



EDUSHARE

USER MANUAL & SYSTEM CONFIGURATIONS

User Manual & System Configurations

In this section, we would present you the basic workflow from the end-user's perspective, as well as the instruction of system configurations to run the whole project (front-end and back-end). We would assume you as a user in this section, leaving out the technical, or say development, details.

System Configurations

To run the whole project, you're strongly suggested to follow the following instructions. Some configuration may not be compulsory, which we may particularly mark.

ElasticSearch

ElasticSearch is used to the following configuration steps is implemented on windows10 while there would be some difference for macOS or Linux.

Step 1: You need to change the cluster-nodes address and the cluster-name according to your pc/server version

Step 2: If you want to test on your pc, on mac, use Homebrew ("brew install elasticsearch") to install (by default it is the latest version 6.4.2), add its bin to your path and type "elasticsearch" in terminal to launch it. Here on windows, you can just download the compressed file from the official website and unzip it. Then you open your terminal and type "elasticsearch" to launch it.

Step 3: You can use curl ip:9200 or just type 127.0.0.1:9200 in your browser to get the default settings of your Elasticsearch (cluster-name is of the most important, it has to be matched to your node IP)

IkAnalyzer

Search for the elasticsearch header plugin in the Google Chrome plugin mall and install it. Click Run to check the information of each node in the elasticsearch.

Import the backend source codes into the IntelliJ IDEA, execute the build operation, execute the run operation and check the localhost:8080 port. The backend would run successfully only if there is no exception.

Back-end

The back-end is developed based on Spring Boot, a Spring framework enabling developers to create stand-alone, production-grade applications. Technically, you may run the back-end as long as JAVA environment is correctly configured. However, you're still suggested to follow the instructions given to make the process easy and quick.

To run the back-end, you may execute the following instructions in the terminal / command at the root directory of the back-end codes.

```
> mvn clean compile  
> mvn install  
> mvn spring-boot:run
```

You are kindly noticed that the back-end should be run before the front-end, and the port 8080 should be vacant.

Front-end

The front-end is developed using VueJS. Of course, you may build the front-end deploy static webpages. But we suggest you run the front-end at the development mode to get better experience and less troubles.

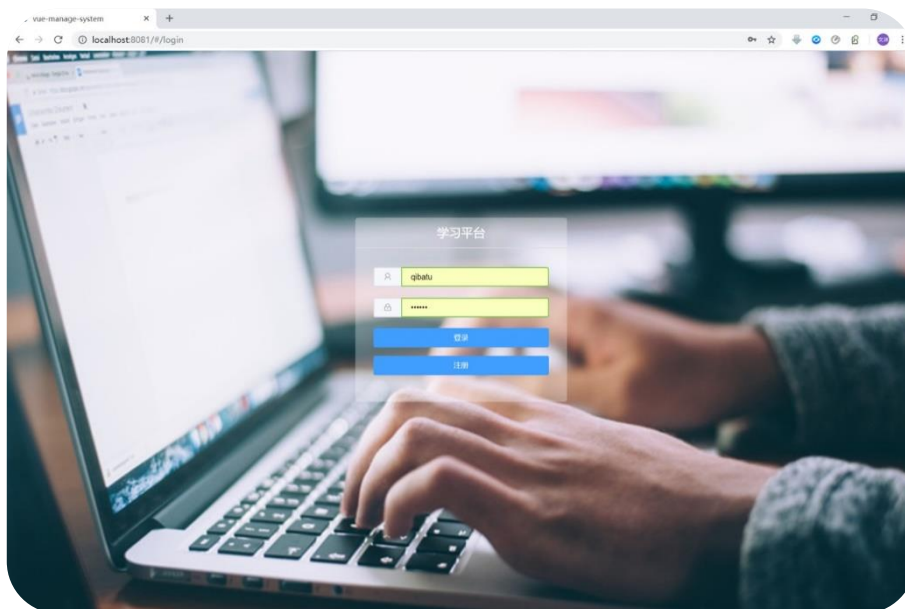
To run the front-end, NodeJS is necessary. We assume you have already configured NodeJS in the following instructions. After you run the front-end project, you may execute the following instructions in the terminal / command at the root directory of the front-end codes.

```
> npm install  
> npm run dev
```

Right after you run the front-end as well as the back-end successfully, you may use the system as the following instructions.

