Report-Image Retrieval

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1.Requirements

My image retrieval system has the following features:

·Image upload

My image retrieval system contains an input box to upload an user image as a query for the search.Suggest to upload images from “database”.

·Upload image preview

Once the user has uploaded the corresponding picture, the uploaded photo is displayed in the window to achieve the preview effect.

·Image search

After clicking the search button, the system will retrieve the corresponding picture results in the database according to the requirements of the uploaded picture.

·Overview of the results

Similarly, the retrieved images will also be displayed to achieve the browsing effect, and each image will display the corresponding label.

·Select by tags

The image retrieval system allow users to change search parameters by tag which below each picture when reviewing results.

·Clear the result

The image retrieval system has a blank button. After finding a set of pictures, you can empty the current search for the next search.

·Add/delete favorites

The image retrieval system maintains the functionality of a favorites. Users can click on the star below the image to collect or cancel the image.

·Review the favorites

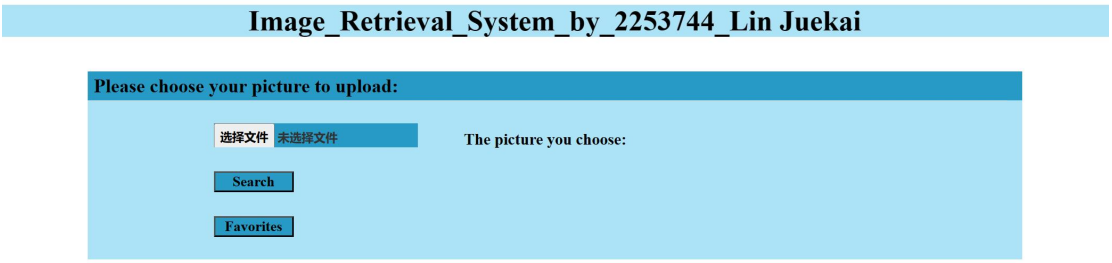
The picture retrieval system will automatically help you record the pictures you collect, you can open the favorites to view the pictures you collect, and you can also cancel the collection function in the collection rack.

2.Designs and description for five stages

A five-stage search framework help to coordinate design practices and satisfy the needs of all users.

·Formulation

The interface of my picture retrieval system has an initial cue bar section containing a selection button where the user can select and upload a local image file as a query image for the search.See in the following picture:



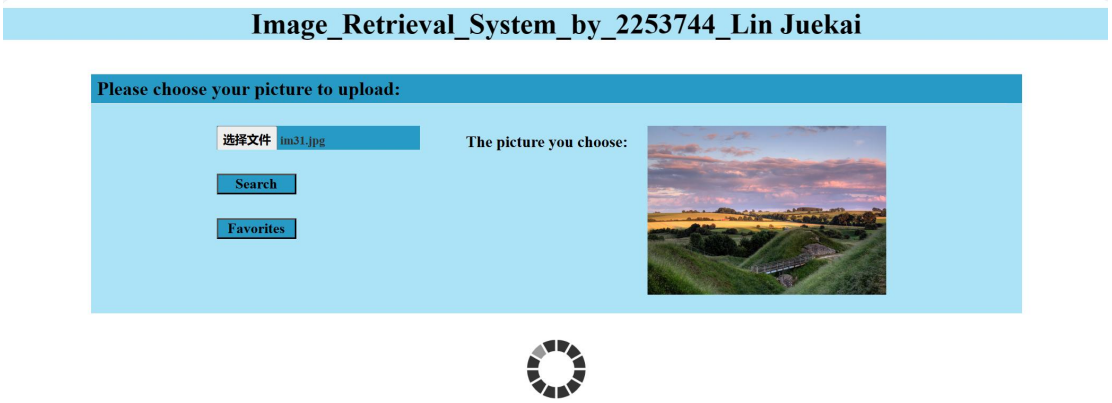
picture 2.1 : The initial interface

In the information bar next to the search button, there is a prompt whether to upload the picture. If it is uploaded, the picture name will be displayed, and if it is not uploaded, the prompt will be given. At the same time, users can observe the added uploaded image on the right side after uploading the uploaded image.

