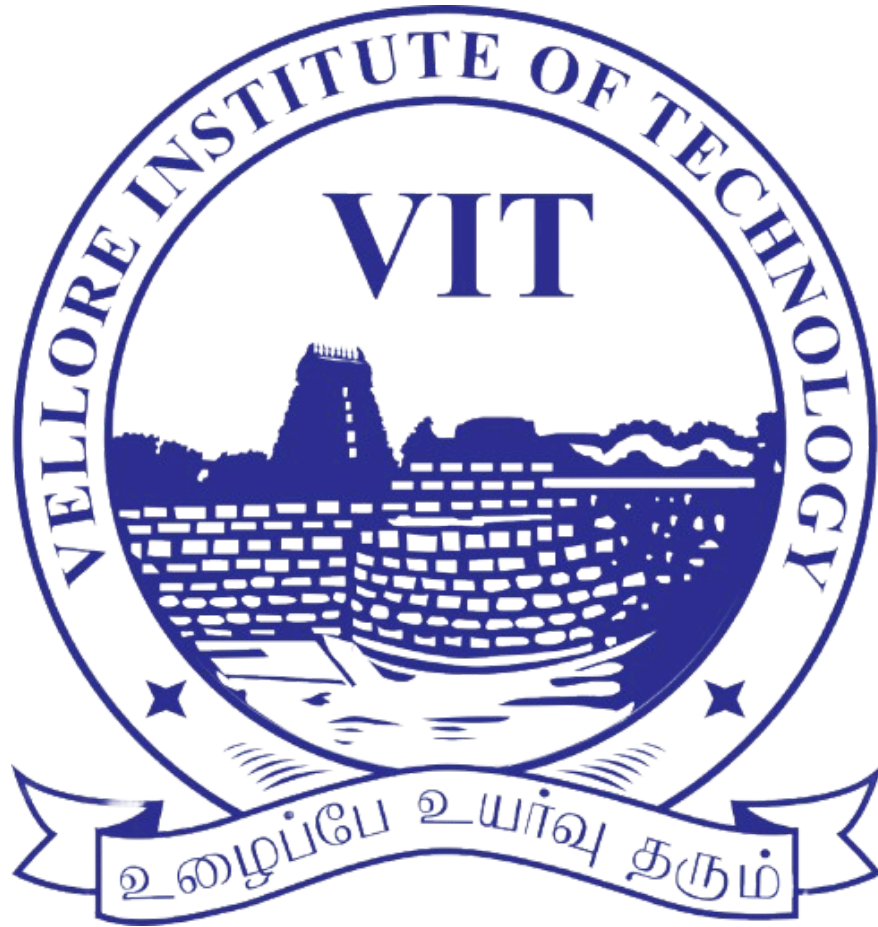


Web Programming

Mini Project



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GitHub Link:

<https://github.com/23bai0111/MiniProject>

GitHub io Link:

<https://23bai0111.github.io/MiniProject/>

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HTML Codes:

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Welcome Page</title>
  <link rel="stylesheet" href="styles1.css">
</head>
<body>
  <header>
    

    <nav>
      <a href="#">Home</a>
      <a href="about.html">About</a>
    </nav>
  </header>

  <main>
    <h1>Welcome to our Mini Project</h1>
    <h3>BMI Calculator & Total Calories Required</h3>
    <p>Determine your daily caloric needs for <br>weight loss, weight gain, or
maintenance.</p>
    <a href="bmi-calculator.html">
      <button>Get Started</button>
    </a>

  </main>
  <script src="script.js"></script>
  <div>
    <div class="wave"></div>
    <div class="wave"></div>
    <div class="wave"></div>
  </div>
</body>
</html>
```

About.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <title>About Us</title>
  <link rel="stylesheet" href="style1.css" />
  <style>
    .about-container {
      background: rgba(255, 255, 255, 0.15);
      backdrop-filter: blur(12px);
      padding: 30px;
      margin-top: 100px;
      border-radius: 20px;
      box-shadow: 0 8px 20px rgba(0, 0, 0, 0.3);
      max-width: 700px;
      text-align: center;
      animation: fadeIn 1s ease forwards;
    }

    .about-container h1 {
      font-size: 36px;
      margin-bottom: 20px;
      letter-spacing: 1px;
      text-transform: uppercase;
    }

    .team-list {
      list-style: none;
      padding: 0;
      margin: 20px 0;
    }

    .team-list li {
      font-size: 20px;
      margin: 10px 0;
    }

    .about-description {
```

```

    font-size: 18px;
    margin-top: 20px;
    line-height: 1.6;
}

.back-button {
    margin-top: 30px;
    display: inline-block;
    padding: 12px 25px;
    background-color: #ff0055;
    color: white;
    border: none;
    border-radius: 8px;
    font-size: 18px;
    font-weight: bold;
    text-decoration: none;
    transition: 0.3s ease;
}

.back-button:hover {
    background-color: #d9004c;
    transform: scale(1.05);
}
</style>
</head>
<body>
<header>
    

</header>

<div class="about-container">
    <h1>About Us</h1>

    <ul class="team-list">
        <li><strong>Nischay N.</strong> – Reg No: 23BAI0111</li>
        <li><strong>Tenidhar Reddy</strong> – Reg No: 23BCT0227</li>
        <li><strong>Shriker Verma</strong> – Reg No: 23BCE0332</li>
    </ul>

    <p class="about-description">

