CONTENTS

1. LIST OF ILLUSTRATIONS 1

2. ACKNOWLEDGEMENT 2

3. ABSTRACT 3

4. INTRODUCTION 4

5. DISCUSSION

- **i.** USES 5
- **ii.** SOURCE CODE 6
- **iii.** OUTPUT 12

6. CONCLUSION 14

7. REFERENCES 15

1. LIST OF ILLUSTRATIONS

LIST OF FIGURES Page Nos.

Fig. 1: Full Page View **12**

Fig. 2: Added My Profile Links **12**

Fig. 3: Output Number 1 **13**

Fig. 4: Output Number 2 **13**

2. ACKNOWLEDGEMENT

I would like to express my deepest gratitude to Professor Subhabrata Sengupta for his valuable advice and assistance in carrying out my project. He has been there to accompany me every step of the way and it is he who motivates me to accomplish my duties effectively. I would also like to thank my parents for their emotional support, without them I would not have been able to complete this project.

I would also like to thank Institute of Engineering and Management for accepting my project in my desired area of expertise.

3. ABSTRACT

The BMI calculator project is a web-based application that provides a simple and effective tool for individuals to estimate their body mass index (BMI) and assess their weight status. The project involved designing a user-friendly web interface using HTML and CSS, as well as implementing the BMI calculation formula using JavaScript.

The purpose of this project was to create a BMI calculator that is easy to use, accessible to everyone, and promotes healthy living by providing individuals with valuable information about their weight status. Through the development of this project, we have gained knowledge and experience in web design using HTML and CSS, as well as programming in JavaScript for implementing basic functionality.

The BMI calculator project has numerous applications, such as a screening tool for identifying individuals at risk of weight-related health problems, evaluating the effectiveness of weight loss programs or other interventions, and monitoring the health of athletes or bodybuilders who need to maintain a certain weight. With further development and integration of additional features, the BMI calculator project has the potential to become an even more valuable tool for individuals and healthcare providers alike.

Overall, this project demonstrates how technology can be leveraged to promote healthy living and improve public health outcomes.

4. INTRODUCTION

BMI calculator is a tool that helps to estimate a person's body mass index (BMI) based on their weight and height. BMI is a widely used measure of body fatness and is calculated by dividing a person's weight in kilograms by the square of their height in meters (BMI = weight / height^2).

BMI is used as a screening tool to identify possible weight-related health problems, such as obesity, which can increase the risk of developing several chronic diseases, such as heart disease, diabetes, and certain cancers. BMI is not a perfect measure of body fatness, as it does not consider factors such as muscle mass, bone density, and body composition, but it is a useful tool for assessing the risk of weight-related health problems.

BMI calculators can be found online or as standalone applications, and they typically require the user to input their weight and height in either metric or imperial units, after which the calculator will return the calculated BMI value along with an interpretation of what that value means in terms of weight status. In this project, we have developed a simple BMI calculator using HTML, CSS and JS language.

5. DISCUSSION

i. USES

Uses for BMI calculator are:

a) Screening tool for identifying individuals who are at risk of weight-related health problems.
b) Assessing the effectiveness of weight loss programs or other interventions.
c) Monitoring the health of athletes or bodybuilders who need to maintain a certain weight.
d) Evaluating the risk of surgical complications for obese patients.
e) Providing personalized recommendations for diet and exercise based on BMI and other factors.
f) Measuring the effectiveness of workplace wellness programs.
g) Conducting research on the prevalence and distribution of obesity in a population.
h) Tracking changes in BMI over time to monitor weight gain or loss.
i) Evaluating the growth and development of children and adolescents.
j) Providing a baseline measure for insurance companies or employers to determine health risks and premiums.

