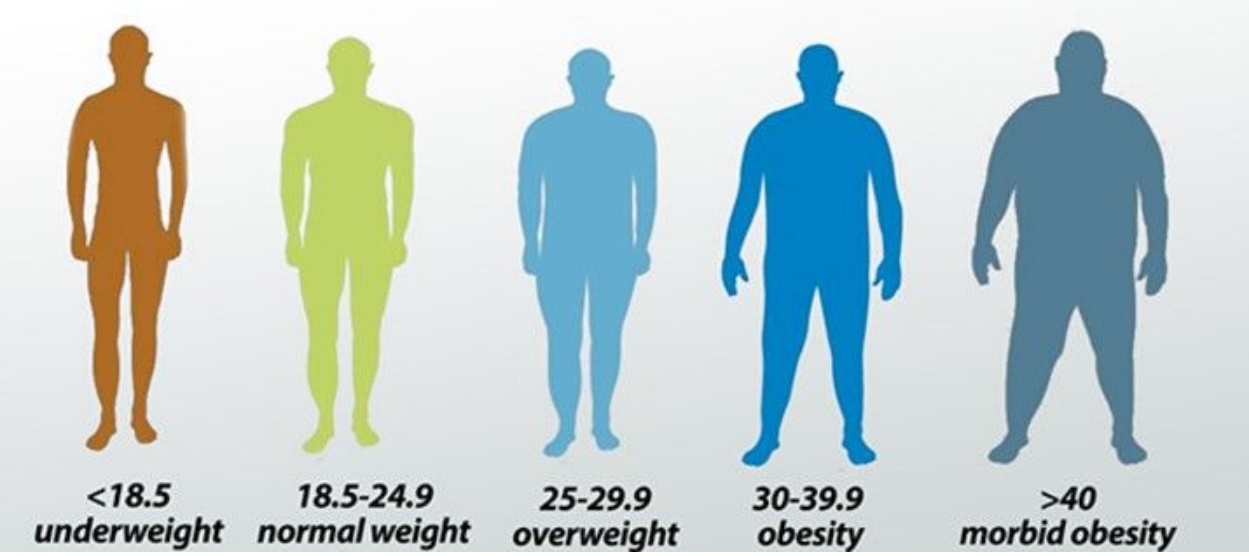
WAD Midterm Exam (Spring 19)

Program Name	BSCS
Course Code	CSSE3143
Course Name	Web Application Development
Course Instructors	Muhammad Ali Makhdoom
Time Allowed	**90 mints**
Total marks available	100
Academic Honesty Policy	Academic dishonesty will not be tolerated. Academic dishonesty includes cheating, plagiarism (copying) or any other attempt to gain an academic advantage in a dishonest or unfair manner.

Instructions (Designing a *BMI Application*)

You need to design a **mobile-first** *BMI application* so that users can calculate their ***body mass index (BMI)*** which is measure of body fat based on height and weight. Users should be able to enter height in centimeters or feet,in and weight in pound or kg. Application should response with the image



according to calculated BMI calculated with user's height and weight as given in screenshots.

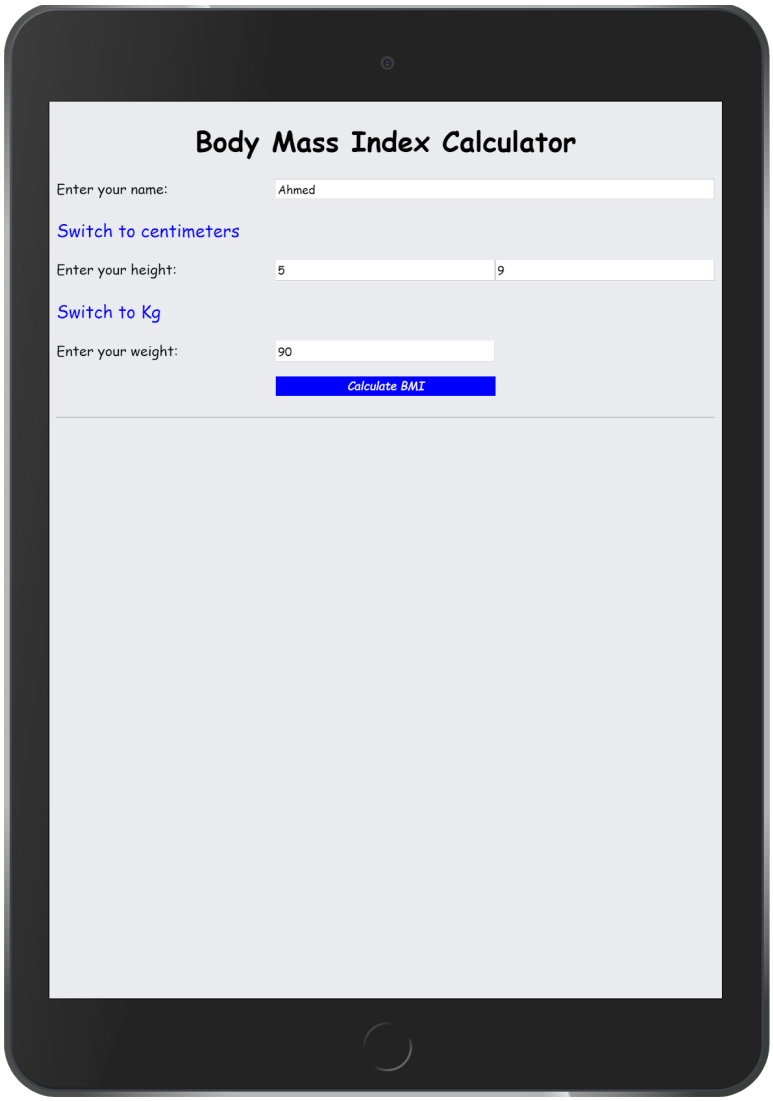
A zip file which contains the content of the Web page is provided to you. This zip file contains "**index.html**" file, a "css" folder with "**style.css**" file inside it, a "js" folder with "**main.js**" file inside it, a "**images**" folder with different images representing the BMI categories inside it to load dynamically with javascript and a **"screenshots"** folder with the final targeted design screenshots for multiple devices. All your HTML code should be added to "index.html" file, all your CSS rules should be added to "style.css" file and all javascript code should be add in "main.js". You **shouldn't remove, add, or move any file or folder**.

