index:

```
!DOCTYPE html>
html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="./styles/style.css">
<link rel="stylesheet" href="./styles/modal-box.css">
    <title>Product list</title>
</head>
<body>
     <div class="toggle-switch";</pre>
         🌙
          (span)
              <label class="switch">
                  <input id="theme-switch" type="checkbox">
                   <span class="slider round"></span>
              </label>
         </span>
         🔆
     </div>
     <div class="search">
             <span>&#9906;</span>
         </div>
         <input type="text" placeholder="Search" id="search">
     </div>
     <div class="shopping-cart">
         <div id="shopping-cart" class="icon" style="background-color: □darkcyan; font-size: 1em;">
              <span style="transform: rotate(0);">&#128722;</span>
              <span id="total" style="transform: rotate(0);"><b>0</b></span>
         </div>
    </div>
     <div id="modal-box" class="modal">
         <div class="modal-content"</pre>
              <div class="modal-header">
                   <span class="close">&times;</span>
                   <b>Net price: </b><span id="net-price">0</span>
              <div class="modal-body"></div>
         </div>
    </div
    <script src="./modules/script.js" type="module"></script>
<script src="./modules/events.js" type="module"></script>
<script src="./modules/theme.js" type="module"></script>
    <script src="./modules/shoppingCart/shoppingCart.js" type="module"></script>
<script src="./modules/loadStorage.js" type="module"></script>
</body>
</html:
```

monitor.js:

```
export default class Monitor {
         constructor(code = 0, name = "unknown", size = 0, resolution = "1440x1080") {
              this _code = code;
             this _name = name;
             this._sizeInInches = size;
             this._stock = 0;
             this._price = 0;
             this._resolution = resolution;
             this _imgURL = "path";
         get name() {
             return this _name;
         get resolution() {
             return this _resolution;
18
         get code() {
             return this _code;
         get imgURL() {
             return this _imgURL;
         get size() {
             return this _sizeInInches;
         get price() {
             return this._price;
         get stock() {
             return this._stock;
          * @param {string} path set a new path
         set imgURL(path) {
             this _imgURL = path;
```

```
* @param {number} amount set a new amount
set stock(amount) {
   this _stock += amount;
* @param {number} size set a new size
set size(size) {
  this._sizeInInches = size;
* @param {string} name set a new name
set name(name) {
   this._name = name;
* @param {string} code set a new code
set code(code) {
  this _code = code;
* @param {string} resolution set a new resolution
set resolution(resolution) {
   this resolution = resolution;
* @param {number} size set a new size
set size(size) {
   this _sizeInInches = size;
* @param {number} price set a new price
set price(price) {
   this._price = price;
```

products.js:

```
import Monitor from "./monitor.js";
const products = [];
products.push(new Monitor(1, "BENQ ZOWIE XL2731", 27, "1920x1080"));
products[0] price = 9900;
products[0] stock = 0;
products[0].imgURL = "./images/ZOWIE-XL2731.jpg";
products push(new Monitor(2, "BENQ MOBIUZ EX3415R", 34, "3440x1440"));
products[1].price = 35900;
products[1].stock = 59;
products[1].imgURL = "./images/MOBIUZ-EX3415R.jpg";
products.push(new Monitor(3, "BENQ MOBIUZ EX2710R", 27, "2560x1440"));
products[2] price = 21900;
products[2].stock = 104;
products[2].imgURL = "./images/MOBIUZ-EX2710R.jpg";
products.push(new Monitor(4, "BENQ EW2780Q", 27, "2560x1440"));
products[3].price = 9500;
products[3].stock = 156;
products[3].imgURL = "./images/EW2780Q.jpg";
products.push(new Monitor(5, "BENQ EW2480", 24, "1920x1080"));
products[4].price = 5500;
products[4] stock = 222;
products[4].imgURL = "./images/EW2480.jpg";
products.push(new Monitor(6, "BENQ EX3203R", 31.5, "2560x1440"));
products[5] price = 16900;
products[5].stock = 25;
products[5].imgURL = "./images/EX3203R.jpg";
products.push(new Monitor(7, "BENQ ZOWIE XL2546", 24.5, "1920x1080"));
products[6] price = 15900;
products[6].stock = 79;
products[6].imgURL = "./images/ZOWIE-XL2546.jpg";
products.push(new Monitor(8, "BENQ GW2780", 27, "1920x1080"));
products[7] price = 5900;
products[7] stock = 0;
products[7].imgURL = "./images/GW2780.jpg";
export { products as default };
```