```

We are a team of passionate developers working together to create a smart health app that helps users calculate their BMI, TDEE, and generate custom diet plans based on their lifestyle and mess type. Our goal is to make nutrition and fitness accessible and personalized for everyone.

```
</p>

<a href="index.html" class="back-button">← Back to Home</a>
</div>
</body>
</html>
```

Bmi-calculator.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <title>BMI & TDEE Calculator</title>
  <link rel="stylesheet" href="style1.css"/>
</head>
<body>
  <header>
    
    <nav>
      <a href="index.html">Home</a>
      <a href="about.html">About</a>
    </nav>
  </header>

  <main>
    <div class="bmi-box">
      <h2>BMI & TDEE Calculator</h2>
      <div class="bmi-inputs">
        <div class="slider-container">
          <label for="height">Height: <span id="heightValue">160</span> cm</label>
          <input type="range" id="height" min="100" max="220" value="160"
oninput="updateValue('height')" />
        </div>
        <div class="slider-container">
          <label for="weight">Weight: <span id="weightValue">60</span> kg</label>
```

```

        <input type="range" id="weight" min="30" max="200" value="60"
oninput="updateValue('weight')" />
    </div>
    <div class="slider-container">
        <label for="age">Age: <span id="ageValue">25</span> years</label>
        <input type="range" id="age" min="10" max="100" value="25"
oninput="updateValue('age')" />
    </div>
    <div class="dropdown-container">
        <label for="gender">Gender:</label>
        <select id="gender">
            <option value="male">Male</option>
            <option value="female">Female</option>
        </select>
    </div>
    <div class="dropdown-container">
        <label for="activity">Activity Level:</label>
        <select id="activity">
            <option value="1.2">Sedentary (Little to no exercise)</option>
            <option value="1.375">Lightly active (1-3 days per week)</option>
            <option value="1.55">Moderately active (3-5 days per week)</option>
            <option value="1.725">Very active (6-7 days per week)</option>
            <option value="1.9">Super active (Intense exercise, twice daily)</option>
        </select>
    </div>
    <div class="dropdown-container">
        <label for="goal">Goal:</label>
        <select id="goal">
            <option value="maintain">Maintain Weight</option>
            <option value="lose">Lose Weight</option>
            <option value="gain">Gain Weight</option>
        </select>
    </div>
</div>
<div id="bmi-result"></div>
<div id="tdee-result"></div>
</div>

<div id="tdee-container" class="tdee-container">
    <div class="graph-box">

```



```

        
    </div>

    <div class="macros-box">
        <div class="macro-item">
            
            <p><span id="protein-grams">0</span>g Protein</p>
        </div>
        <div class="macro-item">
            
            <p><span id="carbs-grams">0</span>g Carbs</p>
        </div>
        <div class="macro-item">
            
            <p><span id="fats-grams">0</span>g Fats</p>
        </div>
    </div>

    <div class="diet-button-container" id="dietPlanContainer" style="display: none;">
        <a href="diet.html" id="dietPlanLink">
            <button id="dietPlanBtn">Get Diet Plan</button>
        </a>
    </div>

</div>
</main>

<script src="script.js"></script>
</body>
</html>

```

Diet.html:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">

```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Diet Plan</title>
<link rel="stylesheet" href="styles1.css">
<script defer src="diet.js"></script>
</head>
<body>
  <header>
    
    <nav>
      <a href="index.html">Home</a>
      <a href="bmi-calculator.html">BMI</a>
      <a href="about.html">About</a>
    </nav>
  </header>

  <main>
    <h1>Personalized Diet Plan</h1>

    <br>

    <label for="mess-type">Select your mess type:</label>
    <br>

    <select id="mess-type" class="styled-dropdown">
      <option value="veg">Vegetarian</option>
      <option value="non-veg">Non-Vegetarian</option>
      <option value="special">Special</option>
      <option value="paid">Paid</option>
    </select>

    <br><br>

    <button onclick="storeAndRedirect()">Get Diet Plan</button>

    <div id="diet-output"></div>

  </main>

  <div class="wave"></div>
  <div class="wave"></div>
  <div class="wave"></div>
```

```
</body>
</html>
```

Diet-result.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Your Diet Plan</title>
  <link rel="stylesheet" href="styles1.css">
  <script defer src="diet.js"></script>
</head>
<body>

  <header>
    
    <nav>
      <a href="index.html">Home</a>
      <a href="bmi-calculator.html">BMI</a>
      <a href="about.html">About</a>
    </nav>
  </header>

  <main>
    <h1>Your Personalized Diet Plan</h1>
    <div id="diet-plan-result"></div>
  </main>

  <div class="wave"></div>
  <div class="wave"></div>
  <div class="wave"></div>

</body>
</html>
```

CSS Codes:

