



# Interface Design and Development

## Task 3.3: Compute Web App

### Overview

Using expression and conditional directive in VueJS, it is possible to create programs that dynamically respond to user input. In this task, you will create a small web application that uses expression and conditional directives to dynamically compute the body mass index (BMI) and output custom message to users.

**Purpose:** Learn to use expressions and conditional directives to respond to user actions.

**Task:** Create a web app that computes BMI and displays a custom message.

**Resources:**

- Lecture notes 3
- VueJS <https://vuejs.org/>

## Instructions

Without VueJS, writing a web application with computational interactive can be quite tedious. Using JavaScript will require several listeners to be hooked up to the input form elements in order to interactively update the view with the updated computed values.

With VueJS, the task is straight forward using model and expressions. And custom message can be implemented using conditional directives, such as v-If and v-Show

Implement a web application with the following logic:

- It reads 2 inputs, namely: weight in kilograms, and height in centimetres.
- Compute and show the calculated BMI. The formula is  
BMI = bodyweight in kilograms divided by height in meters squared
- Display the appropriate custom message whether the calculated BMI is 'underweight', 'normal', 'overweight' or 'obese' based on the following BMI cut off points

Underweight:	below 18.5
Normal weight:	18.5 to below 25
Overweight:	25 to below 30
Obese:	at least 30

**Tip:** Remember height is in centimetre while formula solves height in meter.

**Note:** Form element is used in this task to wrap all input elements. It is optional to style your app with Bootstrap for this task.

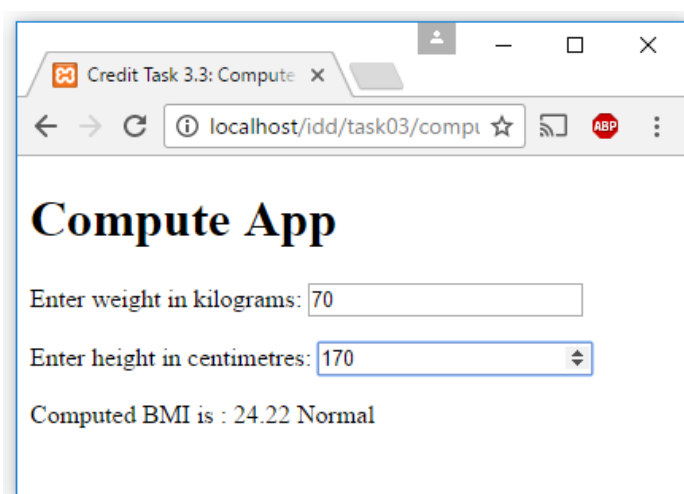


Figure 1: Screenshot of the web app with no Bootstrap mark up