**Final Project**

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IC115 T01: Web Design & Development I

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* GitHub link(s)

1. repository link: <https://github.com/mchangdev/mchangdev.github.io>
2. website link: <https://mchangdev.github.io/>

* Functions/features/pages descriptions

The functions of my website include retaining articles that are helpful to my personal skills, searching for titles based on keywords and sharing techniques to benefit more people. Because the technologies involved may include HTML/CSS, JavaScript, databases, and some common front-end frameworks, categorizing the information is important. This is not only convenient for me to view the information, but also convenient for visitors to browse the corresponding page according to their own needs. Technology is dynamic, and I wanted the site to be positioned to reflect current technology trends and relatively hot development-related topics. There is also the search function is very important, when entering a keyword, can quickly put the relevant article title in a list of ways to display.

My site is roughly divided into three layers. The first layer is the home page, you can see the list of articles recommended to the home page, through the navigation bar can enter the secondary page. The second layer is the secondary page for each subclass, where you can see a list of all article titles for the subclass. The third layer is the details page of the article, you can see the detailed content of the article.

* Technologies/skills applied

The main technologies of my site include HTML, CSS and JavaScript. In order to reduce the bad experience caused by page hopping, such as temporary white screen, I used single-page technology for my home page and secondary page. That is to say, when I click the button in the navigation bar on the home page, my main page will not be refreshed, but the content of the article list area will be updated, which will be a better experience. I realize this function, mainly using JS technology, in the request to the data, with JS to replace the HTML elements and content.

* Novelty and any other specialties worth mentioning

In order to be closer to the real site, I used JS files to store the data, which was achieved by loading JS files. Although not requested from the server, this processing can be quickly switched to requesting data from the server by modifying a small amount of code when the site is officially launched.

I also implemented the ability to retrieve all articles. For example, when I'm interested in Flex, I type flex into the search bar and click OK to retrieve all articles that have Flex in their titles. This feature greatly improves the efficiency of obtaining information.

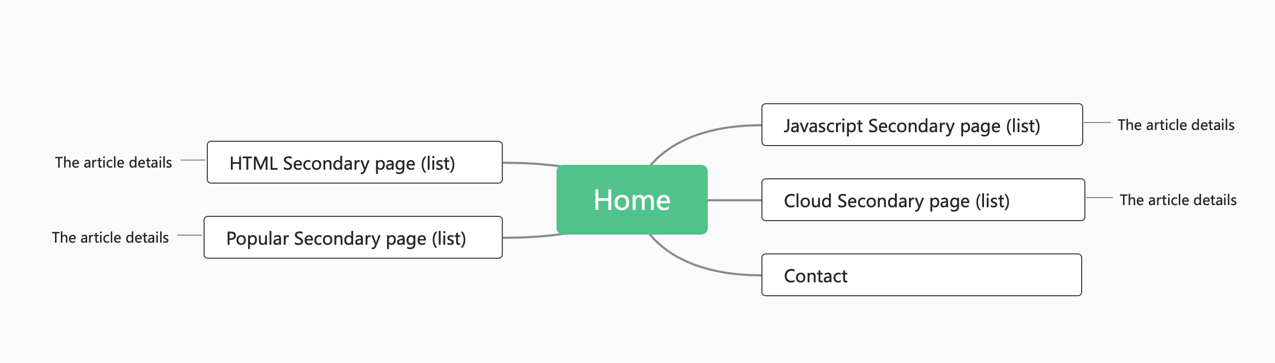
* Development procedure

I first implemented the layout of each page, using temporary data instead of real data. This quickly achieves the look and feel of each page. Then, I started to do the background function design. Data is used as a form of data storage, so that in the later use of the database, also can be quickly switched. The reading and presentation of data is mainly achieved through JavaScript. I use functions for modules with similar functions to improve code reuse. When searching for articles, the main technique used is to iterate through a list of numbers through a for loop. After data has been loaded to the local PC, you can judge and recombine data as required. Finally, the basic realization of the article display function and search function, and each article is the use of the same page, that is to say in a page to replace the content of different articles. Minimizes redundancy.