Styles1.css:

```
body {
  margin: 0;
  font-family: -apple-system, BlinkMacSystemFont, sans-serif;
  background: linear-gradient(315deg, #42002e, #590054, #720137, #5e0009, #46000d);
  animation: gradient 15s ease infinite;
  background-size: 400% 400%;
  background-attachment: fixed;
  color: white;
  text-align: center;
}

@keyframes gradient {
  0% { background-position: 0% 0%; }
  50% { background-position: 100% 100%; }
  100% { background-position: 0% 0%; }
}

header {
  display: flex;
  align-items: center;
  justify-content: space-between;
  padding: 15px 30px;
  position: fixed;
  width: 100%;
  background: rgba(0, 0, 0, 0.3);
  z-index: 1000;
}

.left-corner-image {
  height: 70px;
  width: auto;
  filter: brightness(0) invert(1);
}

nav {
  flex-grow: 1;
  display: flex;
```

```
justify-content: center;
align-items: center;
text-align: center;
gap: 30px;
}

nav a {
  color: white;
  text-decoration: none;
  font-weight: bold;
  font-size: 18px;
  padding: 10px 15px;
  transition: color 0.3s ease;
}

nav a:hover {
  color: #ffcc00;
}

main {
  display: flex;
  flex-direction: column;
  align-items: center;
  justify-content: center;
  height: 100vh;
  padding: 50px 20px;
}

h1 {
  font-size: 48px;
  font-weight: bold;
  animation: fadeIn 1s ease-in-out;
}

h3, p {
  font-size: 22px;
  animation: fadeIn 1.5s ease-in-out;
}

button {
  padding: 12px 24px;
```

```
margin-top: 20px;
background: white;
color: black;
border: none;
border-radius: 5px;
font-size: 18px;
cursor: pointer;
transition: transform 0.2s ease, background 0.3s ease;
}

button:hover {
  background: #ffcc00;
  transform: scale(1.05);
}

.wave {
  background: rgb(255 255 255 / 15%);
  border-radius: 1000% 1000% 0 0;
  position: fixed;
  width: 200%;
  height: 12em;
  animation: wave 10s -3s linear infinite;
  transform: translate3d(0, 0, 0);
  opacity: 0.7;
  bottom: 0;
  left: 0;
  z-index: -1;
}

.wave:nth-of-type(2) {
  bottom: -1.25em;
  animation: wave 18s linear reverse infinite;
  opacity: 0.6;
}

.wave:nth-of-type(3) {
  bottom: -2.5em;
  animation: wave 20s -1s reverse infinite;
  opacity: 0.8;
}

@keyframes wave {
```

```

2% { transform: translateX(1); }
25% { transform: translateX(-25%); }
50% { transform: translateX(-50%); }
75% { transform: translateX(-25%); }
100% { transform: translateX(1); }
}

@keyframes fadeIn {
  from { opacity: 0; transform: translateY(-10px); }
  to { opacity: 1; transform: translateY(0); }
}

/* Styled Dropdown */
.styled-dropdown {
  padding: 12px;
  font-size: 16px;
  border-radius: 5px;
  background: #fff;
  color: black;
  border: none;
  cursor: pointer;
  transition: 0.3s;
  outline: none;
}

.styled-dropdown:hover {
  background: #ffcc00;
  color: black;
}

.styled-dropdown:focus {
  border: 2px solid #ffcc00;
}

```

Style1.css:

```
body {
```

```
margin: 0;
padding: 0;
overflow-x: hidden;
font-family: Arial, sans-serif;
background: linear-gradient(315deg, #42002e, #590054, #720137, #5e0009, #46000d);
background-size: 300% 300%;
animation: gradient 15s ease infinite;
display: flex;
flex-direction: column;
align-items: center;
min-height: 100vh;
color: white;
}

@keyframes gradient {
  0% { background-position: 0% 0%; }
  50% { background-position: 100% 100%; }
  100% { background-position: 0% 0%; }
}

header {
  position: absolute;
  top: 0;
  width: 100%;
  display: flex;
  justify-content: space-between;
  align-items: center;
  padding: 8px 20px;
  height: 50px;
  background: rgba(0, 0, 0, 0.5);
}

.left-corner-image {
  height: 50px;
  filter: brightness(0) invert(1);
}

nav {
  display: flex;
  gap: 20px;
```



```
}

nav a {
  color: white;
  text-decoration: none;
  font-size: 18px;
  font-weight: bold;
  padding: 8px 15px;
  transition: 0.3s;
}

nav a:hover {
  background: rgba(255, 255, 255, 0.2);
  border-radius: 5px;
}

main {
  display: flex;
  justify-content: center;
  align-items: flex-start;
  gap: 50px;
  padding: 40px;
  max-width: 1000px;
  margin: auto;
  transition: all 1s ease-in-out;
}

.bmi-box {
  background: rgba(255, 255, 255, 0.2);
  padding: 20px;
  border-radius: 12px;
  box-shadow: 0px 4px 10px rgba(0, 0, 0, 0.3);
  text-align: center;
  width: 400px;
  backdrop-filter: blur(10px);
  transition: transform 1s ease-in-out;
}

.main-container.show-results .bmi-box {
  transform: translateX(-200px);
}
```

```
.bmi-box h2 {
  font-size: 24px;
  margin-bottom: 15px;
  text-transform: uppercase;
  letter-spacing: 1px;
}

.bmi-inputs {
  display: flex;
  flex-direction: column;
  gap: 20px;
  margin: 15px 0;
}

.slider-container {
  text-align: left;
}

input[type="range"] {
  width: 100%;
  accent-color: #720137;
}

button {
  padding: 12px 20px;
  background-color: #ff0055;
  color: white;
  border: none;
  border-radius: 6px;
  font-size: 18px;
  cursor: pointer;
  transition: 0.3s;
  margin-top: 10px;
}

button:hover {
  background-color: #d9004c;
  transform: scale(1.05);
}

#bmi-result {
  font-size: 20px;
```

```
margin-top: 15px;
}

.tdee-container {
  display: flex;
  flex-direction: column;
  gap: 30px;
  max-width: 500px;
}

.graph-box {
  width: 100%;
  height: auto;
  background: none;
  border-radius: 12px;
  display: flex;
  justify-content: center;
  align-items: center;
  box-shadow: none;
}

#dietPlanLink {
  text-decoration: none;
}

#dietPlanLink button {
  display: inline-block;
  text-align: center;
  padding: 12px 20px;
  background-color: #ff0055;
  color: white;
  border: none;
  border-radius: 6px;
  font-size: 18px;
  cursor: pointer;
  transition: 0.3s;
}

#dietPlanLink button:hover {
  background-color: #d9004c;
  transform: scale(1.05);
}
```

```
.macros-box {
  display: flex;
  justify-content: space-between;
  gap: 15px;
}

.macro-item {
  display: flex;
  flex-direction: column;
  align-items: center;
  background: rgba(255, 255, 255, 0.15);
  padding: 15px;
  border-radius: 12px;
  backdrop-filter: blur(8px);
  box-shadow: 0px 4px 10px rgba(0, 0, 0, 0.2);
  width: 100px;
}

.macro-icon {
  width: 40px;
  height: 40px;
}

.macro-value {
  font-size: 18px;
  font-weight: bold;
  color: white;
}

#protein, #carbs, #fats {
  font-size: 20px;
  font-weight: bold;
}

@media (max-width: 900px) {
  main {
    flex-direction: column;
    align-items: center;
  }
}
```

```

.diet-button-container {
  width: 100%;
  display: flex;
  justify-content: center;
  margin-top: 20px;
}

@keyframes fadeIn {
  from { opacity: 0; transform: translateY(10px); }
  to { opacity: 1; transform: translateY(0); }
}

.diet-button-container {
  animation: fadeIn 0.8s ease forwards;
}

