SDLC file(**Software Development Life Cycle**)

BMI Calculator

This BMI (Body Mass Index) calculator is a web application built using HTML, CSS, and JavaScript. It allows users to calculate their BMI based on their height and weight inputs, providing a simple way to assess if a person's weight falls within a healthy range relative to their height.

# Features

* Clean, responsive user interface that works on desktop and mobile devices
* Input fields for height (in centimeters) and weight (in kilograms)
* Instant BMI calculation with a single button
* Color-coded results display (Underweight, Normal weight, Overweight, Obese)
* Detailed interpretation of BMI results with health recommendations
* Metric and Imperial unit conversion options

# Technologies Used

* **HTML5**: Provides the structure and layout of the calculator
* **CSS3**: Styles the application with responsive design principles
* **JavaScript**: Handles the calculation logic and dynamic UI updates
* **LocalStorage**: Optionally saves previous calculations for user convenience

# Live Demo

A live demo of the application is available at: https://visheshjha11.github.io/bmi-calculator

# Installation

**Option 1: Direct Download**

1. Download the repository as a ZIP file
2. Extract the files to your desired location
3. Open index.html in your web browser

# Option 2: Using Git

bash

*# Clone the repository*

git clone https://github.com/your-username/bmi-calculator.git

*# Navigate to the project directory*

cd bmi-calculator

*# Open index.html in your browser*

# Usage

1. Enter your height in centimeters in the "Height" field
2. Enter your weight in kilograms in the "Weight" field
3. Click the "Calculate BMI" button
4. View your BMI result and its interpretation
5. To calculate a new BMI, simply update the height and weight fields and click the button again

# BMI Calculation Formula

The BMI is calculated using the following formula:

text

BMI = weight(kg) / height(m)²

Where height is in meters. The application automatically converts centimeter inputs to meters for the calculation.

# BMI Categories

**BMI Range Category Interpretation**

Below 18.5 Underweight May indicate nutritional deficiency or other health

issues

18.5 - 24.9 Normal weight Healthy weight range associated with lower health

risks

25.0 - 29.9 Overweight Increased risk of developing health problems

30.0 and above

Obese High risk of developing serious health conditions

# Project Structure

text

bmi-calculator/

│

├── index.html # Main HTML file with the calculator interface

├── css/

│ └── style.css # CSS styling for the application

├── js/

│ └── script.js # JavaScript code for BMI calculation logic

├── screenshots/ # Screenshots of the application

├── LICENSE # License information

└── README.md # Project documentation

# Limitations

* BMI is a screening tool and does not directly measure body fat or account for factors like muscle mass, bone density, or overall body composition.
* The calculator does not take into account age, gender, ethnicity, or fitness level, which can influence the interpretation of BMI values.
* BMI results should be considered alongside other health assessments and professional medical advice.

# Contributing

Contributions are welcome! Here's how you can contribute to this project:

1. Fork the repository
2. Create a new branch (git checkout -b feature/improvement)
3. Make your changes
4. Commit your changes (git commit -m 'Add some feature')
5. Push to the branch (git push origin feature/improvement)
6. Open a Pull Request

Please ensure your code follows the project's coding style and includes appropriate documentation.

# License

This project is licensed under the MIT License - see the LICENCE file for details.

# Acknowledgments

* + World Health Organization (WHO) for BMI classification standards
  + Various open-source projects that inspired this implementation
  + Contributors who have helped improve this calculator

**Disclaimer**: This BMI calculator is for informational purposes only and should not be considered medical advice. Always consult with a healthcare professional for proper evaluation of your health status.