script.js:

```
import products from "./products/products.js"
import * as lib from "./shoppingCart/cart.js"
let mainBody = document.querySelector("body");
mainBody.id = "product-list";
mainBody.className = "p-6 justify-center";
let title = document.createElement("h1");
title.className = "font-bold text-x1 text-center";
title.textContent = "Monitor List";
mainBody.appendChild(title);
let divContainer = document.createElement("div");
divContainer.className = "product-container grid grid-cols-5";
divContainer.id = "store-product";
let container = mainBody.appendChild(divContainer);
       divList.id = product.code;
       divList.className =
       "flex flex-col m-5 bg-white rounded-lg transition duration-200 ease-in-out hover:bg-purple-200 shadow-xl transform hover:scale-110 product"; divList.setAttribute("name", product.name + " " + product.size + '"'); let divItem = container.appendChild(divList);
       img.src = product.imgURL;
img.alt = product.name;
img.style = "width: 100%; height: 100%; ";
       img.className = "p-2";
divItem.appendChild(img);
       // add details to div in container
let divDetails = document.createElement("div");
       divDetails.className = "details p-2"
       let name = document.createElement("div");
       name.className =" p-1 bg-green-100 flex-1 m-1";
name.innerHTML = \cb>Product. </b>${product.name} ${product.size}";
       divDetails.appendChild(name);
       let price = document.createElement("div");
       price.className = "m-1 p-1";
price.innerHTML = `<b>Frice: </b>${new Intl.NumberFormat("th-TH", {
       divDetails.appendChild(price)
```

```
let res = document.createElement("div");
    res.className = "m-1 p-1";
    res.innerHTML = `<b>Resolution: </b>${product.resolution}`;
   divDetails.appendChild(res);
   let stock = document.createElement("div");
    stock.className = "m-1 p-1";
    if (product.stock == 0) {
        let outOfStock = document.createElement("b");
        outOfStock.className = "text-red-500"
        outOfStock.textContent = "Out of Stock";
        stock.appendChild(outOfStock);
        stock.innerHTML = `<b>In stock: </b>${product.stock}`;
    divDetails.appendChild(stock);
   divItem.appendChild(divDetails);
   let divBtn = document.createElement("div");
   divBtn.className = "m-1 p-1";
   let btn = document.createElement("button");
   btn.className = `add-to-cart w-full p-2 rounded ${
        product.stock == 0
            ? "bg-gray-100 text-gray-300 pointer-events-none"
            : "bg-purple-400 text-white transition duration-150 ease-in-out"
    btn.innerHTML = "<b><i>Add</i></b>";
    divBtn.appendChild(btn);
    divDetails.appendChild(divBtn);
let totalQuantity = document.getElementById("total");
totalQuantity.innerHTML = `<b>${lib.getTotalQty()}</b>`;
```

events.js:

change toggle search bar to arrow function

```
import * as lib from "./shoppingCart/cart.js";
import products from "./products/products.js";
document guerySelector(".icon").addEventListener("click", () => {
    document.querySelector("#search").classList.toggle("active");
});
const productStore = document.querySelectorAll(".product");
const search = document.getElementById("search");
search.addEventListener("keyup", (e) => {
    const text = e.target.value.toLowerCase().trim();
    for (let i = 0; i < productStore.length; i++) {</pre>
        let productName = productStore[i].getAttribute("name");
        if (productName.toLowerCase().trim().includes(text)) {
            productStore[i].style.display = "";
        } else {
            productStore[i].style.display = "none";
});
const addButton = document.querySelectorAll(".add-to-cart");
for (const [id, btn] of addButton.entries()) {
    btn.addEventListener("click", () => {
        lib.add(products[id].code);
        let totalQuantity = document.getElementById("total");
        totalQuantity.innerHTML = `<b>${lib.getTotalQty()}</b>`;
    });
```