```

Java Script Codes:

script.js:

```

const colors = [
  "radial-gradient(circle, hsl(260, 100%, 10%), hsl(280, 100%, 20%))",
  "radial-gradient(circle, hsl(300, 100%, 15%), hsl(320, 100%, 25%))",
  "radial-gradient(circle, hsl(240, 100%, 12%), hsl(260, 100%, 22%))"
];
let index = 0;
setInterval(() => {
  document.body.style.background = colors[index];
  index = (index + 1) % colors.length;
}, 10000);

function updateValue(id) {
  document.getElementById(id + "Value").textContent =
document.getElementById(id).value;
}

function calculateBMI() {
  let height = document.getElementById("height").value / 100;
  let weight = document.getElementById("weight").value;
  let age = document.getElementById("age").value;
  let gender = document.getElementById("gender").value;
  let activity = document.getElementById("activity").value;
  let goal = document.getElementById("goal").value;
}

```

```

let bmi = (weight / (height * height)).toFixed(1);
document.getElementById("bmi-result").textContent = `Your BMI: ${bmi}`;

let bmr;
if (gender === "male") {
    bmr = 88.36 + (13.4 * weight) + (4.8 * height * 100) - (5.7 * age);
} else {
    bmr = 447.6 + (9.2 * weight) + (3.1 * height * 100) - (4.3 * age);
}

let tdee = (bmr * activity).toFixed(1);
document.getElementById("tdee-result").textContent = `Your TDEE: ${tdee} kcal/day`;

let protein = Math.round((tdee * 0.3) / 4);
let carbs = Math.round((tdee * 0.5) / 4);
let fats = Math.round((tdee * 0.2) / 9);

document.getElementById("protein-grams").textContent = protein;
document.getElementById("carbs-grams").textContent = carbs;
document.getElementById("fats-grams").textContent = fats;

let graphImage = document.getElementById("bmiGraphImage");
if (graphImage) {
    graphImage.style.display = "block"; // Show the image
}
// Show the diet plan button
document.getElementById("dietPlanContainer").style.display = "block";
}

// Helper function to generate BMI region data
function generateBMIData(minBMI, maxBMI) {
    let data = [];
    for (let h = 140; h <= 210; h += 2) {
        let minWeight = (minBMI * (h / 100) ** 2).toFixed(1);
        let maxWeight = (maxBMI * (h / 100) ** 2).toFixed(1);
        data.push({ x: h, y: minWeight });
        data.push({ x: h, y: maxWeight });
    }
}

