Environmental preparation

System Requirements

- Operating System: Windows 10 + / Linux Distribution

CPU: 4-core CPUMemory: 8 GB RAMStorage space: 50 GB

Software Dependencies

Component	Version	Remarks	
Java	21+	Spring Boot 3.x dependency	
Maven	3.9.6+	Java project build and dependency management tool	
Node.js	22+	Vue 3 runtime environment	
Npm	10+	Node.js package manager (excute starting script)	
Docker	26+	Containerized deployment environment (used to run	
		backend dependent services)	

Additional Requirements

A publicly accessible IP address is required for Alipay sandbox callback notifications. For development environments, consider using similar tunneling services if public IP is not available.

Installation guide

Docker preparation

Ensure the "install" directory is uploaded to your Docker environment. Navigate into it and run the following command to start the required backend services (MySQL, Nacos, Redis):

docker-compose -p secondspin up -d

After the containers are running, verify their status with:

docker-compose -p secondspin ps

Ensure all services are healthy before proceeding.

Nacos configurations preparation

After starting your Docker containers, here's how to import the nacos_config.zip configuration into Nacos:

- 1. Access the Nacos web console (at http://[your-docker-server-ip]:8848/nacos)
- 2. Log in with default credentials (username: nacos, password: nacos)
- 3. Navigate to ConfigManagement > Configurations
- 4. Click the Import button (usually in the top right corner)
- 5. Click the Upload File button and select the nacos_config.zip file (in the install directory) to import the configurations
- 6. Click Import and wait for completion

Remember Nacos is important in backend services, please ensure you have setup Nacos perfectly!

Seata preparation

Due to Seata requiring configurations in Nacos, now move to the computer with docker again and navigate into the "install" directory. Run the following command to start Seata service:

docker-compose -p seata -f seata-compose.yml up -d

Then you can check if Seata run successfully by accessing the Seata web console (at http://[your-docker-server-ip]:7091/login) (username: seata, password: seata)

Backend Service Deployment

Spring Boot Application Setup

Now change to the computer with Java and Maven. Ensure that this device has network access to the Docker host.

Ensure that "secondspin-api" directory is uploaded to your Java and Maven environment. Navigate into it and update the starting script.

Update Environment Configuration

If your operating system is Windows, please open the "start.bat" file and modify to your Docker host IP:

set YOUR DOCKER SERVER IP=39.108.112.191

Change the 39.108.112.191 to the IP of your Docker host IP.

And if your operating system is Linux, please open the "start.sh" file and modify to your Docker host IP:

export YOUR_DOCKER_SERVER_IP=39.108.112.191

Change the 39.108.112.191 to the IP of your Docker host IP.

Then switch to the file "application.yaml" in the "secondspin-api/payment-service/src/main/resources/". You can see the **notify_url** in **line 27**, then change the following url to your public IP address. Thie is the Alipay sandbox callback notifications url, after you pay the order, the Alipay will notify to the public address you write here.

Ensure that you can access this public IP address and that the request will be correctly forwarded to localhost:8085 in this Java environment. Update like the following:

notify url: "http://39.108.112.191:8085/alipay/callback"

Build the Application

Then save the starting script and go back to the "secondspin-api" directory. Open the Terminal and run the following command:

mvn clean install

Launch the Application

At last, run the staring script: "start.bat" for Windows and "start.sh" for Linux.

Launch the Application

Wait for all six services to start. Access the application at http://localhost:8080/users/1 to confirm successful deployment. If success, you will see the JSON format data like following:

```
"username": "root",
"realName": "root",
"password":
"$2a$10$jeDrUhB6nYk6MOvKLxJLgu6aLhUXltPv8YwjCgaFpbCczWeVaT/4
K",
"email": "example@example.com",
"phone": " 11012345678",
"avatarUrl": "default.png",
"registrationDate": "2025-05-31T23:31:39",
"accountStatus": "active"
}
```

This is the default account in this system, you can to log in our system later by using email: example@example.com, password: 123456. But remember do not use this account to get reset password email code or reset password, because this email does not exist, the verification code will not be sent. Please register an account first if you want to experience this function.