cart.js:

```
2 vimport products from "../products/products.js";
    import CookieUtil from "../cookieUtil.js";
    let shoppingCart = new Object();
    export const cookieName = "cart";
     * @param {string} name name of cookie
11 v export function getCookie(name) {
      return CookieUtil.getCookie(name);
    * @param {string} name name of the cookie
    * @param {string} value value of the cookie
     * @param {number} expires duration of the cookie in days
20 < function setCookie(name, value, expires) {
     CookieUtil.setCookie(name, value, expires);
     * @returns {number} total quantity in cart
27 vexport function getTotalOty() {
      if (getCookie(cookieName) === null) {
            return 0;
           shoppingCart = parseToObj(getCookie(cookieName));
            return Object.values(shoppingCart).reduce(
                (total, qty) => total + qty,
39 vexport function getNetPrice() {
      if (getCookie(cookieName) === null) {
            return 0;
            shoppingCart = parseToMap(parseToObj(getCookie(cookieName)));
            let total = 0;
            shoppingCart.forEach((qty, code) => {
                total +=
                    products.find((product) => product.code == code).price * qty;
            return total;
```

```
* @param {string} id product code
export function add(id) {
   if (getCookie(cookieName) === null) {
        shoppingCart[id] = 1;
        shoppingCart = parseToObj(getCookie(cookieName));
        if (shoppingCart.hasOwnProperty(id)) {
            shoppingCart[id] += 1;
            shoppingCart[id] = 1;
   setCookie(cookieName, JSON.stringify(shoppingCart), 1);
   updateTotalQty();
* @param {object} obj product code and quantity of each product
function parseToMap(obj) {
   return new Map(Object.entries(obj));
* @param {string} json JSON string format
* @returns {object} object from JSON
export function parseToObj(json) {
   return JSON parse(json);
}
export function clearAll() {
    if (getCookie(cookieName) !== null) {
        shoppingCart = parseToObj(getCookie(cookieName));
        for (const key in shoppingCart) {
            if (shoppingCart.hasOwnProperty(key)) {
                delete shoppingCart[key];
       CookieUtil.unset(cookieName);
```

```
* @param {string} id product code
export function removeItem(id) {
    shoppingCart = parseToObj(getCookie(cookieName));
   if (Object.keys(shoppingCart).length == 1) {
        delete shoppingCart[id];
       CookieUtil.unset(cookieName);
       delete shoppingCart[id];
        setCookie(cookieName, JSON.stringify(shoppingCart), 1);
* @param {string} id product code
export function remove(id) {
    shoppingCart = parseToObj(getCookie(cookieName));
    shoppingCart[id] -= 1;
   if (shoppingCart[id] == 0) {
        removeItem(id);
        setCookie(cookieName, JSON.stringify(shoppingCart), 1);
   updateTotalQty();
* @param {string} id product code
export function getTotalPrice(id) {
   if (getCookie(cookieName) === null) {
        return 0;
        shoppingCart = parseToObj(getCookie(cookieName));
        return (
            products.find((product) => product.code == id).price *
            shoppingCart[id]
function updateTotalQty() {
    let totalQuantity = document.getElementById("total");
    totalQuantity.innerHTML = `<b>${getTotalQty()}</b>`;
```

cookieUtil.js:

```
export default class CookieUtil {
     * @param {string} name name of the cookie
   static getCookie(name) {
       let cookieName = `${encodeURIComponent(name)}=`;
       let cookieStart = document.cookie.indexOf(cookieName)
       let cookieValue = null;
       if (cookieStart > -1) {
           let cookieEnd = document.cookie.indexOf(";", cookieStart);
           if (cookieEnd == -1) {
               cookieEnd = document.cookie.length;
           cookieValue = decodeURIComponent(
               document.cookie.substring(
                   cookieStart + cookieName.length,
                   cookieEnd
       return cookieValue;
     * @param {string} name name of the cookie
    * @param {string} value value of the cookie
    * @param {number} expires duration of the cookie in days
   static setCookie(name, value, expires) {
       let cookieText = `${encodeURIComponent(name)}=${encodeURIComponent(
       const expireDate = new Date();
       expireDate.setTime(
           expireDate.getTime() + expires * 24 * 60 * 60 * 1000
       cookieText += `; expires=${expireDate.toUTCString()}`;
       document.cookie = cookieText;
    * @param {string} name name of the cookie
   static unset(name) {
       CookieUtil.setCookie(name, "", new Date(0));
```