```

```
}  
return data;  
}
```

diet.js:

```
function storeAndRedirect() {  
    const messType = document.getElementById("mess-type").value;  
    localStorage.setItem("selectedMessType", messType);  
    window.location.href = "diet-result.html";  
}  
  
document.addEventListener("DOMContentLoaded", () => {  
    const resultDiv = document.getElementById("diet-plan-result");  
    if (!resultDiv) return;  
    const messType = localStorage.getItem("selectedMessType");  
    if (!messType) {  
        resultDiv.textContent = "No diet plan selected. Please go back and select your  
mess type.";  
        return;  
    }  
  
    function getRandomItems(items, count) {  
        const shuffled = [...items].sort(() => 0.5 - Math.random());  
        return shuffled.slice(0, count);  
    }  
  
    const messPlans = {  
        veg: {  
            title: "Vegetarian Diet Plan",  
            meals: {  
                Breakfast: {  
                    fixed: [{ item: "Idly (2 pcs)", calories: 120 }],  
                    random: [  
                        { item: "Chutney", calories: 90 },  
                        { item: "Plain Dosa", calories: 150 },  
                        { item: "Plain Masala Dosa", calories: 180 },  
                        { item: "Aloo Paratha", calories: 200 },  
                        { item: "Aloo Masala", calories: 160 },  
                        { item: "Poori (4 pcs)", calories: 280 }  
                    ]  
                }  
            },  
        },  
    },
```

```
Lunch: {
  fixed: [{ item: "White Rice", calories: 150 }],
  random: [
    { item: "Rasam", calories: 80 },
    { item: "Loose Curd (1 cup)", calories: 100 },
    { item: "Sambar", calories: 130 },
    { item: "Mushroom Peas Masala", calories: 200 },
    { item: "Paneer Tikka Masala", calories: 280 },
    { item: "Veg Biryani", calories: 350 },
    { item: "Phulka (2 pcs)", calories: 160 }
  ]
},
Dinner: {
  fixed: [{ item: "Phulka (2 pcs)", calories: 160 }],
  random: [
    { item: "Sambar", calories: 121 },
    { item: "Rasam", calories: 80 },
    { item: "Plain Dosa", calories: 150 },
    { item: "Dhal Fry", calories: 140 },
    { item: "Channa Masala", calories: 250 },
    { item: "Gobi Manchurian", calories: 300 },
    { item: "Veg Fried Rice", calories: 350 }
  ]
}
},
"non-veg": {
  title: "Non-Vegetarian Diet Plan",
  meals: {
    Breakfast: {
      fixed: [{ item: "Fried Eggs (2)", calories: 180 }],
      random: [
        { item: "Idly (2 pcs)", calories: 120 },
        { item: "Chutney", calories: 90 },
        { item: "Plain Masala Dosa", calories: 180 },
        { item: "Aloo Paratha", calories: 200 }
      ]
    },
    Lunch: {
      fixed: [{ item: "Kadai Chicken", calories: 250 }],
      random: [
        { item: "Chicken Biryani", calories: 900 },
```



```
    { item: "White Rice", calories: 150 },
    { item: "Onion Raitha", calories: 55 },
    { item: "Chicken 65 (5 pcs)", calories: 250 }
  ]
},
Dinner: {
  fixed: [{ item: "Dhal Rajma", calories: 150 }],
  random: [
    { item: "White Rice", calories: 130 },
    { item: "Loose Curd", calories: 100 },
    { item: "Soya Manchurian", calories: 350 },
    { item: "Channa Masala", calories: 250 }
  ]
}
},
special: {
  title: "Special Mess Diet Plan",
  meals: {
    Breakfast: {
      fixed: [{ item: "Fried Eggs (2)", calories: 180 }],
      random: [
        { item: "Idly (2 pcs)", calories: 120 },
        { item: "Sambar", calories: 125 },
        { item: "Chutney", calories: 90 },
        { item: "Pav Bhaji", calories: 375 },
        { item: "Omelette", calories: 190 }
      ]
    },
    Lunch: {
      fixed: [{ item: "Kadai Chicken", calories: 250 }],
      random: [
        { item: "Chicken Biryani", calories: 900 },
        { item: "Chicken 65 (5 pcs)", calories: 250 },
        { item: "Dal Tadka", calories: 280 },
        { item: "White Rice", calories: 150 },
        { item: "Phulka (2 pcs)", calories: 160 }
      ]
    },
    Dinner: {
      fixed: [{ item: "White Rice", calories: 130 }],
      random: [
```

```
    { item: "Sambar", calories: 121 },
    { item: "Dhal Rajma", calories: 150 },
    { item: "Egg Fried Rice", calories: 350 },
    { item: "Gobi Manchurian", calories: 300 },
    { item: "Channa Masala", calories: 250 }
  ]
}
},
paid: {
  title: "Paid Mess Diet Plan",
  meals: {
    Breakfast: {
      fixed: [{ item: "Fried Eggs (2)", calories: 180 }],
      random: [
        { item: "Idly (2 pcs)", calories: 120 },
        { item: "Sambar", calories: 125 },
        { item: "Chutney", calories: 90 },
        { item: "Pav Bhaji", calories: 375 },
        { item: "Omelette", calories: 190 }
      ]
    },
    Lunch: {
      fixed: [{ item: "Chicken Biryani", calories: 900 }],
      random: [
        { item: "Phulka", calories: 104 },
        { item: "Juice (Watermelon)", calories: 80 },
        { item: "Tandoori Roti", calories: 180 },
        { item: "Kadai Vegetable", calories: 280 },
        { item: "Paneer Tikka", calories: 320 },
        { item: "Chicken Tikka", calories: 350 },
        { item: "Kadai Paneer", calories: 380 },
        { item: "Fried Rice", calories: 350 },
        { item: "Noodles", calories: 400 },
        { item: "Butter Chicken", calories: 400 },
        { item: "White Rice", calories: 130 }
      ]
    },
    Dinner: {
      fixed: [{ item: "Chicken Biryani", calories: 900 }],
      random: [
        { item: "Phulka", calories: 104 },
```

```

        { item: "Juice (Watermelon)", calories: 80 },
        { item: "Tandoori Roti", calories: 180 },
        { item: "Paneer Tikka", calories: 320 },
        { item: "Fried Rice", calories: 350 },
        { item: "Butter Chicken", calories: 400 }
      ]
    }
  }
}

};

const plan = messPlans[messType];
if (!plan) {
  resultDiv.textContent = "Invalid mess type selected.";
  return;
}

let html = `

## ${plan.title}</h2>`; let totalCalories = 0; for (const [mealName, mealData] of Object.entries(plan.meals)) { const randomItems = getRandomItems(mealData.random, 2); const allItems = [...mealData.fixed, ...randomItems]; const mealCalories = allItems.reduce((sum, item) => sum + item.calories, 0); totalCalories += mealCalories; html += `${mealName}</h3><ul>`; allItems.forEach(({ item, calories }) => { html += `- ${item} - ${calories} kcal</li>`; }); html += `</ul><div class="meal-total">Total: ${mealCalories} kcal</div>`; } html += `<div class="meal-total" style="text-align:center; font-size:20px; margin-top:30px; border-top:1px solid #fff; padding-top:10px;"> 🔥 <strong>Total Daily Calories:</strong> ${totalCalories} kcal </div>`; resultDiv.innerHTML = html; });