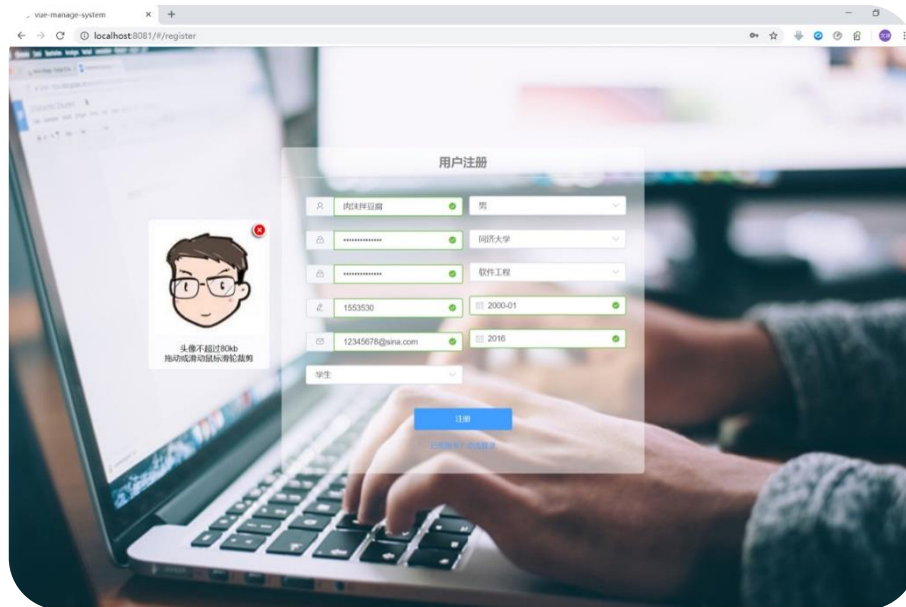
User Login

Type in the URL of the front-end. (Generally speaking, it's <http://localhost:8081>. It's presented in the command window where you typed in the instructions to run the front-end.)



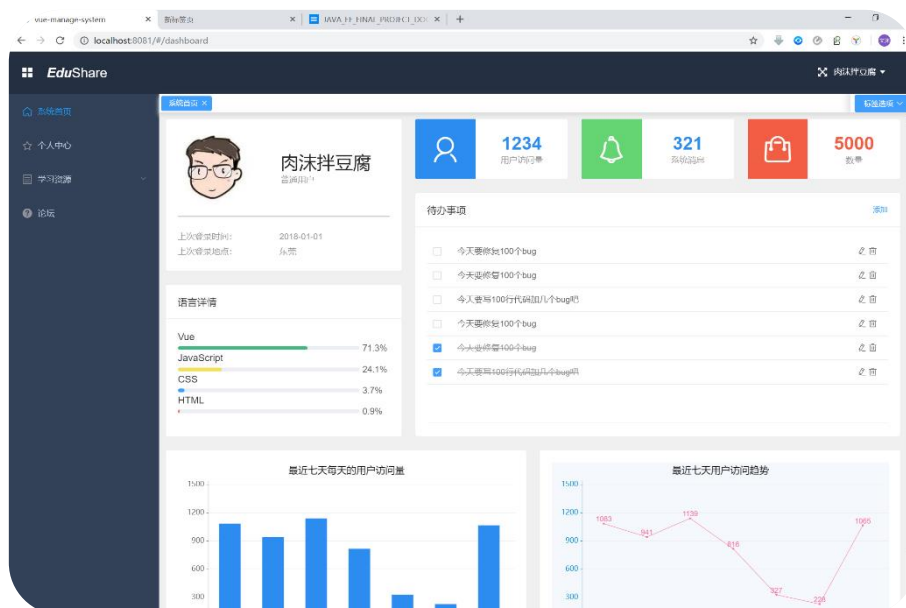
If you have already registered successfully, you can enter your username and password in corresponding input boxes and click on the 'login' button to login the system. However, if you haven't registered yet, you are supposed to click on the 'register' button to jump to the registration subpage.

