**CART FUNCTIONALITY IN JAVASCRIPT**

**How to render Products in javascript**

In the case assume there is a products.js file displaying file in this manner.

Here is the sample

const products = [

{

id: 0,

name: "T-shirt 1",

price: 29.99,

instock: 100,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t1.png",

},

{

id: 1,

name: "T-shirt 2",

price: 24.99,

instock: 43,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t2.png",

},

{

id: 2,

name: "T-shirt 3",

price: 19.99,

instock: 10,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t3.png",

},

{

id: 3,

name: "T-shirt 4",

price: 25.99,

instock: 5,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t4.png",

},

{

id: 4,

name: "T-shirt 5",

price: 29.99,

instock: 4,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t5.png",

},

{

id: 5,

name: "T-shirt 6",

price: 39.99,

instock: 40,

description:

"Lorem ipsum dolor sit amet, consectetur adipisicing elit. Asperiores, error.",

imgSrc: "./img/t6.png",

},

];

This is the structure of the data we are receiving from the admin will be in a json format I presume which is a representation of the above dataset.

Then this is the sample html file which is used to display the products .

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<link rel="shortcut icon" href="#">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Shopping Cart JS</title>

<link rel="stylesheet" href="style.css">

<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-icons.css">

</head>

<body>

<div class="app-container">

<div class="app-bg">

<div class="left-side"></div>

<div class="right-side"></div>

</div>

<header>

<nav>

<ul>

<li class="btn home">

<a href="./">

<img src="./icons/home.png" alt=""> Home

</a>

</li>

<li class="btn">

<a href="#">

<img src="./icons/filter.png" alt="filter">

</a>

</li>

<li>

<a href="#">

Women

</a>

</li>

<li class="active">

<a href="#">

Men

</a>

</li>

<li>

<a href="#">

Children

</a>

</li>

</ul>

</nav>

<div class="shopping-bag">

<a href="./cart.html">

<img src="./icons/bag.png" alt="cart">

Cart

<div class="total-items-in-cart">

0

</div>

</a>

</div>

</header>

<main>

<div class="content">

<div class="products-preview">

<div class="products-container">

<div class="product">

<img src="./img/t1.png" alt="t-shirt 1">

</div>

<div class="product">

<img src="./img/t2.png" alt="t-shirt 2">

</div>

<div class="product">

<img src="./img/t4.png" alt="t-shirt 3">

</div>

</div>

<div class="more-details">

<div class="see-more-btn">

<img src="./icons/right-arrow.png" alt="">

Details

</div>

<div class="description">

<small>New Season</small>

<h1>Men Tees - <small>$</small>29.99</h1>

<h1>Summer T-shirt</h1>

</div>

</div>

</div>

<div class="model">

<img class="model-img" src="./img/model.png" alt="model">

<div class="product">

<img src="./img/t3.png" alt="t-shirt 4">

</div>

</div>

</div>

</main>

</div>

<div class="products-list">

<div class="products">

<!-- render porducts here -->

</div>

<div class="cart">

<div class="cart-header">

<div class="column1">Item</div>

<div class="column2">Unit price</div>

<div class="column3">Units</div>

</div>

<div class="cart-items">

<!-- render cart items here -->

</div>

<div class="cart-footer">

<div class="subtotal">

Subtotal (0 items): $0

</div>

<div class="checkout">

Proceed to checkout

</div>

</div>

</div>

</div>

<script>

const porductsListEl = document.querySelector(".products-list");

const seeMoreBtn = document.querySelector(".see-more-btn");

seeMoreBtn.addEventListener('click', () => {

porductsListEl.scrollIntoView({behavior: "smooth"})

})

</script>

<script src="./products.js"></script>

<script src="./app.js"></script>

</body>

</html>

In this case the section of the cmportal will be interacting with the cart

Graphical user interface, website

Description automatically generated

These are the services that will interact with the cart.

