Unit 5: JavaScript program design

idea one for home page:

On the home page, I'm going to prepare a product.js file to store product information, using JSON format, with fields including id, name, color, type, price. The product image needs to be named according to the product ID, such as "bg_id.jpg".

The functions to implement are getNum, goUrl, and refreshCart. Here's what they do:

- The getNum function is on when a product image is clicked and obtains the id of the clicked image.
- After the goUrl function gets the image id, the page is redirected to the shop page and the id information is appended to the url.
- refreshCart: Displays the number of items in the shopping cart at top

Pseudocode is as follows::
```
Let getNum=function(){
    Step 1, gets the clicked image element
    Step 2. get the path of the image from the image element
    Step 3, split the path to obtain the image id
    Step 4, return id
}
Let goUrl=function(){
    Step 1, call getNum function to get the image id
    Step 2, Connect the image id with the address of the shop page
    Step 3, Use the concatenated string to navigate to the shop page
}
Let refreshCart=fuction(){
    Setp 1, Get the string in the cookie
    Setp 2, Gets product number from the string
    Setp 3, Displays the number next to the shopping cart at top
}
```

idea two for shop page:

on the shop page, we need to display products according to the product id passed in. After the customer selects the product, we need to store the product information to the cookie. Depending on the requirements, we need to implement the following

functions:

The functions to implement are getUrlValue, getProductDate, setProductDate, setCookie, putCart, and refreshCart.. Here's what they do:

- The getUrlValue function gets the product id from the URL.
- The getProductDate function obtains the corresponding product data from json according to the product id.
- The setProductDate function displays the product data on the page.
- The setCookie function stores data to cookie.
- he putCart function converts the selected products data into json data and calls the setCookie function to store the data to cookie.
- refreshCart function, reuse.

Pseudocode is as follows::

Let getUrlValue =function(){
  Step 1, get the product id from the URL
  Step 2, return product ID
}
Let getProductDate =function(id){
  Step 1, get the product information based on the product id
  Step 2, return the product information
}
Let setProductDate =function( ){
  Step 1, call getProductDate to get the product information
  Step 2, get the html element object corresponding to the product information
  Step 3, each field is assigned to its corresponding element
}
Let setCookie =function(data){
  Step 1, call getcookie to get information about products that have been purchased,
  Step 2, If the product ID already exists, then the number will be updated, if the item ID does not exist, then the new information will be added
  Step 3, store the new product information to cookie
}

Let putChar =function( ){
  Step 1, get the HTML element object related to product information
  Step 2, Obtain the product information selected from the element object
  Step 3, Call the setCookie function to store product information
  Step 4, Call the refreshCart function to update the number of product next to shopping cart
}

idea three for cart page:

The shopping cart page needs to read the product information from the cookie first, and list all product information on the page. At the same time, the total price of the product needs to be calculated, and the quantity of the product can be changed or the product can be deleted from the shopping cart

The functions that need to be implemented are setCookie, refreshCart, inputAction, deleteAction and the following is the purpose of these functions..

- setCookie fuction, reuse
- refreshCart fuction, reuse
- inputAction function, called when the "+" and "-" buttons are clicked, update cookie, total price, and page
- The deleteAction function is called when the "delete" button is clicked, update cookie, total price, and page

Pseudocode is as follows::

Let inputAction =function( ){

Step 1, If the click is "+", the quantity of the product +1, if the click is "-", the quantity of the product -1, and the minimum quantity of the product is 0.

Step 2, get product information in this row.

Step 3, call the setCookie function to store product information.

Step 4, Call the refreshCart function to update the total number these are in the shopping cart at top.

Step 5, recalculate total price.

}

Let deleteAction =function( ){

Step 1, get the product information to be delete, the quantity of the product is set to 0

Step 2, hide the row to be delete

Step 3, call the setCookie function to store product information.

Step 4, Call the refreshCart function to update the total number these are in the shopping cart at top.

Step 5, recalculate total price.

}