User Register



In this page, you are required to correctly fill in the form according to the hint in the input fields. Besides, after clicking on the 'upload image' area in the left side, you can choose a picture from local files and upload it to the system automatically, also the thumbnail of the selected image would be displayed. Some edit work can be done to the uploaded avatar before the final submission, for example, you can drag the image to adjust the position while rolling the mouse wheel to zoom in and out. When all these works have been well done, you would jump to homepage after clicking on the 'register' button.

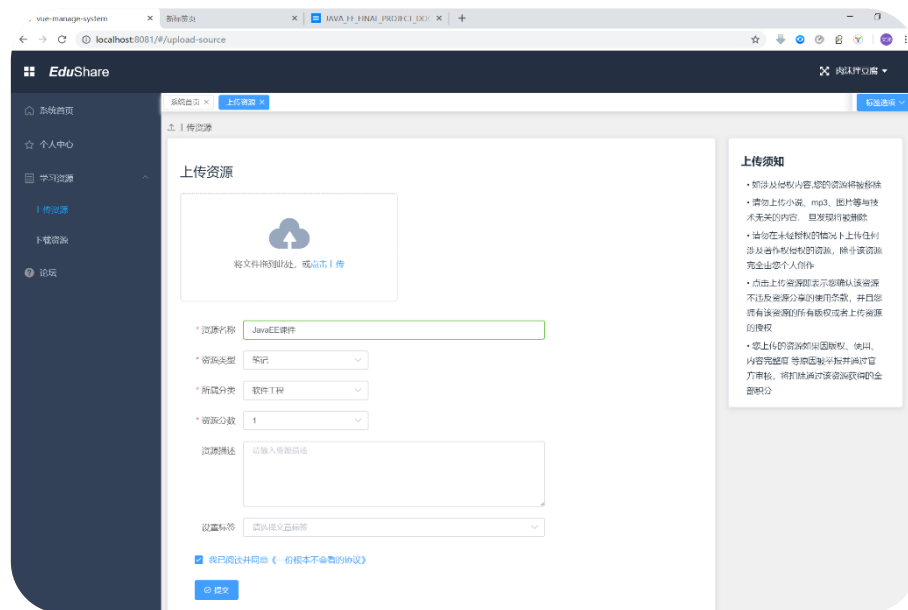
Index & Sidebar



Our system's homepage provides you with some fundamental information with both system operation data and your to-do list involved. It's convenient of you to edit your to-do list, for example, you can modify the titles or remove any item that has been completed.

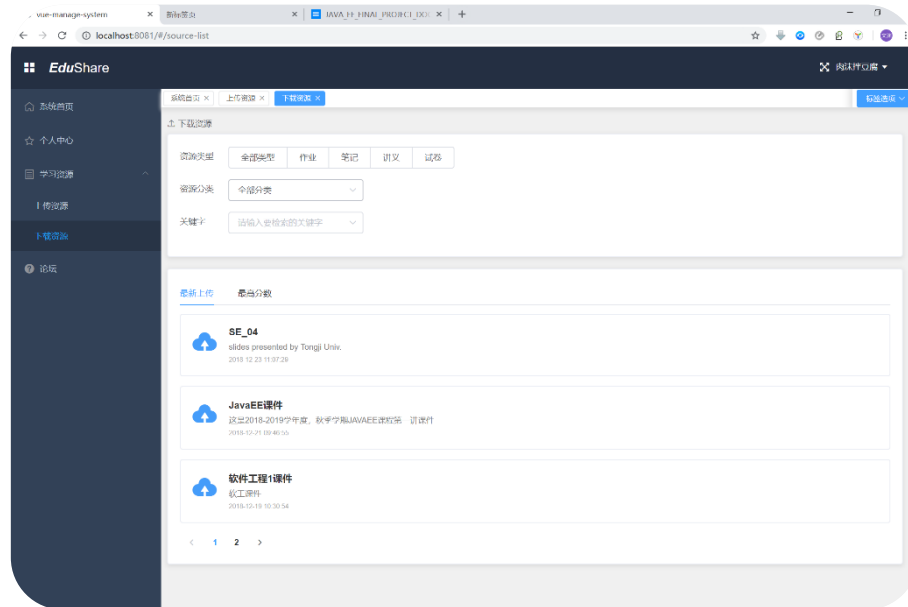
The navigation bar locates in the left side and you would open a new subpage when you click on the tab. If you intend to return to the previous subpages, you should click on corresponding tabs in the tab bar at the top of the current page.