Frontend Service Deployment

Now change to the computer with Node.js and Npm. Ensure that this device has network access to the Backend host.

Ensure that "secondspin-app" directory is uploaded to your Node.js and Npm environment. Navigate into it and update the configurations.

Update Environment Configuration

Open the "http.js" file in the "src" directory, and you can see the following codes in line 4:

```
baseURL: 'http://localhost:8080',
```

Update the localhost in the baseURL to your Backend host IP. If your Node.js environment is the same with the Java environment, you can do not change it.

Install Dependencies

Before running the frontend application, you need to install all required dependencies. In the "secondspin-app" directory, run the following command:

npm install

This command will install all the necessary packages listed in the "package.json" file.

Launch the Frontend Server

To start the Frontend application, you will need to use the following command:

npm run serve

Then you will see the following results:

DONE Compiled successfully in 103ms 22:36:40

App running at:

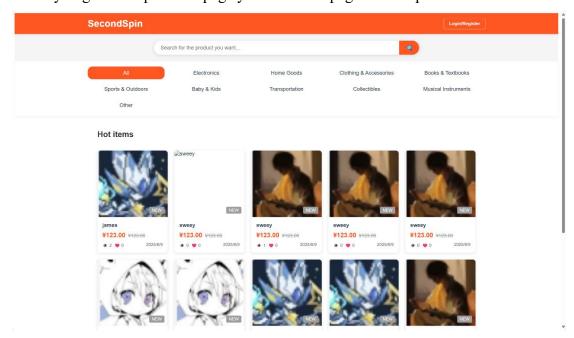
- Local: http://localhost:7000/

- Network: http://10.252.149.149:7000/

The Frontend application should now be accessible at http://localhost:7000. You can have access to your web browser to see our application.

Example operation flow

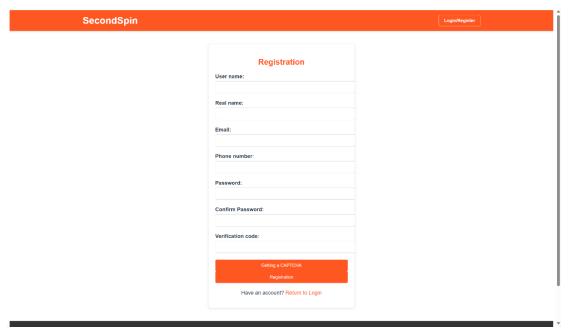
When you go to our platform page you will see a page like the picture below



You can click the Login/Register button to sign in. When you click it, you will be redirected to the page shown below

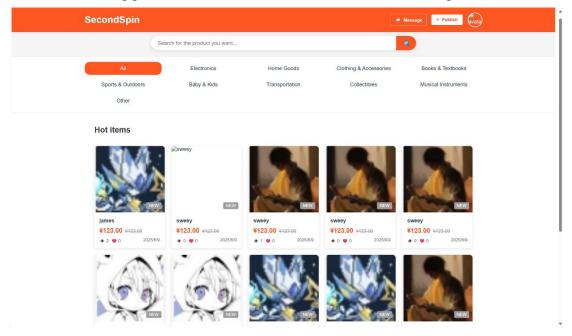
SecondSpin		Login/Register
	Login Email: Password: Login No account yet? Sign up Now Forgot password?	
	© 2025 SecondSpin All rights reserved	

If you already have an account you can log in directly. If you don't have an account yet you can go ahead and click Sign up now to jump to the registration screen to register. If you already have an account but have forgotten your password, click Forgot password to retrieve your password. The transition after clicking is shown in the image below.

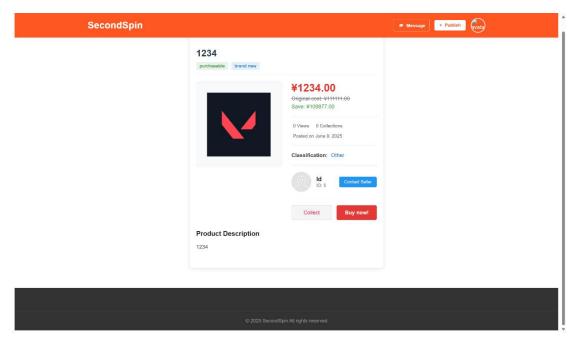


SecondSpin		Login/Register
	Reset Password Email: New password: Confirm new password: Verification code: Getting a CAPTCHA Reset Password Return to Login	

When you have completed the registration and login, go to the home page, the original login and registration button will be changed to your user avatar, and add the function button of releasing products and information. This is shown in the figure below.