Ie if a client would like to purchase a video(webinar)

Graphical user interface

Description automatically generated

In the app.js file it shows the cart functionality this is the sample of the cart functionality

|  |
| --- |
| // SELECT ELEMENTS |
|  | const productsEl = document.querySelector(".products"); |
|  | const cartItemsEl = document.querySelector(".cart-items"); |
|  | const subtotalEl = document.querySelector(".subtotal"); |
|  | const totalItemsInCartEl = document.querySelector(".total-items-in-cart"); |
|  |  |
|  | // RENDER PRODUCTS |
|  | function renderProdcuts() { |
|  | products.forEach((product) => { |
|  | productsEl.innerHTML += ` |
|  | <div class="item"> |
|  | <div class="item-container"> |
|  | <div class="item-img"> |
|  | <img src="${product.imgSrc}" alt="${product.name}"> |
|  | </div> |
|  | <div class="desc"> |
|  | <h2>${product.name}</h2> |
|  | <h2><small>$</small>${product.price}</h2> |
|  | <p> |
|  | ${product.description} |
|  | </p> |
|  | </div> |
|  | <div class="add-to-wishlist"> |
|  | <img src="./icons/heart.png" alt="add to wish list"> |
|  | </div> |
|  | <div class="add-to-cart" onclick="addToCart(${product.id})"> |
|  | <img src="./icons/bag-plus.png" alt="add to cart"> |
|  | </div> |
|  | </div> |
|  | </div> |
|  | `; |
|  | }); |
|  | } |
|  | renderProdcuts(); |
|  |  |
|  | // cart array |
|  | let cart = JSON.parse(localStorage.getItem("CART")) || []; |
|  | updateCart(); |
|  |  |
|  | // ADD TO CART |
|  | function addToCart(id) { |
|  | // check if prodcut already exist in cart |
|  | if (cart.some((item) => item.id === id)) { |
|  | changeNumberOfUnits("plus", id); |
|  | } else { |
|  | const item = products.find((product) => product.id === id); |
|  |  |
|  | cart.push({ |
|  | ...item, |
|  | numberOfUnits: 1, |
|  | }); |
|  | } |
|  |  |
|  | updateCart(); |
|  | } |
|  |  |
|  | // update cart |
|  | function updateCart() { |
|  | renderCartItems(); |
|  | renderSubtotal(); |
|  |  |
|  | // save cart to local storage |
|  | localStorage.setItem("CART", JSON.stringify(cart)); |
|  | } |
|  |  |
|  | // calculate and render subtotal |
|  | function renderSubtotal() { |
|  | let totalPrice = 0, |
|  | totalItems = 0; |
|  |  |
|  | cart.forEach((item) => { |
|  | totalPrice += item.price \* item.numberOfUnits; |
|  | totalItems += item.numberOfUnits; |
|  | }); |
|  |  |
|  | subtotalEl.innerHTML = `Subtotal (${totalItems} items): $${totalPrice.toFixed(2)}`; |
|  | totalItemsInCartEl.innerHTML = totalItems; |
|  | } |
|  |  |
|  | // render cart items |
|  | function renderCartItems() { |
|  | cartItemsEl.innerHTML = ""; // clear cart element |
|  | cart.forEach((item) => { |
|  | cartItemsEl.innerHTML += ` |
|  | <div class="cart-item"> |
|  | <div class="item-info" onclick="removeItemFromCart(${item.id})"> |
|  | <img src="${item.imgSrc}" alt="${item.name}"> |
|  | <h4>${item.name}</h4> |
|  | </div> |
|  | <div class="unit-price"> |
|  | <small>$</small>${item.price} |
|  | </div> |
|  | <div class="units"> |
|  | <div class="btn minus" onclick="changeNumberOfUnits('minus', ${item.id})">-</div> |
|  | <div class="number">${item.numberOfUnits}</div> |
|  | <div class="btn plus" onclick="changeNumberOfUnits('plus', ${item.id})">+</div> |
|  | </div> |
|  | </div> |
|  | `; |
|  | }); |
|  | } |
|  |  |
|  | // remove item from cart |
|  | function removeItemFromCart(id) { |
|  | cart = cart.filter((item) => item.id !== id); |
|  |  |
|  | updateCart(); |
|  | } |
|  |  |
|  | // change number of units for an item |
|  | function changeNumberOfUnits(action, id) { |
|  | cart = cart.map((item) => { |
|  | let numberOfUnits = item.numberOfUnits; |
|  |  |
|  | if (item.id === id) { |
|  | if (action === "minus" && numberOfUnits > 1) { |
|  | numberOfUnits--; |
|  | } else if (action === "plus" && numberOfUnits < item.instock) { |
|  | numberOfUnits++; |
|  | } |
|  | } |
|  |  |
|  | return { |
|  | ...item, |
|  | numberOfUnits, |
|  | }; |
|  | }); |
|  |  |
|  | updateCart(); |
|  | } |

Then after the cart functionality should be checkout to go ahead and pay for the service in this case.

Here are the links for more referrals

<https://github.com/CodeExplainedRepo/shopping-cart-javascript> here is the github link that leads to the project.

<https://www.youtube.com/watch?v=UcrypywtAm0> here is the youtube referral