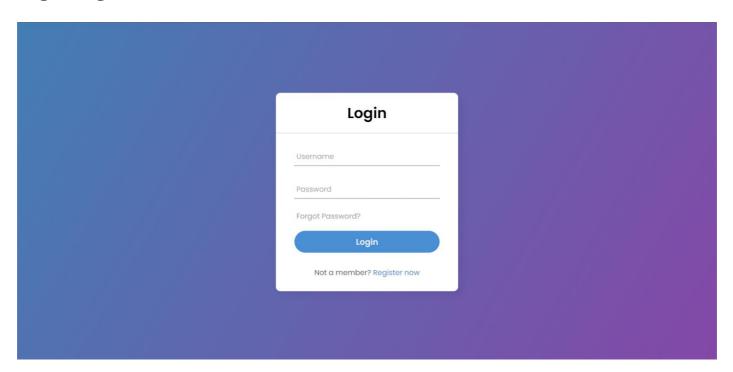
# Healthchoice

Enjoy the taste of Eating right. We are assisting you to eat the delicious

# Registration Page:



# Login Page:



# Food Classification and Other Details:

