

(30%) JavaScript 網頁設計 1N 期中上機考-2

-- 斷網考試

2024-4-18 at E201

Note:

1. 請不要發揮同學愛，作弊雙方除了本次考試 0 分外，平常分數另扣 20 分，情節嚴重者會送校。
2. iClass 上請繳交 mid21_xx.md, mid21_xx.pdf, 還有壓縮檔 mid21_xx.zip 3 個檔案
3. 請直接將答案寫在 mid21_xx.md 上，老師實作的圖片放在 mid21_htc.pdf 上，請依照老師所給的圖片來實作並標註
4. 跟期中考相關的檔案及目錄名稱有 xx 時，必須要改成學號後 2 碼，沒有修改時，會視違犯情況扣分。
5. 每一張圖片要有機房左側背景，圖片上要有你的學號(或後兩碼)，圖片標註要跟老師所標註的類似。違者會依情節扣分。
6. 請自評分數，將每一題的 ? 填入分數，沒有填者，不會批改，以 0 分計算。

Your (Name, ID): (陳亮瑜, 208410331)

Mid21 斷網題目 (30%)


- P1 (10%): 10 分
- P2 (10%): 7 分
- P3 (10%): 2 分

總分: ? 分

(10%) P1: Products Demo -- 透過 JavaScript 來建構

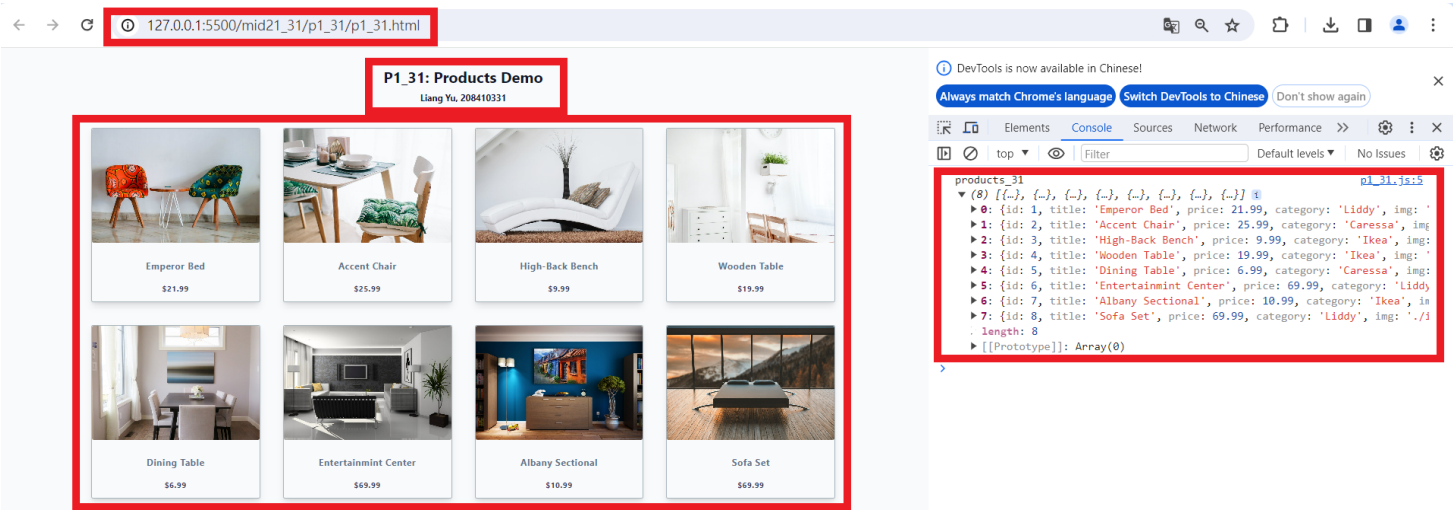
請從 p1_data_xx.js 中之 all_products_xx 陣列產生 8 筆產品資料放入 products_xx 中。第 1 筆之 id 是你學號最後一碼，由此往下找 8 筆，如果學號最後一碼是 0 則從 id=10 產品開始，取得 10, 11, 12, 1, 2, 3, 4, 5，放入 products_xx 中。