picture 2.2 : The preview interface

·Initiation of action

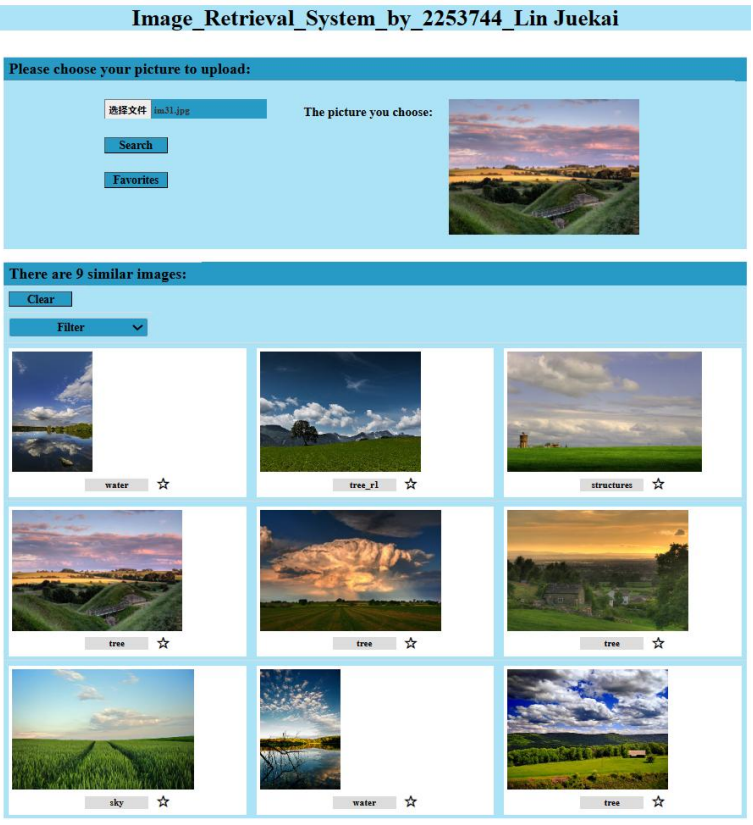
There is also a search button on my image search interface. When the user completes the above operation, click search and the system will start searching for similar images. When the button is clicked, a loading icon is displayed on the interface to indicate that the search process is in progress.



picture 2.3 : The searching interface

·Review of results

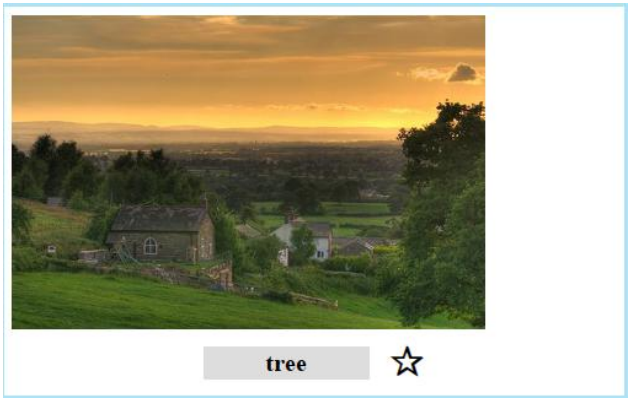
When the search is complete, another display bar is generated below the initial interface, where we can see the results of the search First, it will describe how many images have been searched, and there are empty keys and filter keys under it. Each image is displayed in detail, including their labels and their collection display.



picture 2.4 : Result review

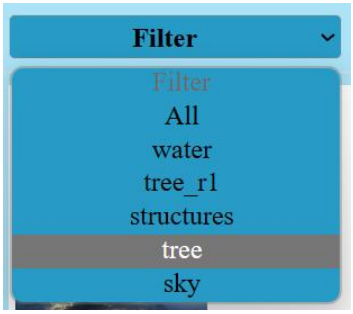
·Refinement

Each search image is displayed with a tag like this:

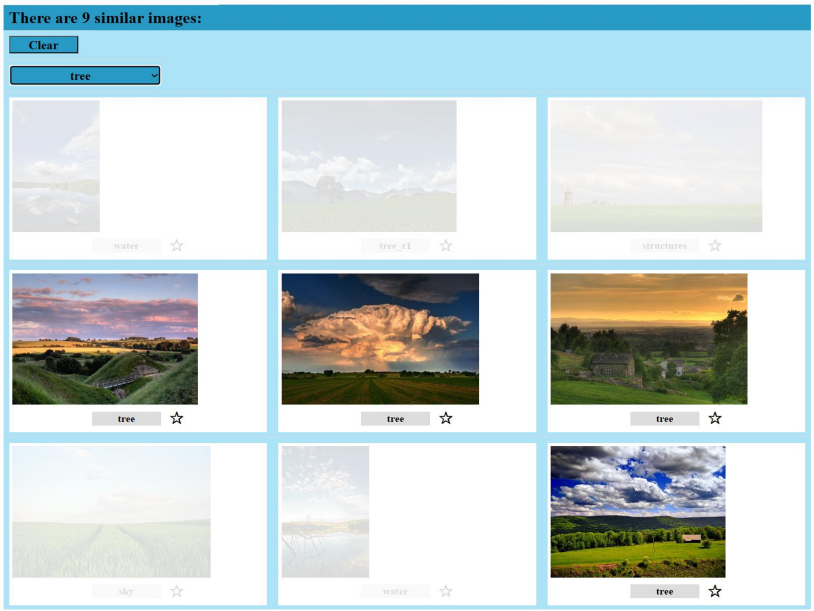


picture 2.5: A picture with a tree tag

With the label, we can filter and display the searched images. By clicking the "Filter" button, the user can access a list of available tags. Choosing the desired tag, the user can view only the search result image associated with that particular tag and ignore the other images.

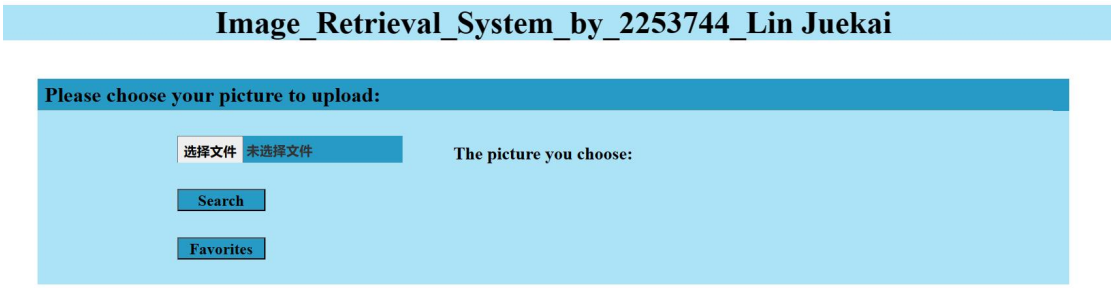


picture 2.6: The Filter button



picture 2.7: Choose tag “tree”

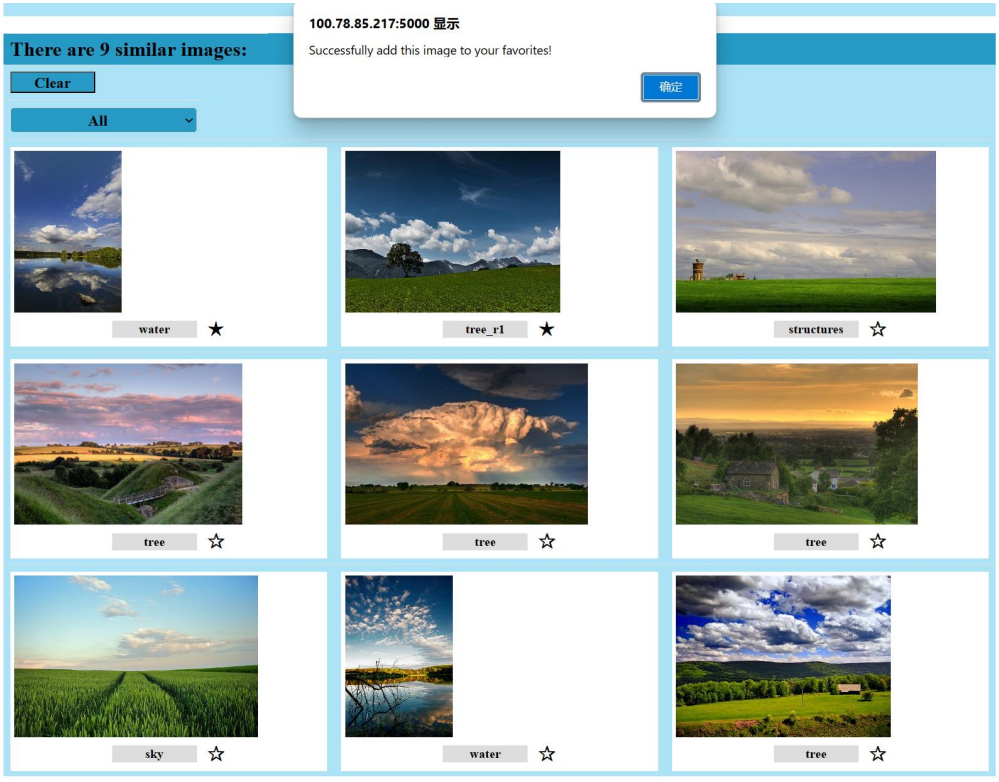
Click the clear button to clear the previous search.