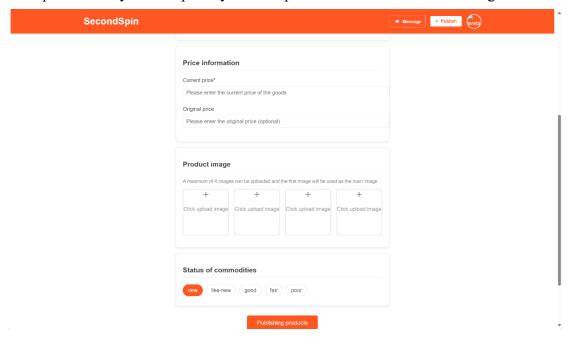


On this page, you can use the search bar to search, or filter by category to find what you want. Click the product card you see will jump to the corresponding product details view page. This is shown in the figure below.

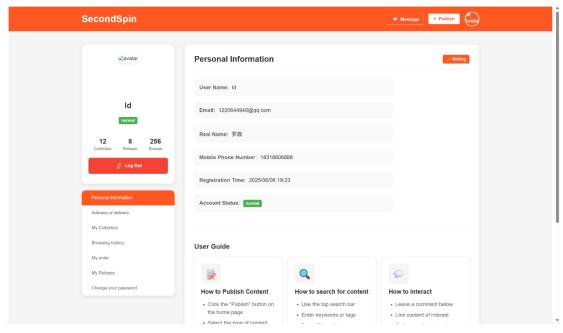


On this page, you can see more detailed information about the product, or make a purchase, or bookmark, or contact the seller of the product.

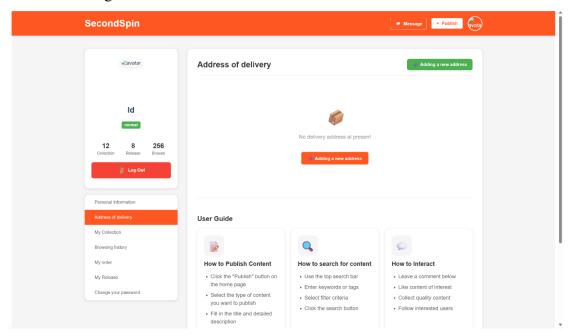
Click the release button and you can enter the product release page, where you can fill in the detailed content of the product and upload the photo of the product. Once done click publish and you can upload your own products. This is shown in the figure below.



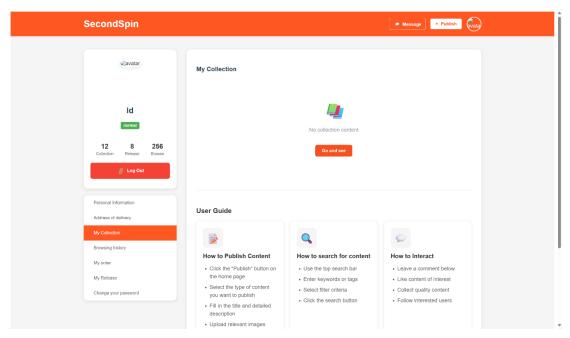
When you click on your avatar, you can go to your personal home page, where you can see your details and change them. This is shown in the figure below.



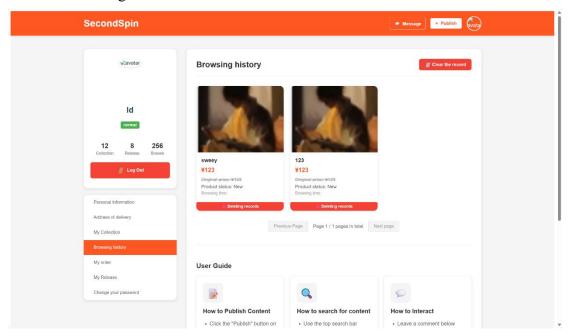
You can also click the address bar to view or modify or add your own address. This is shown in the figure below.



