

Front End Development Diploma in CSF 2021/22 Semester 2	Week 6
	2 Hours
JavaScript Essential	

Activities

In this practical you will learn to create JavaScript file for the following:

- Display a greeting
- Calculate BMI
- Display JC entry cut off point
- Calculate pizza price

Reference:

<https://www.w3schools.com/js/default.asp>

Task 1: Display greeting message

1. Create a new project from Blank Solution template in Visual Studio and name it as **Week6_1_Practical**.
2. Change to the Folder View.
3. Add an HTML page and name it **greeting.html**.
4. In the HTML file,
 - a) Add meta tag for author and your name as content.
 - b) Add meta for description and "Display greeting" as content.
 - c) Add title as "Display greeting".
5. Add a JavaScript file and name it **greetingScript.js**.
6. In the JavaScript file,
 - a) Display a dialog box to prompt the user for his/her name as shown in Figure 1(a) by using the prompt() method.

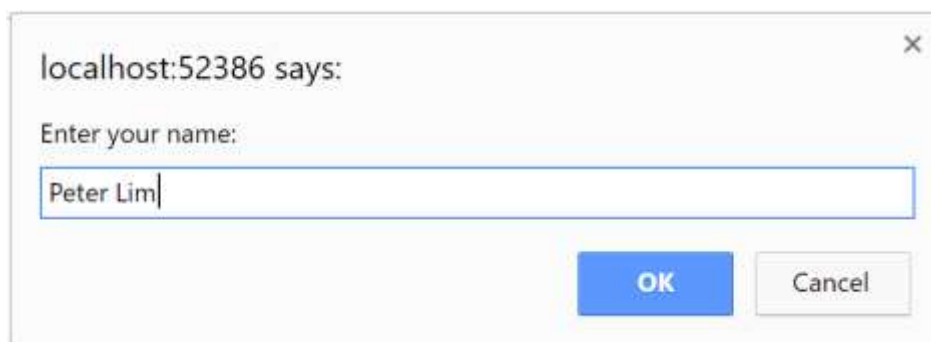


Figure 1(a)

- b) Create a Date object that stores the current date and time.
- c) Display an alert box with a greeting message according to the current time as shown in Figure 1(b) by using the alert() method (display “Good morning” if hours is below 12, otherwise, display “Good afternoon”).

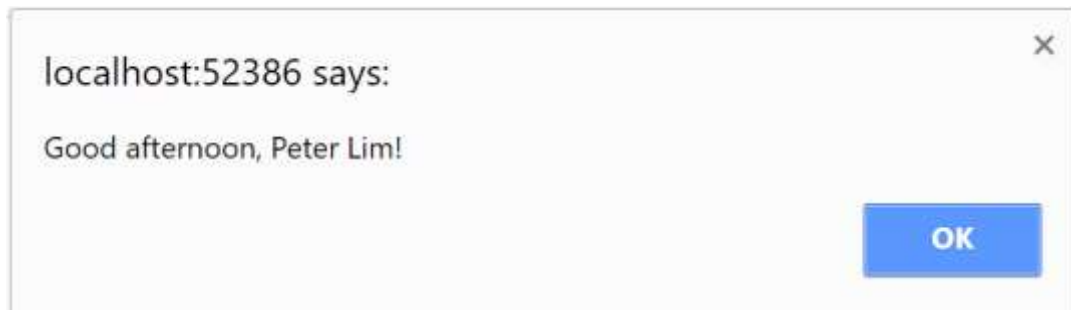


Figure 1(b)

- 7. Save the files and view the HTML page in the Browser.
- 8. Zipped the entire **Week6_1_Practical** folder and submit in MEL submission.
(Zip filename format as instructed in ppt slides)

Task 2: Calculate BMI

- 1. Create a new project from Blank Solution template in Visual Studio and name it as **Week6_2_Practical**.
- 2. Add an HTML page and name it **bmiCalculator.html**.
- 3. In the HTML file,
 - a) Add meta tag for author and your name as content.
 - b) Add meta for description and “BMI Calculator” as content.
 - c) Add title as “BMI Calculator”.
 - d) Form with header, labels and input fields to accept the input for weight and height as shown in figure 2 is given. (Default values for weight set to 50 and height as 1.7. The BMI and health category are calculated and displayed when the page is loaded).