Submission

Compress all the files into a zip file and submit it to the "mid-term" folder submission directory on LMS.

View on below 600px screen width

View on 600px - 799px screen width



View on 800px and greater screen width

Question 01

1. Pick your favorite font from google fonts and apply it in all html tags. **(6)**
   Hint:
   Use universal selector in external CSS
2. Change the background color of the button from **blue** to **dark blue** within *half second* when user bring mouse cursor over it. **(7)**

   Hint: Use CSS property in .btn class and Pseudo Class in external CSS file

3. Replicate 12 column classes (col-s-*) for small devices starting from 600px to 799px in a media query in external CSS file. **(7)**
   Hint:
   min-width

Question 02

1. Display and hide input fields on mouse click so that user can enter value in different known formats of height (centimeters,feet + in).
    - Attach dynamic click event using javascript with anonymous function. **(10)**
    - Toggle hide class on click. **(10)**

    We had done Similar activity in class, find it here.

    View Before click

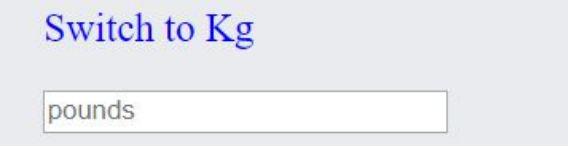
    

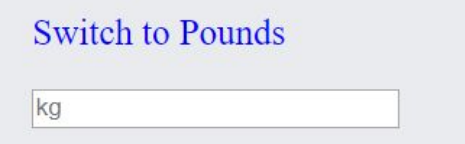
    View After click

    Hint:
    Display: none;
    Hide class is already applied to hide input field.
    Attach the click event with variable hs.
    addEventListener
    classList.toggle

3. Repeat the above for weight fields as well (pounds, kg). **(10)**

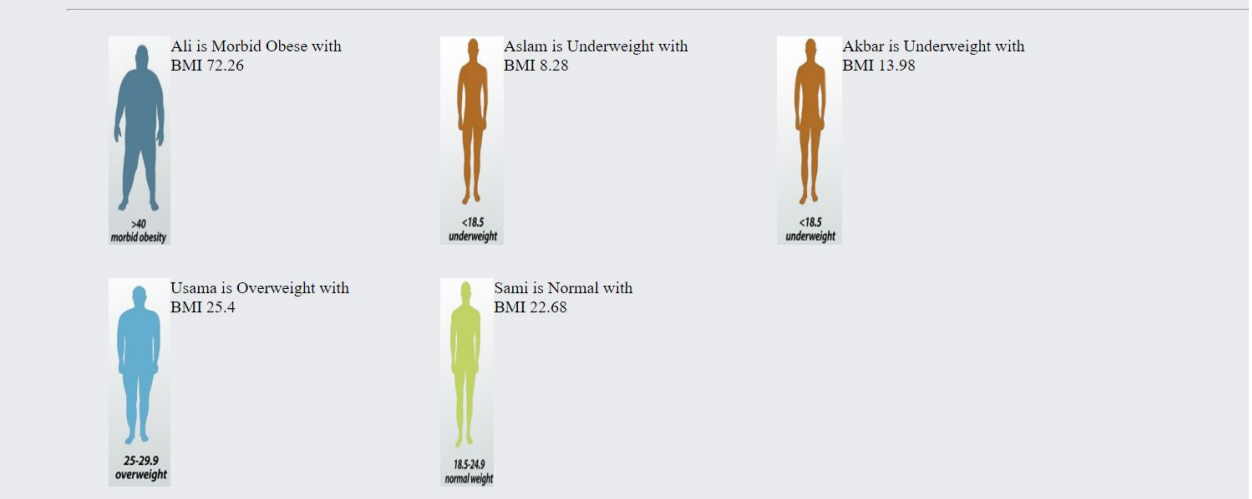
Question 03

1. Attach click event with button 

, and callback function *computeBMI* in main.js **(5)**

2. BMI value is already calculated in variable ***output***, check the value of BMI and call function ***displayResult()*** with parameters (*bmi, message, image name*) accordingly using conditions. **(10)**

3. Create ***figure***, ***img*** and ***figcaption*** elements dynamically and append in div with id ***users*** in ***displayResult()*** function the view should look like the following. Set image src attribute dynamically according to BMI value. Images are given in images folder. **(30)**



Hint:
createElement
innerHTML
setAttribute
classList.add
append

4. Clear all the fields in ***clearFields()*** so that user can enter new values of weight and height. **(5)**