* A zipped file including HTML/CSS code and other associated files

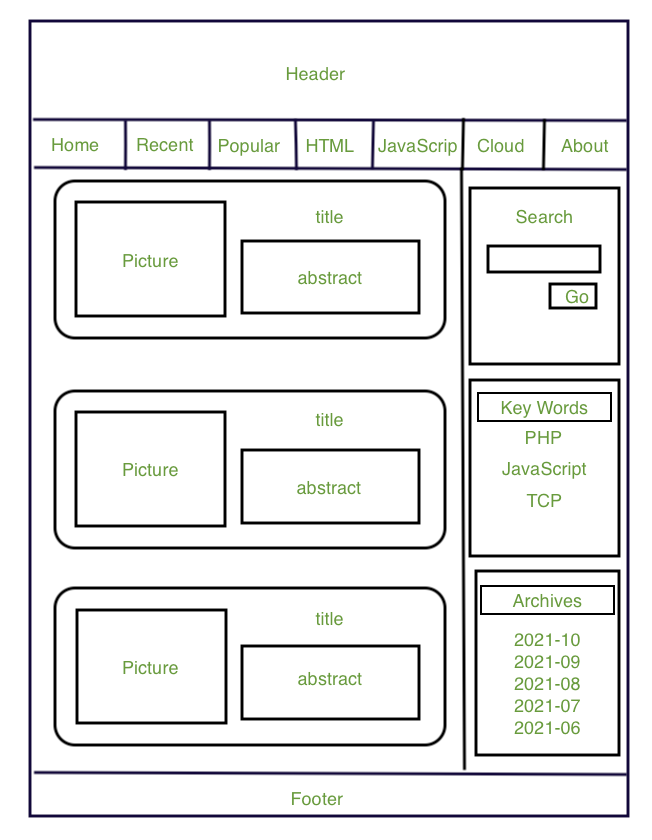
It has been uploaded.

* Web Project Site Map

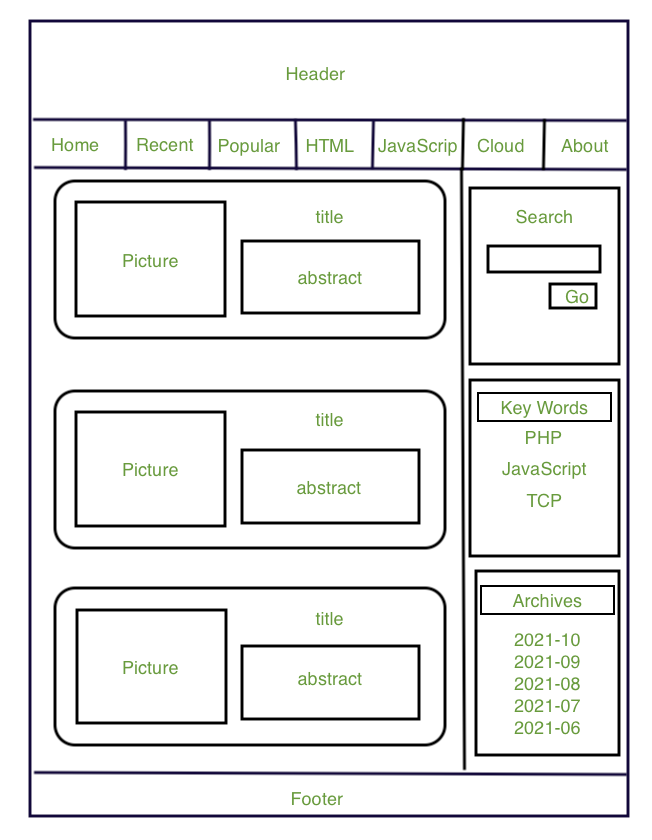


* Web Project Page Layout Design

Home page



Secondary page (list)



Content page