記得，每一項產品名稱後面要顯示產品 id，如第 1 筆的 Albany Sectional (P7)，其中的 P7 就表示產品 id=7

 mid21-p1-1.png

Your Answer

=> Chrome 顯示, 如上圖



=> js code

將 p1_31.js code 放入此

```
import { products_31, all_products_31 } from './p1_data_31.js';

const productContainer = document.querySelector('.products-container');

console.log('products_31', products_31);

const DisplayProducts = (products) => {
  let displayMenu = products
    .map((item) => {
      const { id, title, category, price, img, desc } = item;
      return `
<div class="single-product">
  <img
    src=${img}
    class="single-product-img img"
    alt="high-back bench"
  />
  <footer>
    <h3 class="name">${title}</h3>
    <span class="price">${price}</span>
  </footer>
</div>
`;
    })
    .join('');
  productContainer.innerHTML = displayMenu;
};

document.addEventListener('DOMContentLoaded', () => {
  DisplayProducts(products_31);
});
```

(10%) P2: DOM 應用 -- BMI 計算

BMI = (體重 / 身高^2)


體重以公斤計算，身高以公尺計算

BMI < 18.5	Underweight
18.5 <= BMI <= 24	Normal
BMI > 24	Overweight

=> test for underweight BMI

weight: 50kg


height: 175 cm

mid21-p2-1.png

=> test for normal BMI

weight: 70kg


height: 175 cm

mid21-p2-2.png

=> test for overweight BMI

weight: 90kg

height: 175 cm

mid21-p2-3.png

Your Answer

將 p2_31.js code 放入此

```
const calculateBtn = document.querySelector('#calculate');
const bmiResult = document.querySelector('#result');
const suggest = document.querySelector('#suggest');
const weight = document.querySelector('#weight');
const height = document.querySelector('#height');
```

```
function weightInput() {
  // return userInput.value
  return parseInt(weight.value);
}
```

```
function heightInput() {
  // return userInput.value
  return parseInt(height.value);
}
```

```
function outputResult(result, text) {
  let bmiResult = bmiCalc_31(height, weight);
  calculateBtn.textContent = text;
  bmiResult.textContent = result;
  suggest.textContent = text;
}
```

```
function bmiCalc_31(weight, height) {
  weight = weightInput().toFixed(2);
  height = heightInput().toFixed(2);
  console.log('weight', weight);
  bmiResult.textContent = weight / (height * height);
  return weight / (height * height);
}
```

```
function bmiCalcSuggestion_31(height, weight) {
  let result = bmiCalc_31(height, weight).toFixed(2);
  if (result < 18.5) {
    let normal_low = bmi_normal_low(height);
    suggest.textContent = `Your BMI is ${result} Underweight. add at least ${((
      normal_low - weight
    ).toFixed(2))}kg.`;
  } else if (result < 24) {
    suggest.textContent = `Your BMI is${result}normal.`;
  }
}
```

```
    } else {  
      let normal_high = bmi_normal_high(height);  
      console.log('normal_high', normal_high);  
      suggest.textContent = `Your BMI is ${result} Overweight. reduce at least ${(  
        weight - normal_high  
      ).toFixed(2)}kg to normal.`;  
    }  
  }  
}
```

```
function bmi_normal_low(height) {  
  return 18.5 * (height * height);  
}
```

```
function bmi_normal_high(height) {  
  return 24 * (height * height);  
}
```

```
// function bmiDataCalcSuggestion(data) {  
//   data.forEach(function (item) {  
//     bmiCalcSuggestion_31(item.height, item.weight);  
//   });  
// }
```

```
calculateBtn.addEventListener('click', bmiCalcSuggestion_31);
```

=> test for lower BMI

127.0.0.1:5500/mid21_31/p2_31/p2_31.html

P2_31: BMI Calculation

Liang Yu, 208410331

BMI Calculator

Weight (kg):

50

Height (cm):

170

Calculate

0.0017301038062283738

Your BMI is 0.00 Underweight. add at least NaNkg.

=> test for normal BMI

127.0.0.1:5500/mid21_31/p2_31/p2_31.html

P2_31: BMI Calculation

Liang Yu, 208410331

BMI Calculator

Weight (kg):

19

Height (cm):

1.75

Calculate

19

Your BMI is 19.00 normal.

=> test for higher BMI

127.0.0.1:5500/mid21_31/p2_31/p2_31.html

P2_31: BMI Calculation

Liang Yu, 208410331

BMI Calculator

Weight (kg):


Height (cm):

70

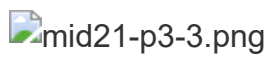
Your BMI is 70.00 Overweight. reduce at least NaNkg to normal.

