* **A diagram/scenario of all the paths/functions that users can take/do on the site**

|  |  |  |  |
| --- | --- | --- | --- |
| index | paths | function | description |
| 1 | Js/product.js | doOnclick(id) | Product onclick function, link to productDetail.html |
| 2 | createItem(item) | Create the html code of every product |
| 3 | loadFilter(categoryCache) | Create the html code of filter |
| 4 | filter(key) | It is used to Control the display of products, loop every product, and check the category. |
| 5 | showCartNum() | Calculate the quantity of product in shopping cart. |
| 6 | addToCart(productItem) | Add a product to shopping cart, it the product has in the cart, then add the quantity. |
| 7 | setCartData() | Update the quantity of product show in the navigational bar |
| 8 | Product.html | loadImages() | Loading recommended products, display the html code |
| 9 |  | loadProducts() | Loading product list, and display the html code |
| 10 | productDetail.html | loadData() | Loading the product detail, and the product id come from url. |
| 11 | shoppingCart.html | calTotalPrice() | Loop the products in shopping cart, and calculating the total price of all product in shopping cart |
| 12 |  | del(obj) | Deleting the product in shopping cart, and delete it from cookie and table |
|  |  | Onload | Reading data from cookie, and display items |

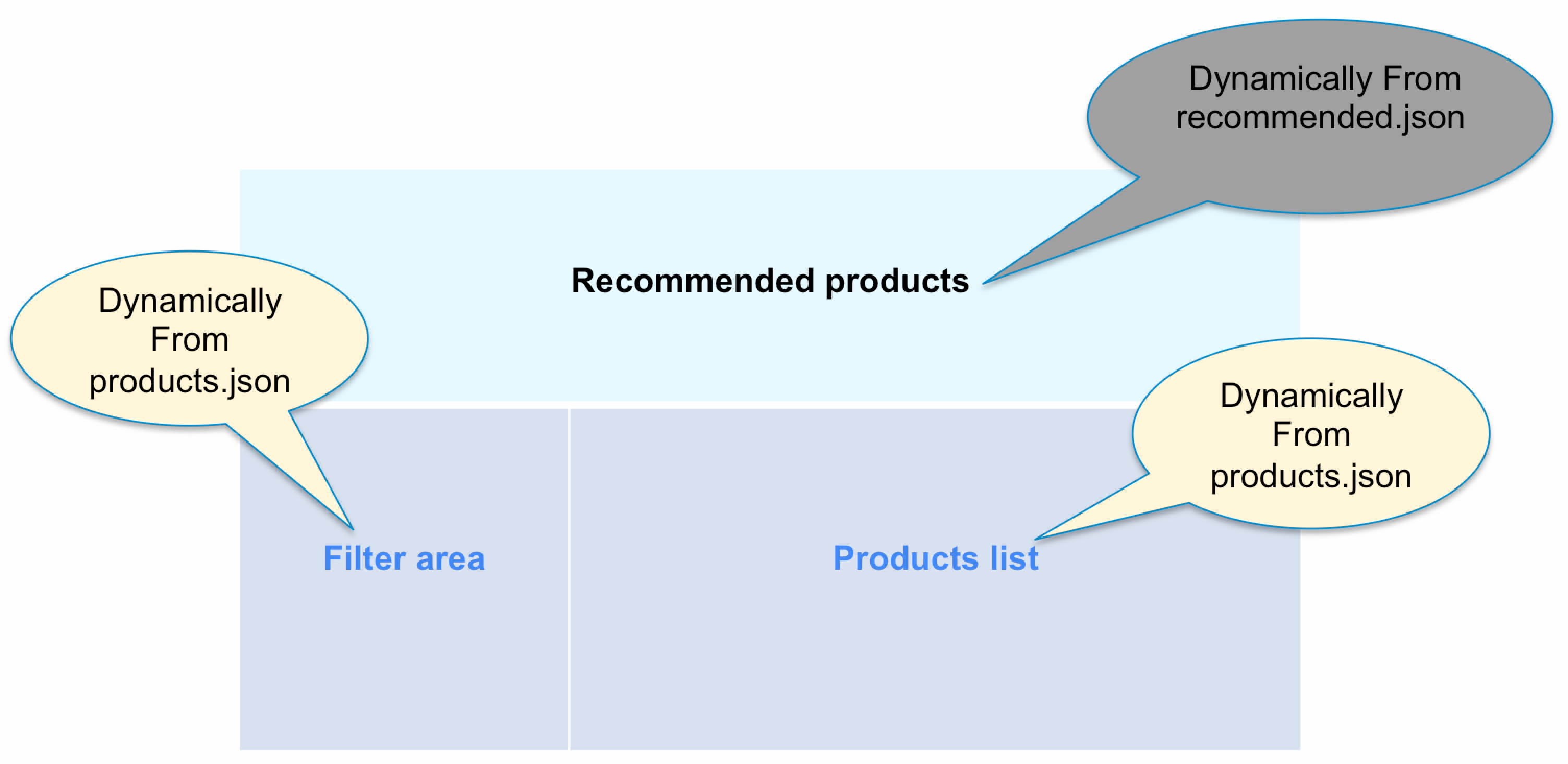
* **Evidence of research carried out to understand the present web designs for business purposes and how usability is implemented in the website you have developed.**