```

Importance of Project:

The project was designed for health awareness and nutrition decisions. The tool combines user BMI and TDEE calculation results with personalized diet plans and gives clear and relevant guidance according to individual requirements. Meal suggestion systems cater to the requirements of the user, whether the user is interested in weight loss, muscle gain, or maintenance.

Major advantages of this project are that it has a simple and user-friendly setup. Users select their type of mess-Whether it is Vegetarian or Non-Vegetarian or Special Or Paid-and it immediately provides an apt meal plan. Local storage is used so that whenever a page is refreshed or during website browsing, users can save their data. It does provide for easy navigation, hence an interactive experience.

Health data are easy to read in this project, but they also form a bridge between the numbers and real everyday actions. Therefore, the project goes further: it does not only provide the basic calculations but also gives realistic solutions that the user can be incorporating into daily patterns. This has a greater significance in a world where health awareness is gaining traction-a viable tech solution that will lead to healthier lives.

Project Documentation:

1. Project Goal

Build a dynamic web application that calculates a user's ideal calorie needs based on BMI, BMR, and TDEE formulas. Then, this data will be used to generate personalized diet plans based on meal type (veg/non-veg).

2. Data Gathering and Preparation

- Researched common Indian mess-style meals with known calorie values.
- Created a meal database with item names, calorie counts, and diet type (veg/non-veg).
- Structured the data in JavaScript (`diet.js`) to enable easy filtering and categorization.

3. Researching Metrics

To determine the most accurate calorie needs:

- BMI (Body Mass Index)** was used to assess weight category.
- BMR (Basal Metabolic Rate)** is calculated the base calories required to maintain body function.
- TDEE (Total Daily Energy Expenditure)** adjusted BMR based on activity level.

-Different variations were compared to find the most actionable metric for meal planning.

4. Calculations & Formula Logic

Implemented in `bmi-calculator.htm`:-

BMI = weight / (height in m²)

-**BMR** (Mifflin-St... Jeor Equation):

-Male: `10 * weight + 6.25 * height - 5 * age + 5`

-Female: `10 * weight + 6.25 * height - 5 * age - 161`

-**TDEE** = BMR × Activity Factor (1.2 to 1.9)

Then:

-**Target Calories** adjusted based on user goal:

Lose weight: `TDEE - 500`

Gain weight: `TDEE + 500`

Maintain: `TDEE`

5. BMI Calculator UI (bmi-calculator.html)

Form Inputs:

-Age, Gender, Height, Weight, Activity Level, Goal, Mess Type

Output Display:

-BMI category (underweight, normal, overweight)

-Calories needed (TDEE and Target Calories)

-Stores values using `localStorage` for the next page use

Tech Highlights:

-Form validation

- Real-time calculation
 - Responsive layout with a dark theme
- ## **6. Main Index Page (index.html)**

Features:

- Central navigation hub
- Introduces the app
- Encourages users to start with the BMI calculation
- Uses animated backgrounds and CSS styling for visual appeal

7. Diet Generation Logic (diet.js)

- Fetches user calorie target and mess type from `localStorage`
- Filters the meal database accordingly
- Distributes calories across:
 - Breakfast (20–25%)
 - Lunch (30–35%)
 - Snacks (10–15%)
 - Dinner (25–30%)
- Generates a dynamic table for each meal with:
 - Meal names
 - Calories per item
 - Total meal calories

Smartness:

- Randomized but controlled selection

- Ensures calorie range per meal is respected
- Highlights underfilled meals if the calorie quota is hard to match

8. Responsive Design & User Experience

- All pages are mobile-friendly and styled for dark theme users
- Uses consistent UI styling across pages
- Transitions and animations enhance engagement
- Local storage ensures continuity across pages