ii. SOURCE CODE

- HTML

```
<!doctype html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>BMI Calculator</title>
    <meta name="description" content="Web Page to Calculate Body Mass Index">
    <meta name="author" content="Supratim">
    <link rel="stylesheet" href="style.css">
    <link href='https://cdn.jsdelivr.net/npm/boxicons@2.0.5/css/boxicons.min.css'
rel='stylesheet'>
  </head>
  <body>
    <div class="bmi">
      <h2>Body Mass Index Calculator</h2>
      <p class="text">Height in CM</p><input type="text" id="height">
      <p class="text">Weight in KG</p><input type="text" id="weight">
      <p id="result"></p><button id="btn">Calculate</button>
    </div>
    <div class="chart">
      <table>
        <thead>
          <tr>
            <th>BMI</th>
            <th>Category</th>
          </tr>
        </thead>
        <tbody>
          <tr>
            <td data-column="bmi">less than 18.5</td>
            <td data-column="category">Underweight</td>
```

```
        </tr>
        <tr>
          <td data-column="bmi">between 18.5 and 24.9</td>
          <td data-column="category">Ideal</td>
        </tr>
        <tr>
          <td data-column="bmi">between 25 and 29.9</td>
          <td data-column="category">Overweight</td>
        </tr>
        <tr>
          <td data-column="bmi">over 30 </td>
          <td data-column="category">Obesity</td>
        </tr>
      </tbody>
    </table>
  </div>
  <script src="script.js"></script>
  <footer class="footer">
    <p class="footer__title">Supratim Maji</p>
    <div class="footer__social">
      <a
href="https://www.facebook.com/profile.php?id=100005386576182&mibextid=ZbWKwL"
class="footer__icon"><i class='bx bxl-facebook' ></i></a>
      <a href="https://github.com/Supramaji" class="footer__icon"><i class='bx bxl-github'
></i></a>
      <a href="https://instagram.com/ragnar_clicks.ig?igshid=ZDdkNTZiNTM="
class="footer__icon"><i class='bx bxl-instagram' ></i></a>
      <a href="https://www.linkedin.com/in/supratim-maji-2212601b2"
class="footer__icon"><i class='bx bxl-linkedin' ></i></a>
    </div>
  </footer>
 </body>
</html>
```

- CSS

```
@import
url("https://fonts.googleapis.com/css2?family=Montserrat:wght@500;600;700&display=swap"
);
body {
  margin: 2px;
  display: block;
  padding: 1px;
  text-align: center;
  font-family: "Montserrat";
  background: rgb(34, 193, 195);
  background: linear-gradient(
    0deg,
    rgb(0, 194, 81) 0%,
    rgb(110, 0, 161) 100%
  );
  min-block-size: 0%;
  zoom: 90%;
}
.bmi {
  width: 350px;
  position: absolute;
  top: 50%;
  left: 50%;
  background-color: #fff;
  transform: translate(-50%, -50%);
  padding: 20px;
  border-radius: 10px;
}
h2 {
  font-size: 30px;
  font-weight: 600;
```

```
}
.text {
  text-align: center;
}
#weight,
#height {
  color: #222f3e;
  text-align: left;
  font-size: 20px;
  font-weight: 200;
  outline: none;
  border: 1px solid black;
  border-radius: 7px;
  width: 200px;
  height: 35px;
}
#weight:focus,
#height:focus {
  width: 250px;
  transition: 0.5s;
}
#result {
  color: #341f97;
}
#btn {
  font-family: inherit;
  margin-top: 10px;
  border: none;
  color: #000;
  background: rgb(173, 230, 173);
  width: 150px;
  padding: 10px;
  border-radius: 30px;
  outline: none;
```

```
  cursor: pointer;
  transition: 0.5s;
}
#btn:hover {
  transform: scale(1.1);
  transition: 0.5s;
}

table {
  width: 650px;
  border-collapse: collapse;
  margin: 600px auto;
}

tr {
  background: lightblue;
}

th {
  background: #fff;
  color: #000;
  font-weight: bold;
}

td,
th {
  padding: 10px;
  border: 1px solid #000;
  text-align: center;
  font-size: 18px;
}
.footer {
  font-size: 24px;
}
```

```
.footer i {
  font-size: 2em;
}
.footer {
  font-size: 27px;
}
```

- JS

```
document.getElementById("btn").addEventListener("click", function() {
  var height_val = document.getElementById('height').value;
  var weight_val = document.getElementById('weight').value;
  var bmi = weight_val / (height_val / 100 * height_val / 100);
  var bmio = (bmi.toFixed(2));

  document.getElementById("result").innerHTML = "Your BMI is " + bmio;
})
```