picture 2.8: Clear operation

·Use

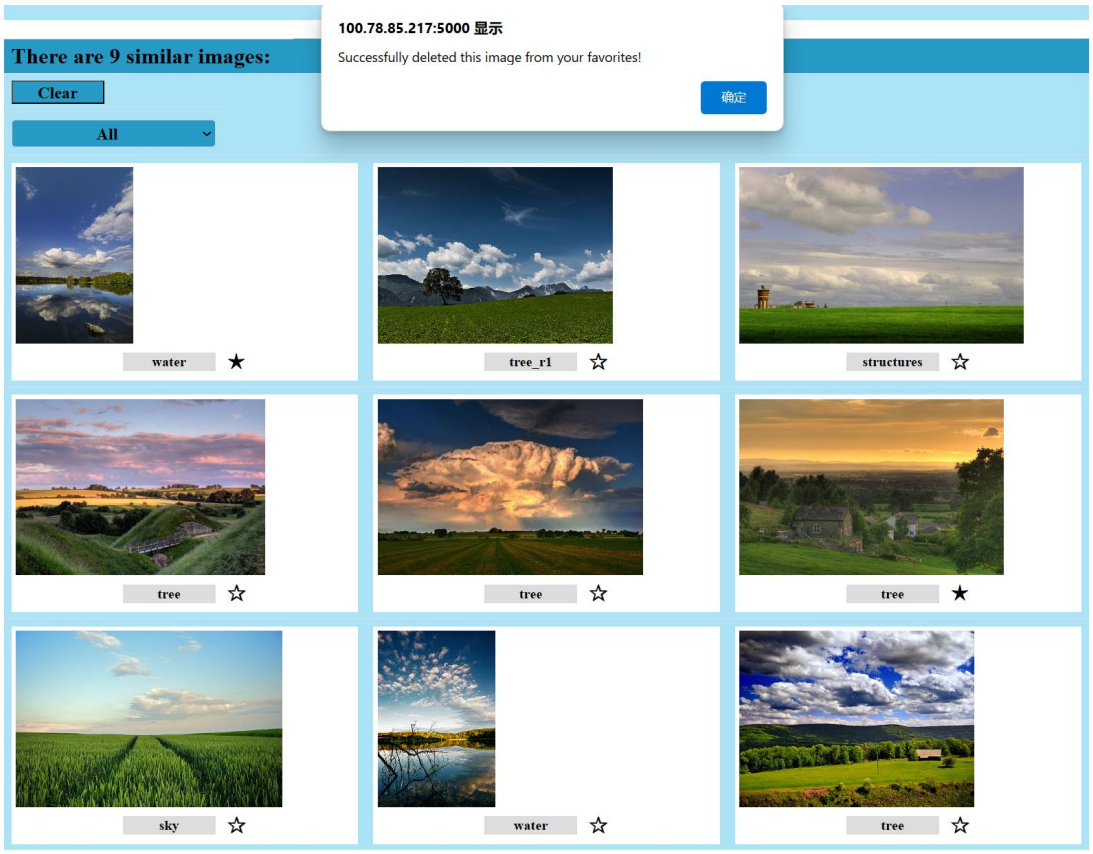
My image retrieval system provides the collection folder function. After completing the search, users can choose to add their favorite images to the favorites list or remove them from the list. Below each image, there is a collection button that users can click on to collect. The pop boxes will also give hints during the collection:“Successfully add this image to your favorites!”.At the same time, the collection icon will change, just like this:



picture 2.9: Add to favorite

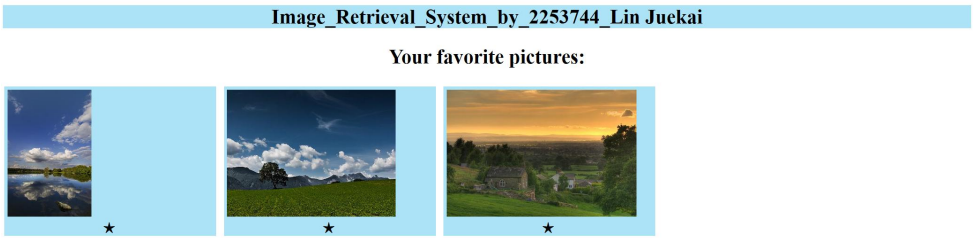
We can observe that after the collection of the image below the collection star became solid in above picture.

Similarly, we can also click on the collection icon again in this interface, when there will be a pop-up display reminder:“Successfully delete this image from your favorites!”, and the pictures of the collection will become the previous hollow.As shown in the following figure:



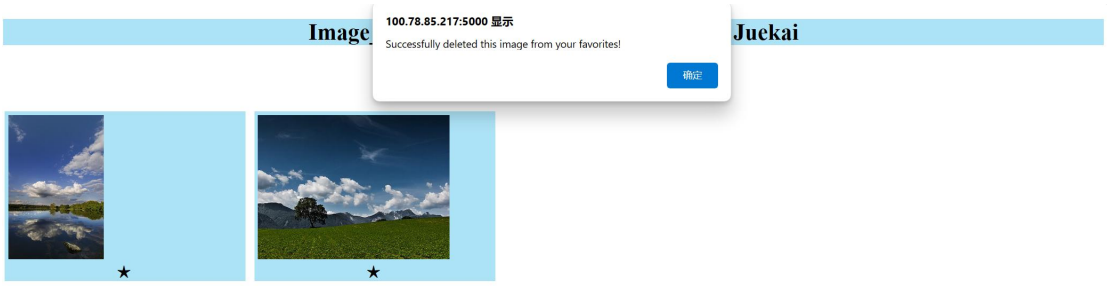
picture 2.10: Delete from favorite

My picture retrieval system also supports the operation of viewing folders. There is a favorite button at the top, and when we click on it, we will go to another page, the —— favorite folder page, where users can view the added favorite pictures. Just as shown in the following figure:



picture 2.11: Favorite folder page

In the collection folder, we can also delete the corresponding collection of pictures. Operation and display are as shown above.



picture 2.12: Delete in the collection folder

3.My feelings and gains

The assignment of Human Computer Interaction is becoming more and more interesting and challenging!This operation mainly needs to achieve a picture retrieval system front page and some button trigger events.

Html、Css and Javascript are called the front-end three-musketeers. To complete this homework, I also need to learn this knowledge outside the class (fortunately, I learned a little about this aspect during the May Day holiday).The focus of this operation is to realize the beauty of the front-end page, for which I designed a fresh blue and white user interface; the second is the basic key trigger type, such as search, collection and clear keys, etc.

Through this homework, I think I have the following harvest. First of all, this makes me more proficient in the front-end code, which also plays a huge role in other courses, because many courses this semester require us to master the front-end design; secondly, I have gained a lot by searching the rich information and previous experience on the Internet. Including a lot of front-end code format specification, label design and Javascript event processing writing.

Finally, thanks to teacher for providing us with such an interesting homework!