

6. BMI Calculator

Student learning outcomes

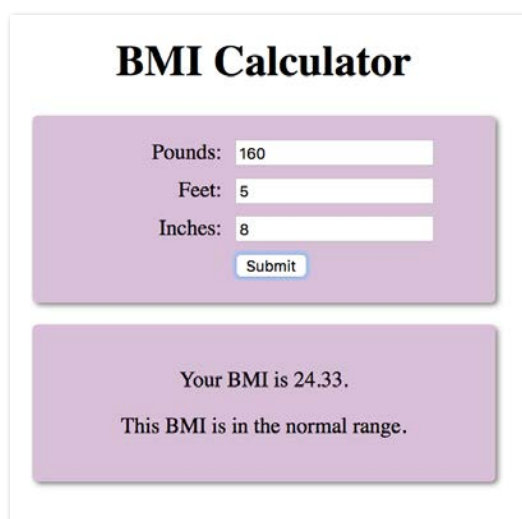
- Students will create a form to perform a mathematical calculation on user-supplied data.
- Students will explore how to let users enter data in a way that they easily understand.
- Students will learn how to make a more extensive form look nice.

Real world applications:

- Medical and health applications are among the most popular and highest revenue producing.
- Students need to pay more attention to their everyday health choices.
- Applications that have the best user interface will gain the most market share.

Assignment requirements:

- The page has a form where the user can enter height and weight.
- The script calculates the BMI and displays whether the weight is in the normal range.
- User interface question: what is the best way for users to enter height and weight?
- HTML elements used:
 - Input text
 - Input submit
 - Label (new)
- JavaScript concepts:
 - Events, event handlers, onclick
 - getElementById
 - Input field values
 - parseFloat()
 - Cascading if_else statements
 - Using NaN and isNaN() to detect input errors
 - Using toFixed() to reduce the number of decimal places



The image shows a web form titled "BMI Calculator". The form has three input fields for "Pounds", "Feet", and "Inches", with values 160, 5, and 8 respectively. A "Submit" button is located below the input fields. Below the input fields, the form displays the result: "Your BMI is 24.33." and "This BMI is in the normal range."