(10%) P3: DOM 整合題

=> 按下左邊 L1 按鈕，會顯現 淡江大戲選單，共 5 個

 mid21-p3-1.png

=> 按下 淡江大戲 3 按鈕，會顯現淡江大戲 3 的圖片 (images/TKU3.png)

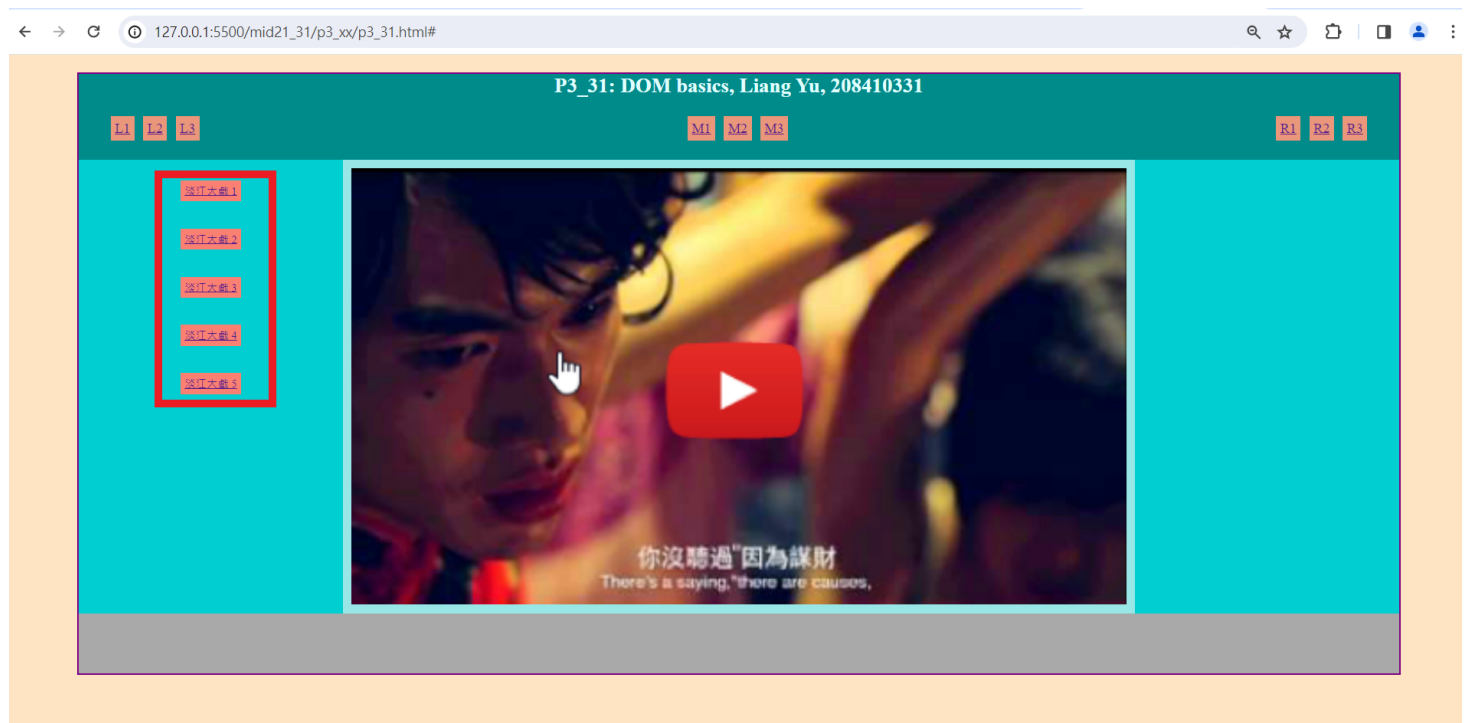


=> 按下左邊 L2 按鈕，會將淡江大戲選單全部清除



Your Answer

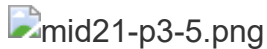
=> 按下左邊 L1 按鈕，會顯現 淡江大戲選單，共 5 個



p3_31.js code

```
function changeImage(index) {  
    const player = document.querySelector('#player');  
    console.log('player', player);  
    switch (index) {  
    }  
}  
  
function showTKU60() {  
    const p = document.querySelector('#menu1');  
}  
  
function clearMenu1All() {  
    const p = document.querySelector('#menu1');  
}  
  
window.addEventListener('DOMContentLoaded', () => {  
    showTKU60();  
    console.log('click', click);  
});
```

=> 按下 淡江大戲 3 按鈕，會顯現淡江大戲 3 的圖片 (images/TKU3.png)



=> 按下左邊 L2 按鈕，會將淡江大戲選單全部清除