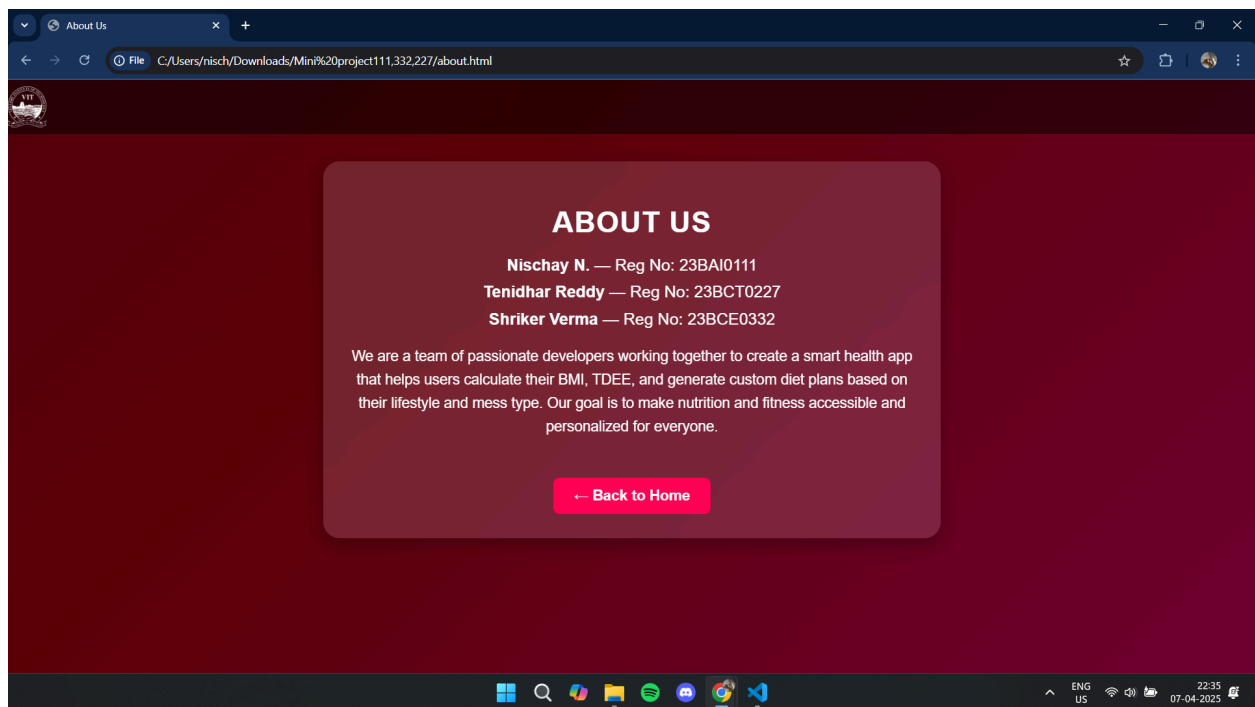
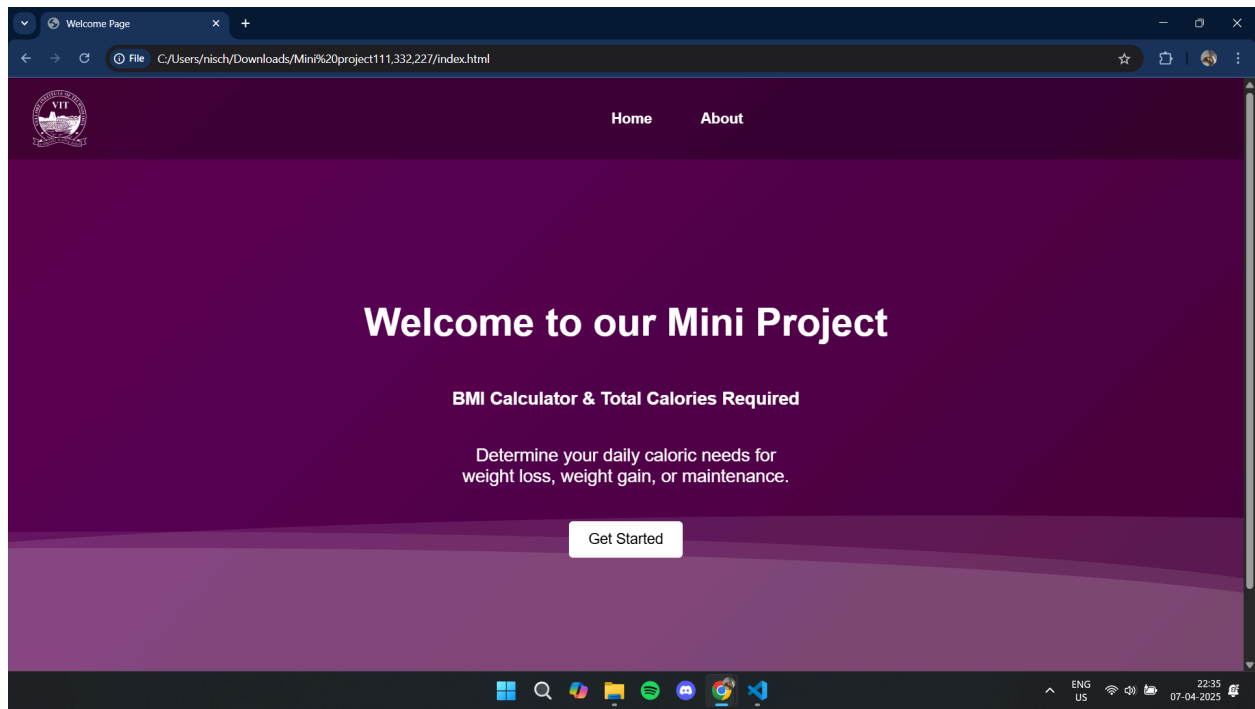
9. Key Technologies Used