**Null**

* **Page designs for each page showing the layout, design metaphors and technical details of the media used on the page. Specify which elements are static and which are dynamic**

Page layout:

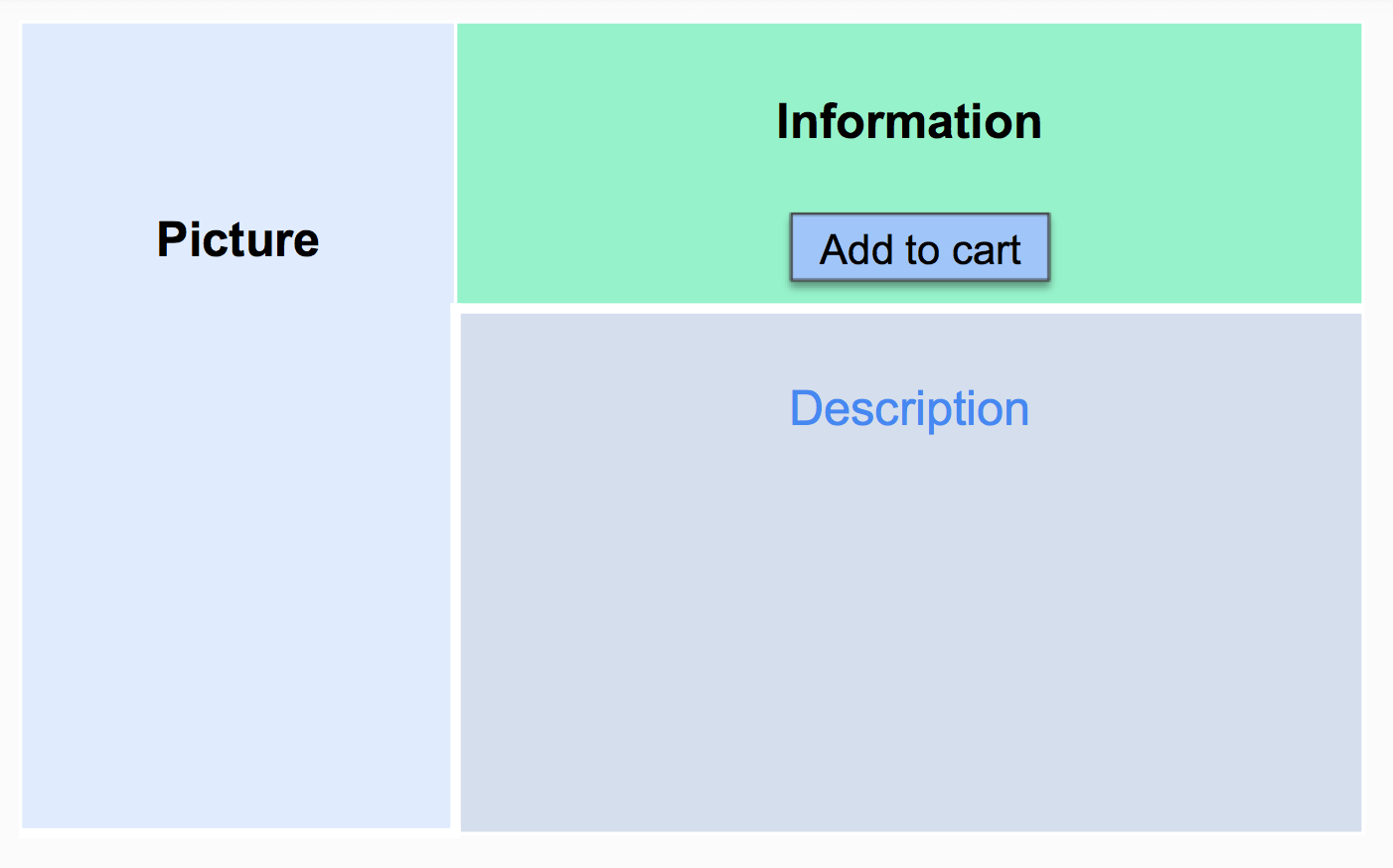
Product.html page: When you click the navigational link of “books”, it will enter this page. The following figure is the page layout.



