JavaScripts Objects in an Online Ordering System

Assignment

cenario:

You are working on a project for a restaurant that wants to create an online ordering system. They have provided you with a list of menu items, each with a name, description, price, and a list of ingredients. Your task is to create a JavaScript program that can display the menu items on the restaurant's website and allow customers to place orders.

Learning Objectives

- Use syntax for creating and accessing object properties.

- Create and manipulate objects in JavaScript using various techniques, including object literal notation, constructor functions, and the new operator.

- Create and work with custom objects, including creating object methods and using inheritance to create object hierarchies.

- Use best practices for working with objects in JavaScript, including naming conventions, using object literals, and creating objects with descriptive properties.

Directions:

Task 1: Create a JavaScript object for a menu item.

- Define an object for a menu item that contains properties for the name, description, price, and ingredients.

- Add a method to the object that calculates the total cost of the item, including any applicable taxes or discounts.

Task 2: Create an array of menu items.

- Create an array of menu items using the objects you defined in Task 1.

- Add at least five menu items to the array.

Task 3: Display the menu on the website.

- Use JavaScript to display the menu on the restaurant's website, including the name, description, price, and ingredients of each item.

- Format the display in a user-friendly way, such as using a table or list.

Task 4: Allow customers to place orders.

- Create a form on the website that allows customers to select menu items and enter the quantity they want to order.

- Use JavaScript to calculate the total cost of the order and display it to the customer.

- Use the this keyword to access object properties and methods from within the order form.

Task 5: Validate user input.

- Use JavaScript to validate the user's input, such as ensuring that they enter a valid quantity and that they select at least one menu item.

- Display appropriate error messages if the user enters invalid input.

Task 6: Submit the order.

- Display a confirmation message to the customer indicating that their order has been received.