- HTML5, CSS3, JavaScript ES6**
- LocalStorage** for state persistence
- DOM manipulation** for dynamic UI
- Modular approach in `diet.js` to allow future scalability (e.g., adding more mess types or goals)

10. Possible Future Improvements

- Allow users to customize or replace meals manually
- Track the history of calories and progress
- Add macro nutrients (carbs, protein, fat) to meals
- Integrate with the backend or database for multi-user support.

Screenshots:



Home

About

BMI & TDEE CALCULATOR

Height: 175 cm

Weight: 84 kg

Age: 25 years

Gender: Male

Activity Level: Very active (6-7 days per week)

Goals: Gain Weight

Calculate

Your BMI: 27.4

Your TDEE: 3297.3 kcal/day

Body Mass Index (BMI) for adults

247g Protein

412g Carbs

73g Fats

Get Diet Plan

22:36

07-04-2025

Home

BMI

About

Personalized Diet Plan

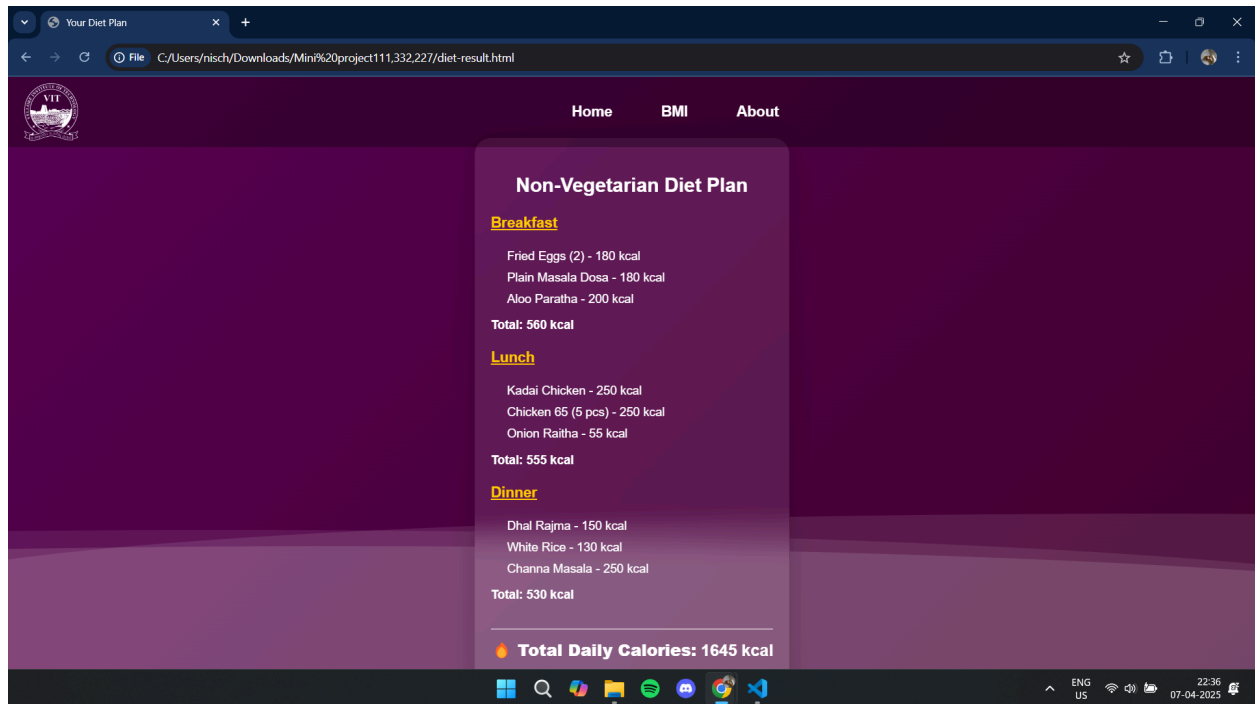
Select your mess type:

Non-Vegetarian

Get Diet Plan

22:36

07-04-2025



Conclusion:

This project has been a practical and meaningful step toward helping people better understand and manage their health. By combining simple calculations like BMI and TDEE with personalized meal plans, it offers an easy way for users to get diet suggestions that actually fit their lifestyle. The website is designed to be smooth, responsive, and easy to use, making the experience more enjoyable and accessible for everyone. What makes this project special is how it turns numbers into something useful, clear and personalized advice that people can

follow without needing expert knowledge. Whether someone follows a vegetarian, non-vegetarian, special, or paid diet plan, the system adapts to meet their needs. Overall, this project shows how technology can make a real difference in everyday life by promoting healthier habits in a simple and user-friendly way.