Resource Sharing Module

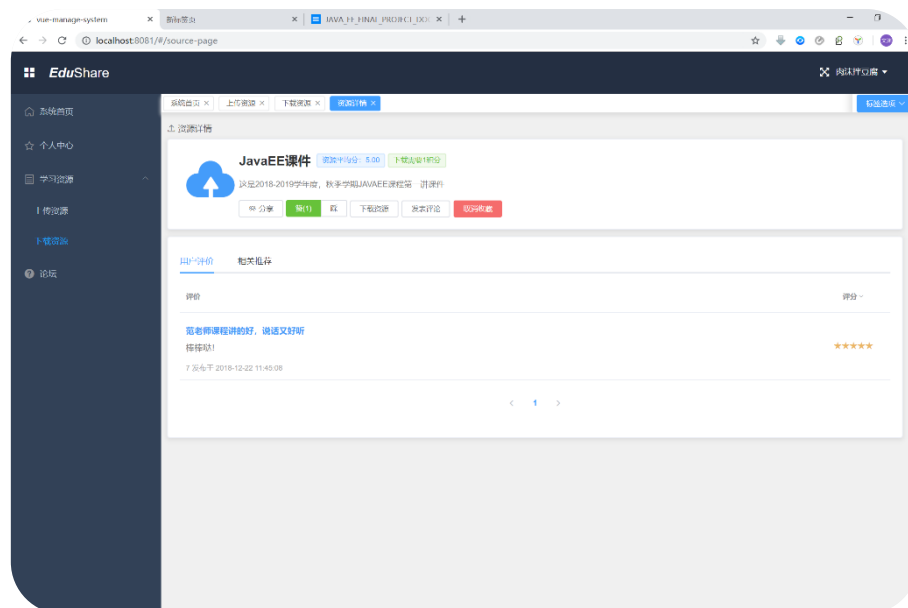


In this page, you can upload the resources to be shared with other users, but you are supposed to read the notes carefully in the right side first. There are several steps you should follow to make it. First, click on the 'click to upload' button then choose one or several local files to be uploaded from your computer.

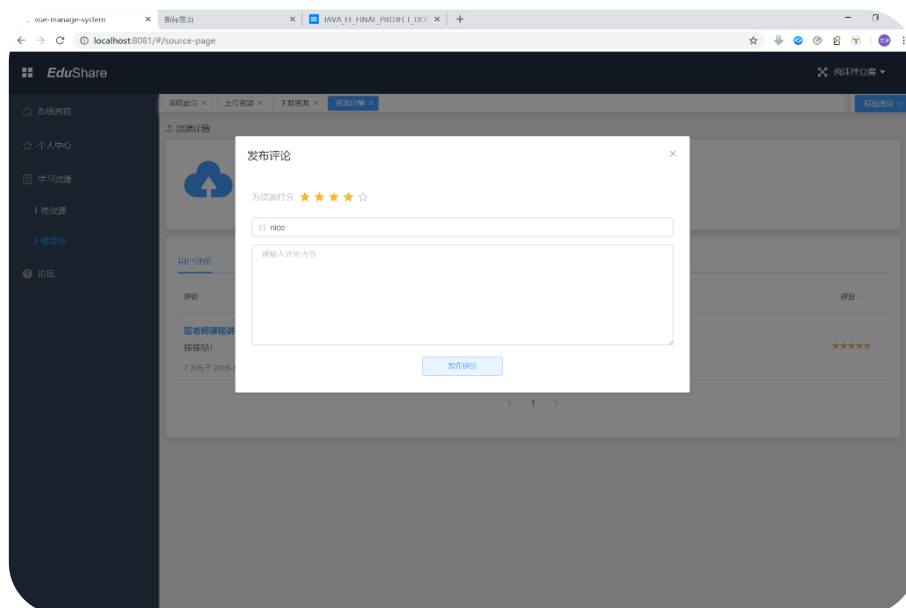
Second, fill out the form in detail which would give other users a better shot to find your resources and learn more them. Third, click on the text indicating "I have read and agree to the Network Resource Security Agreements". Finally, click the "submit" button and a status message would pop up at the top of the page.