iii. OUTPUTS

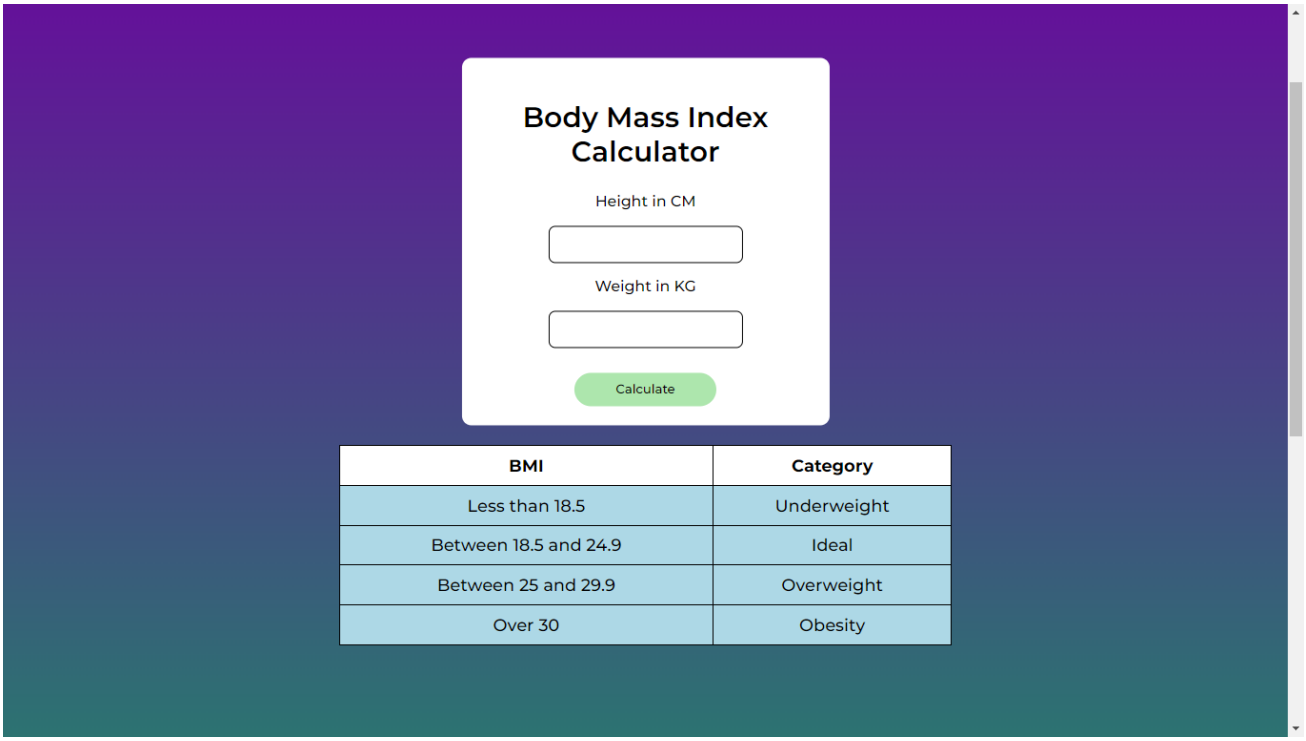

FIG. 1

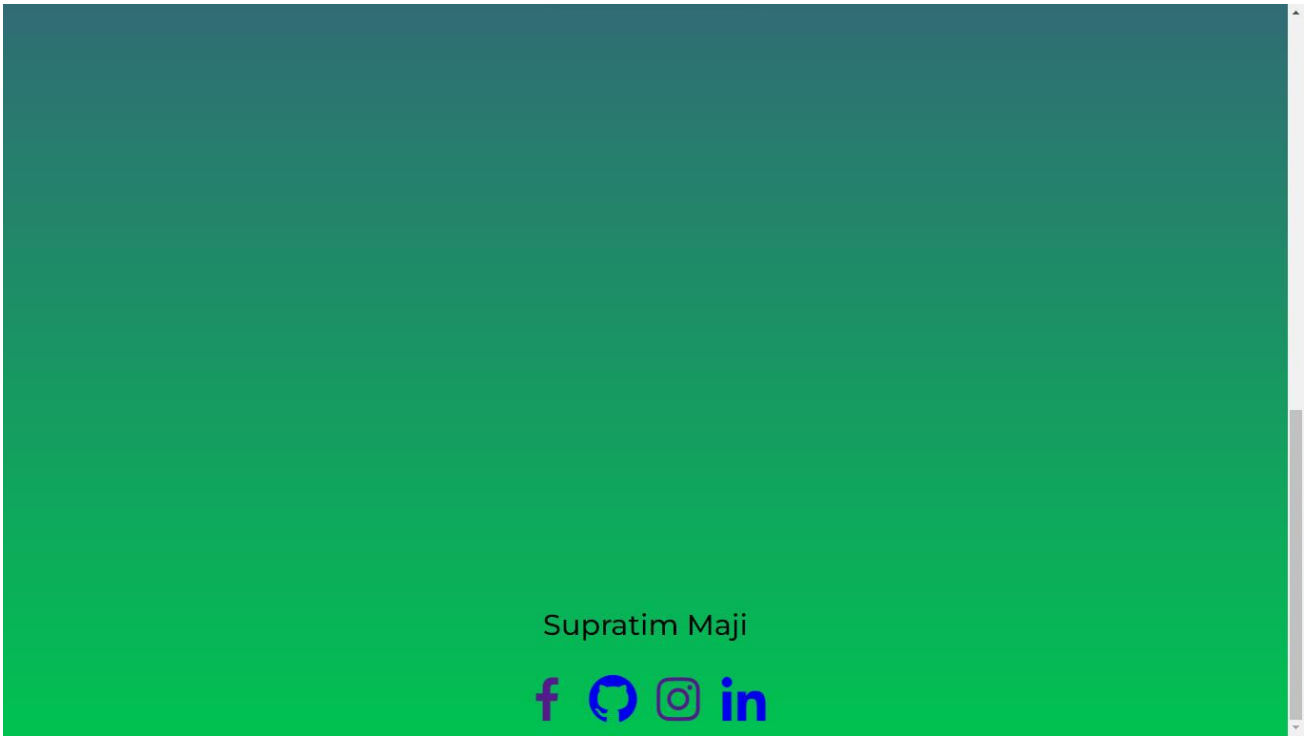

FIG. 2

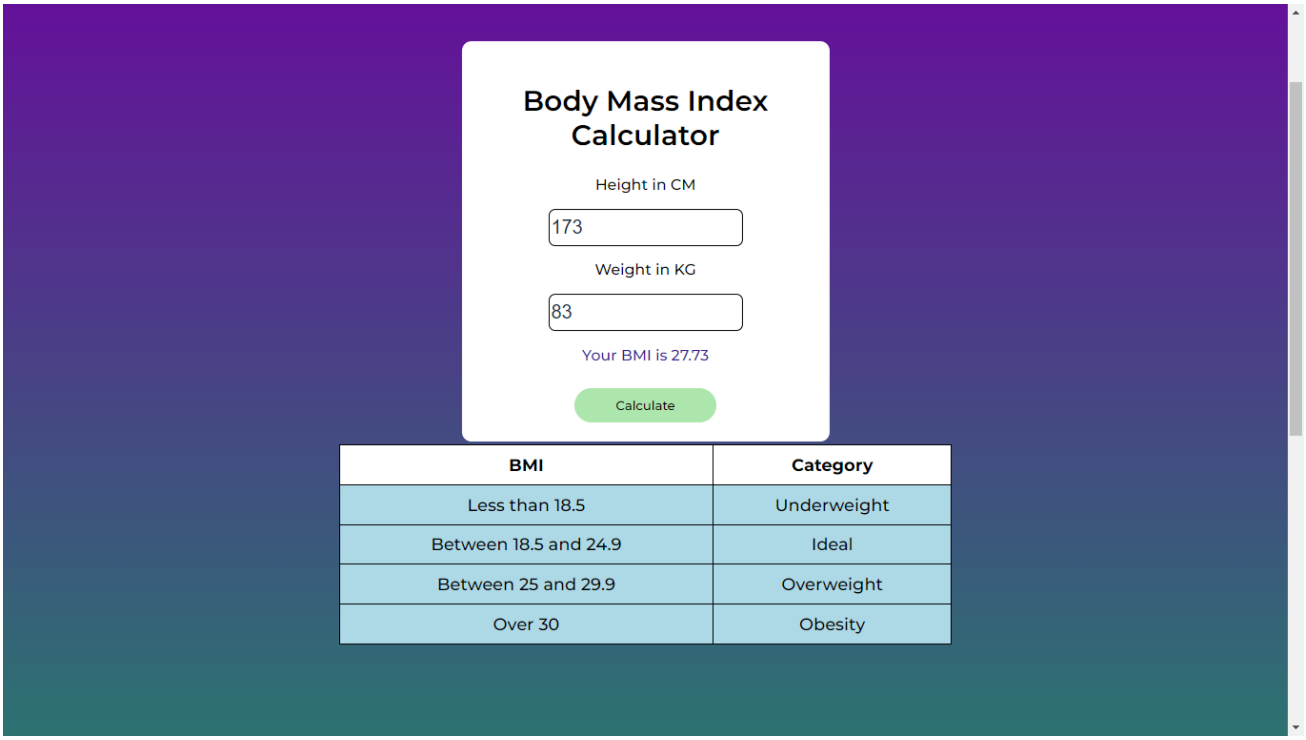
Body Mass Index Calculator
Height in CM
173
Weight in KG
83
Your BMI is 27.73
Calculate
BMI
Category
Less than 18.5
Underweight
Between 18.5 and 24.9
Ideal
Between 25 and 29.9
Overweight
Over 30
Obesity