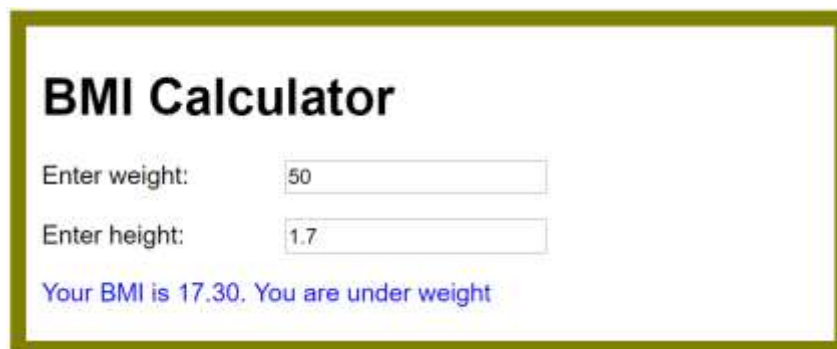


Figure 2

4. Add a css file and name it **styles.css** to style the web page as shown above.
5. Add a JavaScript file and name it **bmiScript.js**.
6. In the JavaScript file,
 - a) retrieve the input values from the two input fields
 - b) calculate the bmi using the formula $\text{weight} / (\text{height} * \text{height})$
 - c) determine the health category using the following table

BMI	Health category
Below 18.5	Under weight
Between 18.5 and 23	Normal weight
Between 23 and 27.5	Over weight
Above 27.5	Obese

- d) display the BMI and health category below the input
7. Save the files and view the HTML page in the Browser.
8. Zipped the entire **Week6_2_Practical** folder and submit in MEL submission.
(Zip filename format as instructed in ppt slides)

Task 3: Display JC entry cut off point

1. Create a new project from Blank Solution template in Visual Studio and name it as **Week6_3_Practical**.
2. Add an HTML page and name it **jcEntryPoints.html**.
3. In the HTML file,
 - a) Add meta tag for author and your name as content.
 - b) Add meta for description and "JC Entry Cut Off Points" as content.

- c) Add title as “JC Entry Cut Off Points”.
- d) Form with header, label and dropdown list to allow the user to select a JC from the list and display the entry cut off point as shown in figure 3(a) is given.

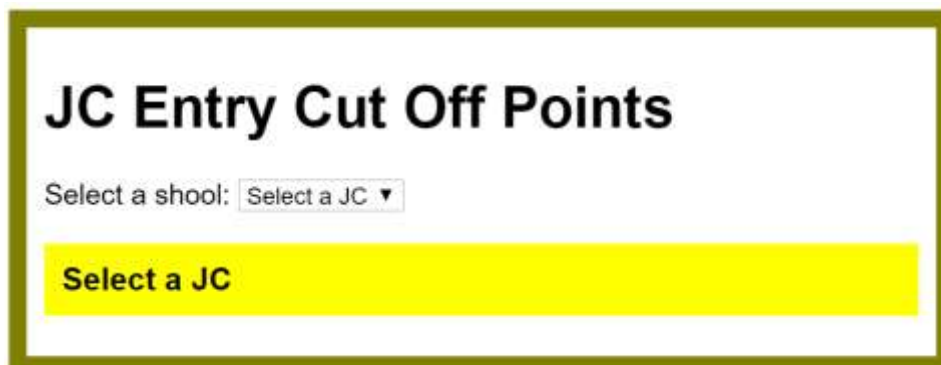


Figure 3(a)

4. The list of JCs and their entry cut off points are shown below:

ACJC	8
AJC	11
CJC	10
EJC	9
HCI	4

NJC	7
NYJC	7
SAJC	10
TJC	9
VJC	7

5. Add your styling to the css file created in task 2 to style the web page as shown above.
6. Add a JavaScript file and name it **jcEntryScript.js**.
7. In the JavaScript file,
 - a) retrieve the input value from the dropdown list
 - b) determine the entry cut off point for the school selected and display it as shown in figure 3(b).
8. Save the files and view the HTML page in the Browser.



Figure 3(b)

9. Zipped the entire **Week6_3_Practical** folder and submit in MEL submission.

(Zip filename format as instructed in ppt slides)

Task 4: Calculate pizza price

10. Create a new project from Blank Solution template in Visual Studio and name it as **Week6_4_Practical**.
11. Retrieve the pizza order form that you've done in week 2 and add it to the project.
12. In the HTML file,
- Change the dropdown list for the "Addons" to allow multiple selection.
 - Add a division to display the price for the order.
13. Add a JavaScript file "pizzaScript.js" for the calculation. The price for the pizza is:
- Small - \$22; Medium: \$28; Large: \$35
 - \$2 for each topping added
 - For the addons, \$5 for Buffalo Wings; \$3 for Garlic Bread
14. Screenshot of the pizza form is shown in Figure 4.

Pizza Order Form

Pizza Type: Aloha Chicken ▼ Quantity: 1

Size:
☒ Small ☐ Medium ☐ Large

Crust:
☒ Thin ☐ Thick ☐ Deep Dish

Toppings:
☐ Mushrooms ☒ Sausage ☒ Olives

Addons:
Buffalo Wings
 Garlic Bread

Total price for your order is \$31

Deliver to:
 Name:
 Address: Postal Code:
 Phone #:
 Email: Enter email addresses
 Date: dd/mm/2019 Time: 10:00 AM

Submit
Reset

Figure 4

15. Note: user should only allow to select the date between today and one week from today.

16. Save the file and view in Browser.

17. Zipped the entire **Week6_4_Practical** folder and submit in MEL submission.

(Zip filename format as instructed in ppt slides)

If you have any questions, please contact your tutor via Microsoft Teams.

== End of Worksheet ==