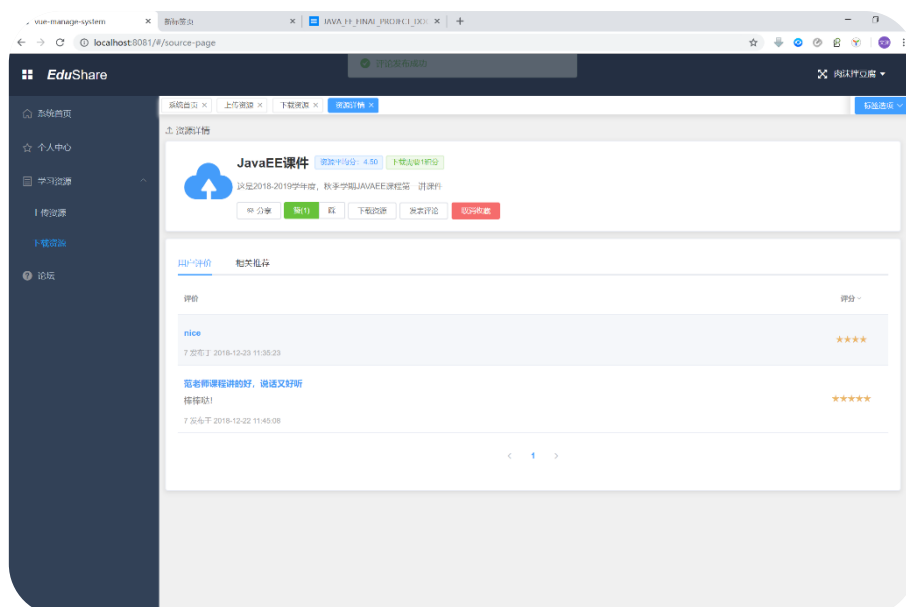
Here you can find the resources that were uploaded by all users recently and you can switch the tab to sort these items according to the scores or you can select some tags or enter the keywords to filter out a specific type of resources. To mention it, you can click on any item in the resource list to view more information.



This page offers you more details about a resource. Mention that there are several buttons in the resource information bar—if you like this resource, just click on the "add to collection" button to collect it or the "download" button to download. Also, you can give it a thumb up or click the "tread on it" button to express your dissatisfaction. What's more, we encourage you to interact with other users by making comments, so you would see this after you click on the comment button:



In the comment box, you can rate this resource by giving stars—if you like it, five stars would be favorable, or else fewer stars. Also, you should entitle your comments with a brief description and write the comment content right below the title box. After you finish these works, just click on the issue button to make your comment visible to all users.



Usually, users tend to see more objective and comprehensive comments about a very resource rather than the counterparts made by some online water army. In this case, you are guided to unfold the filter bar and select the star rating of comments presented in the comment list.

System functionalities

EduShare is a platform for instructors and college students to share their teaching or learning materials with each other. It serves instructors and students from different universities and different majors. Sharing files is the major functionalities of this platform. In this section, you may have a general idea of the functionalities of the platform.

User Register

Of course, like many other web applications, our system provides users with a comparatively handy and personalized registration, with two main parts involved: **basic information** uploading as well as some **personalized settings**.

Basic Information

To sign in EduShare, users are required to enter their basic information, which includes username, password, birthday, email address, gender, university, identity (as teachers or students) and so on. This information is necessary for our offering better services to the users. We would utilize the hard data to create personas for each user and do some big data analysis from a further point of view.

Features

To mention it, our system will automatically examine the format of the input information, which is complemented by regular expression. For example, if you mistakenly entered "jonny.gmail.com" (missing the @ sign) as your email address, an error message will pop up right below the input box, all information will be strictly verified to assure the validity.