Description:

* **Top**: Show recommended products, and the information is dynamically come from recommended.json which is a online file.
* **Left**: It is a filter area, and it’s html code is dynamically populated.
* **Right**: Right is the main area, it is show the products list, and it is dynamically come from products.json which is a online file.

productDetail.html: In product.html page, if you want to know more information of a product , you can click it’s link, and then it will transfor the id to this page. In this page, if it get the ID of a product ,it will use ajax to get the product information, then show in this page. The following figure is the page layout.



Description:

* Left: It used to show the pictures of the product;
* Top of right: It shows the detail information of product including title, category, price, popularity etc. And this area include the button of “Add to Cart”, when click this button, it will add the product to your shopping cart.
* Bottom of right: This area shows the description of the product.

shopingCart.html: From the link in the navigation bar, you can enter this page, and this page record the list of a buyer selected products, and give the total price, also you can finish your payment here.



Description:

* **Table area**: Table area include the column of index, title, quantity, price, del, and about the del which can delete a product from the shopping cart; The quantity can be changed in this table.
* **Total Price**: It use to show the total price of the products.
* **Buy All**: It is a button of payment

technical details:

Use JSON: Using json file to store the data of products, and we upload files to GitHubGist, including two json files ( products.json and recommended.json), it is easy and simple to use.

Use Jquery, Ajax: jquery is easy to get the object of element, and it rich in utility library, for example: it is very easy to use ajax, the following code is how to use ajax read json file:

var productList= $.ajax({url:"",async:false}).responseText;

Use lodash: A modern JavaScript utility library delivering modularity, performance & extras.

* **A short explanation about where and how JavaScript/JQuery/Ajax and CSS have been used on the site**

Javascript:

In this case, Javascript is used to organize html element, for example:

In the function of createItem(), it organizes the element and give them to their father element.

Jquery:

In this case, Jquery used to get the object of items and it rich in utility library, for example:

var myValue = $.parseJSON(myValue); //get the json object

var tableObj = $("#myTbody");//get the object of myTbody

var tableStr = "";

$.each(myValue, function(index, item){});//A loop of the json

Ajax:

Using jquery’s ajax, this is the example:

var products = $.ajax({url:URL, async:false});

CSS:

In this case, css used for the page layout, take the product’s layout:

.event\_div{

margin-left: 1%;

cursor:pointer;

width: 23%;

vertical-align: top;

display: inline-block;

padding: 1%;

}

* **A list of future improvements (i.e. problems identified in user and browser tests that you didn't have time to implement)**
  + Information retrieval, more conditions for buyers to filter products
  + More information about the products, let buyers can know more details
  + Intelligent recommended books, it is very popular in some bigger online shopping websites and helpful for customers to get similar or more useful products
* **Reference the use of any external code/media element**

In this website, we got several ideas about layout come from amazon, and the images and information are all come from it, but no external code.