shoppingCart.js:

add function showNetPrice & revise code

```
import * as lib from "./cart.js";
import products from "../products/products.js";
let modalBody = document.querySelector("div.modal-body");
let table = document.createElement("table");
table.style = "width: 100%;";
modalBody.appendChild(table);
let thead = document.createElement("thead");
thead id = "thead";
let tbody = document.createElement("tbody");
tbody id = "tbody";
table.appendChild(thead);
table.appendChild(tbody);
let tr = document.createElement("tr");
thead.appendChild(tr);
const heads = [
   "Picture"
    "Product code",
    "Product name",
    "Price",
    "Quantity",
    "Total",
    "Delete",
for (const head of heads) {
    let th = document.createElement("th");
    th.textContent = head;
    tr.appendChild(th);
function showNetPrice() {
    let netPrice = document.getElementById("net-price");
    netPrice.textContent = new Intl.NumberFormat("th-TH", {
        style: "currency",
        currency: "THB",
    }).format(lib.getNetPrice());
```

revise clear all and deleteRow

```
let clearAllButton = document.createElement("button");
clearAllButton.id = "clear-all-products";
clearAllButton.className =
    "m-2 p-2 bg-red-500 text-white rounded-lg btn btn-outline-primary";
clearAllButton.innerHTML = "<b>Clear All</b>";
clearAllButton.addEventListener("click", () => {
    let tableBody = document.getElementById("tbody");
    while (tableBody.firstChild) {
        tableBody.removeChild(tableBody.lastChild);
    let totalQuantity = document.getElementById("total");
    totalQuantity.innerHTML = "<b>0</b>";
    lib.clearAll();
    showNetPrice();
    clearAllButton.style.visibility = "hidden";
}):
modalBody.appendChild(clearAllButton);
function deleteRow(id) {
    let rw = document.querySelector(`#sc-row-${id + 1}`);
    rw.remove();
```

```
const shoppingCart = document.querySelector("#shopping-cart");
     let modal = document.getElementById("modal-box");
     shoppingCart.addEventListener("click", showModalBox);
73 ∨ function showModalBox() {
         if (lib.getCookie(lib.cookieName) !== null) {
             let sc = lib.parseToObj(lib.getCookie(lib.cookieName));
             let tableBody = document.querySelector("#tbody");
             while (tableBody.firstChild) {
                 tableBody.removeChild(tableBody.lastChild);
             for (let i = 0; i < Object.keys(sc).length; i++) {</pre>
                 let row = document.createElement("tr");
                 row.id = `sc-row-${i + 1}`;
                 tbody.appendChild(row);
                 let noCol = document.createElement("td");
                 noCol.className = "no-col";
                 noCol.textContent = i + 1;
                 noCol.style = "text-align: center;";
                 row.appendChild(noCol);
                 let imageCol = document.createElement("td");
                 let productImg = document.createElement("img");
                 imageCol.className = "image-col";
                 productImg.src = products.find(
                      (product) => product.code == Object.keys(sc)[i]
                  ) imgURL;
                 imageCol.appendChild(productImg);
                 row.appendChild(imageCol);
                 let productCodeCol = document.createElement("td");
                 productCodeCol.className = "product-code-col"
                 productCodeCol.textContent = Object.keys(sc)[i];
                 productCodeCol.style = "text-align: center;";
                 row.appendChild(productCodeCol);
                 let productNameCol = document.createElement("td");
                 productNameCol.className = "product-name-col";
                 productNameCol.textContent = products.find(
                      (product) => product.code == Object.keys(sc)[i]
                 ) name;
                 row.appendChild(productNameCol);
                 let productPriceCol = document.createElement("td");
                 productPriceCol.className = "product-price-col";
                 productPriceCol.textContent = new Intl.NumberFormat("th-TH", {
                     style: "currency",
                     currency: "THB",
                 }).format(
                     products.find((product) => product.code == Object.keys(sc)[i])
                          price
                 productPriceCol.style = "text-align: center;";
                 row.appendChild(productPriceCol);
```