FIG. 3

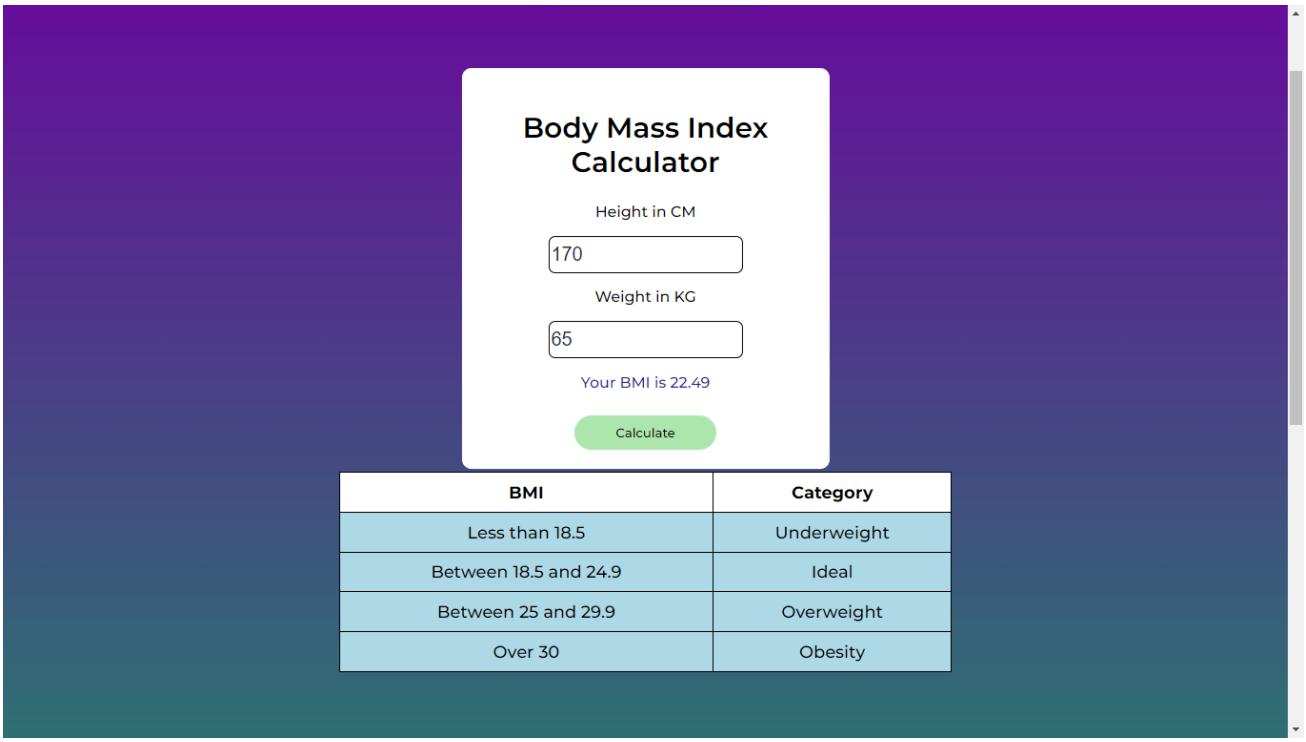
Body Mass Index Calculator
Height in CM
170
Weight in KG
65
Your BMI is 22.49
Calculate
BMI
Category
Less than 18.5
Underweight
Between 18.5 and 24.9
Ideal
Between 25 and 29.9
Overweight
Over 30
Obesity

FIG. 4

6. CONCLUSION

In conclusion, the BMI calculator project using HTML, CSS, and JavaScript is a useful tool for individuals who want to estimate their body mass index and assess their weight status. The project involved designing a user-friendly web interface with HTML and CSS, as well as implementing the BMI calculation formula using JavaScript.

Through this project, we have learned how to build a simple but effective web application that can help individuals monitor their weight and make informed decisions about their health. We have also gained experience in working with HTML and CSS for web design and JavaScript for implementing basic functionality.

Overall, this BMI calculator project is a great example of how technology can be used to promote healthy living and improve public health outcomes. With further development and integration of additional features, such as personalized diet and exercise recommendations, the BMI calculator project has the potential to become an even more valuable tool for individuals and healthcare providers alike.

7. REFERNCES

- **Project Idea and Implementation**
  - **GEEKS FOR GEEKS**

    https://www.geeksforgeeks.org/
  - **JAVA POINT**

    https://www.javatpoint.com/