Personalized Settings

Since personalized information can help us establish impeccable profile for every user and users can also obtain better experience at the same time, we try to collect some insensitive information from users while they can set these as default as well. Specifically speaking, users can upload an image chosen from the local files to the system as their avatar. Besides, you can also select your school and even the department from the offered candidate list.

Features

Some bounds are imposed on the settings, for example, users are not allowed to upload an image that's over 80Kb and illegal picture format would also be rejected. Right after a picture being uploaded and displayed in a small window, you can adjust this cropping window through dragging the picture or scrolling the mouse wheel. Then all you need to do is clicking the Confirm button and the cropped image would be stored automatically.

Login

Users should login the EduShare through this module. Just like many other web applications, users are required to input the username and password correctly to get the access permission. And users should register at first to get their own account without doubt. The login status is stored in domain section and the authorization will expire after a period of time. (Right now, the validity of login status lasts 1 hour.)

Resource Sharing

As a core function of our system, users may upload, search, browse and download resources in the platform. EduShare also provide abilities for users to comment, like/dislike, add collection as well as checking the resources uploaded, downloaded and collected by user himself/herself.

Resource Upload

In this module users can upload local files to the server. The type of the uploaded files is confined to several formats, like pdf, pptx, doc, md, java, cpp, etc. Generally speaking, almost all common file types are supported by our system. Every time users have successfully uploaded a file, they are authorized to decide the number of credits (usually between 1 to 5) needed for other users to download this resource. All the upload records can be found in the management center.

Features

Because all users can upload resources to the cloud, it's very significant for our system to properly manage the massive files. Two strategies are adopted to cope with this issue. First, during the course of uploading files, our system automatically matches and filter any potentially sensitive contents. Second, sometimes users may inevitably upload some identical resources to the server and our system doesn't want to duplicate the efforts to manage these redundant files. Since two identical files share the same MD5 codes, we can check MD5 codes to exclude the duplicate files. However, from users' perspectives, they feel like the resources being uploaded in an extremely high speed.

Resource Search

EduShare is equipped with direct search engine, which means users can search for target resources by entering the keywords of the filename as well as choosing the category and/or major it belongs to as well. The matched items would be listed on the webpage. Moreover, if there are too many items that cannot be displayed in a single page, users can switch pages to view more. Users can also click the items entering the subpage to get more information about this item.

Resource Details

You may enter the resource page from the 'My' page or search result page, which will be mentioned in the following section, to view the detailed information about the specific resource, including the title, description, uploader information and so on. And the detailed page involves the following functionalities as well.

Download

If you have found something really appealing, just click the download button and the relevant resources would be downloaded to your computer automatically. The credit will be deducted correspondingly.

Resource Collection

In the subpage of a specific resource, a resource collecting button is noticeable. If you click it, we would add this resource to your favorites so that it's more accessible when you intend to find it. Undoubtedly, you are forbidden to collect one resource for twice. If you have already collected this resource, the button will turn into red when the page is shown and the collection will be canceled if you click this red button.

Likes and Dislikes

Users are able to click the "like" button to give the resource a thumb up or else you can click the "dislike" button. To mention it, EduShare would scarcely recommend items you dislike. The counts of likes and dislikes as well as the average "stars" of comment will be calculated into a rate and it will be used to determine the sequence of resource search results. (Of course, showing by uploading time is also an option.)

Comment

One thing you should keep in mind is that EduShare is not only a platform for resource storage but also a paradise for users to communicate, interact and exchange your thinking spark! In the subpage of any resource, there is a comment area where you can make your own comments or just post your opinions below others' comments. When you make a comment, you are required to rate this resource, for instance, if you really like it, you can offer 5 stars or else fewer ones. Certainly, when you browse the comments, you can filter them according to the rating level.

"My" (Personal Center)

In the personal center, or say "My" page, you may check the resources you have already uploaded, downloaded or collected, as well as the numbers of them. This module shows you the credit remained in your account. Initially, you are given 100 points right after your registration. Then you may gain credits if others download the resources you update, while credits are deducted when you download resources.