Add plus button and minus button

```
let productQuantityCol = document.createElement("td");
productQuantityCol.className = "product-quantity-col ";
let plusBtn = document.createElement("button");
plusBtn.className =
    plus transition duration-300 ease-in-out inline-block m-1 px-2 text-white rou"
plusBtn.innerHTML = "+";
productQuantityCol.appendChild(plusBtn);
plusBtn.addEventListener("click", () => {
    lib.add(Object.keys(sc)[i]);
    showModalBox();
let divQty = document.createElement("div");
divQty.className = " px-5 py-1 rounded-lg bg-gray-200 inline-block";
let qty = document.createElement("p");
qty.className = "text-x1 font-bold"
qty.innerHTML = sc[Object.keys(sc)[i]];
divQty.appendChild(qty);
productQuantityCol.appendChild(divQty);
let minusBtn = document.createElement("button");
minusBtn.className =
    minus transition duration-300 ease-in-out inline-block m-1 px-2.5 text-white"
minusBtn.innerHTML = "-";
minusBtn.addEventListener("click", () => {
    lib.remove(Object.keys(sc)[i]);
    if (lib.getCookie(lib.cookieName) === null) {
        deleteRow(i);
    showModalBox();
productQuantityCol.appendChild(minusBtn);
row.appendChild(productQuantityCol);
```

```
let totalPriceCol = document.createElement("td");
            totalPriceCol.className = "total-price-col"
            totalPriceCol.textContent = new Intl.NumberFormat("th-TH", {
                style: "currency",
                currency: "THB",
            }).format(lib.getTotalPrice(Object.keys(sc)[i]));
            totalPriceCol.style = "text-align: center;";
            row.appendChild(totalPriceCol);
            let deleteCol = document.createElement("td");
            let deleteButton = document.createElement("button");
            deleteButton.type = "button";
            deleteButton.innerHTML = "🗑";
            deleteButton.className = "delete-button";
            deleteButton.addEventListener("click", () => {
                let totalQuantity = document.getElementById("total");
                lib.removeItem(Object.keys(sc)[i]);
                totalQuantity.innerHTML = `<b>${lib.getTotalQty()}</b>`;
                deleteRow(i);
                showModalBox();
                showNetPrice();
            deleteCol.style = "text-align: center;";
            deleteCol.appendChild(deleteButton);
            row.appendChild(deleteCol);
        clearAllButton.style.visibility = "visible";
    } else {
        clearAllButton.style.visibility = "hidden";
    modal.style.display = "block";
    showNetPrice();
let span = document.getElementsByClassName("close")[0];
span.addEventListener("click", () => {
    modal.style.display = "none";
window.onclick = (event) => {
    if (event.target == modal) {
        modal.style.display = "none";
```

theme.js:

revise code

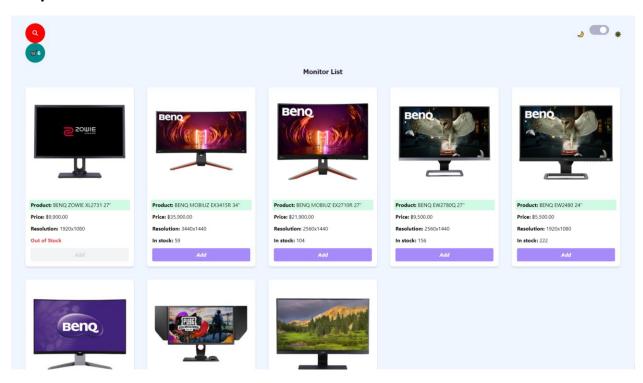
```
const themeSwitcher = document.getElementById("theme-switch");
themeSwitcher.checked = false;
function clickHandler() {
    if (this checked) {
        document.body.classList.remove("light");
        document.body.classList.add("dark");
        localStorage.setItem("theme", "dark");
        document.body.classList.add("light");
        document.body.classList.remove("dark");
        localStorage.setItem("theme", "light");
themeSwitcher.addEventListener("click", clickHandler);
function checkTheme() {
   const localStorageTheme = localStorage.getItem("theme");
    if (localStorageTheme === "dark") {
        document.body.classList.add(localStorageTheme);
        themeSwitcher checked = true;
        document.body.classList.add(localStorageTheme);
        themeSwitcher.checked = false;
export { checkTheme as default };
```

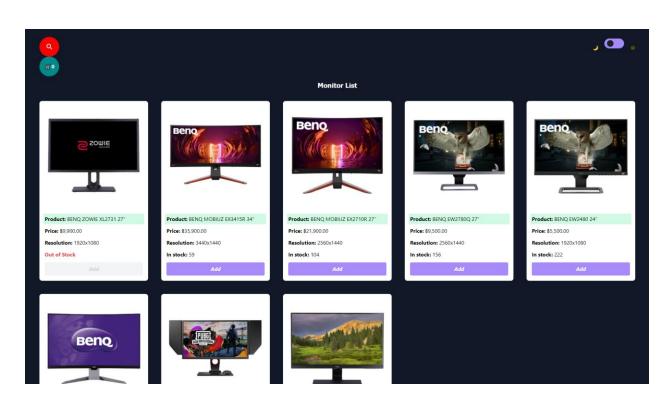
loadStorage.js:

```
import checkTheme from "./theme.js";

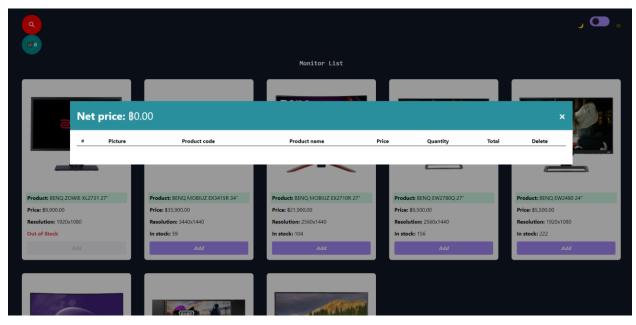
window.onload = checkTheme();
```

Output:

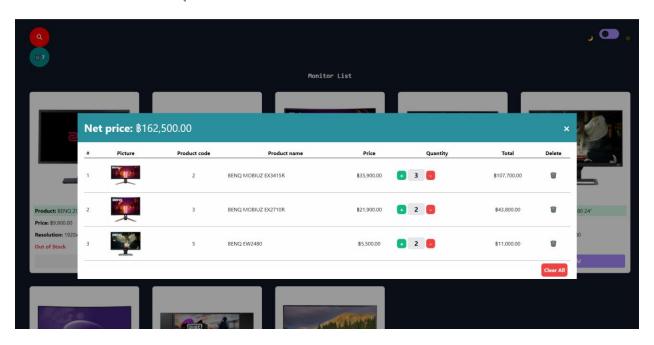




ถ้าไม่มีสินค้าจะไม่มีปุ่ม clear all



สามารถเพิ่มลดสินค้าได้โดยกดที่ปุ่มบวกและลบ



GIT LINK (This Assignment): Click here

GIT LINK (All Assignment): Click here

Work ratio

No.	Student ID	Name	Part	Percentage
1	63130500006	Kittiphum Uamthon	add "show net price function" and documents	20%
2	63130500026	Chotiwit Souyan	add "plus & minus button" in modal box	20%
3	63130500032	Nutchanon Assawachin	minor fix theme.js & clear all button and documents	15%
4	63130500034	Nuttida Meeboon	add "plus & minus button" in modal box	15%
5	63130500042	Songglod Petchamras	revise & improve cart.js (rewrite the whole file)	30%