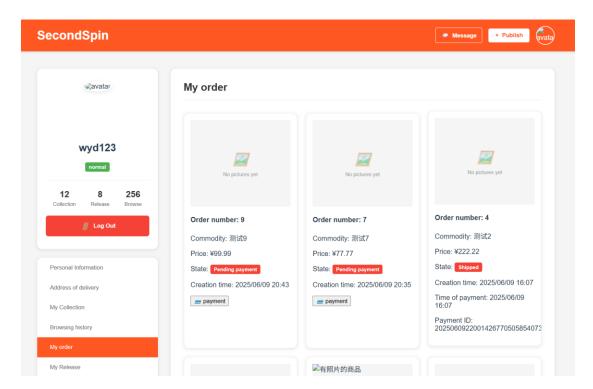
You can also click on the collection, to view their own collection of commodity information. This is shown in the figure below.



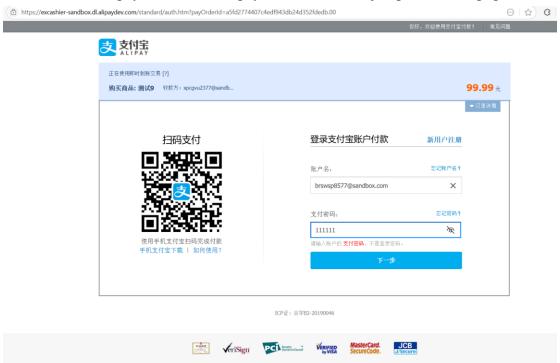
You can also click on the browsing history to see the products you have viewed. This is shown in the figure below.



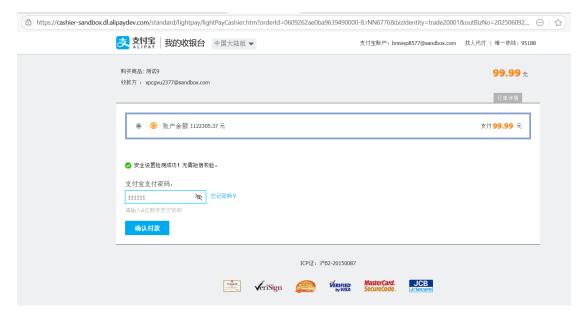
Click on My Order, you can also view your own purchase order. This is shown in the figure below.



You can click the payment button to pay the order, it will jump to another page:



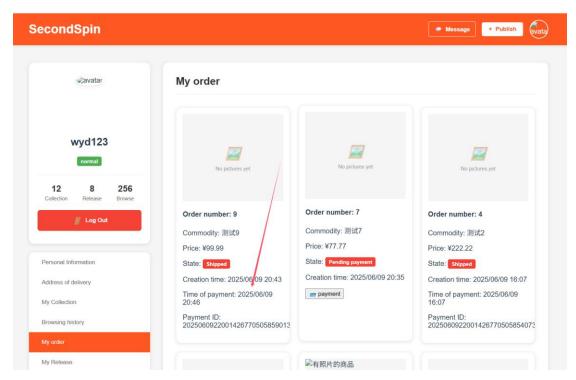
Here, write the account: "brswsp8577@sandbox.com" and password: "111111", then click the "下一步" button to continue the payment.



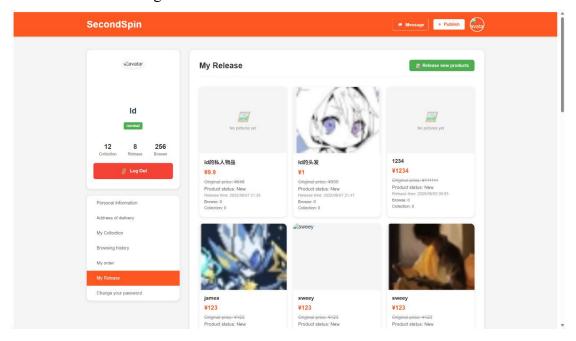
Then write the payment password: 111111, and confirm payment.



This is the result page, then go back to the profile page, you will see this order is paid as follow:



You can also click on my release, to view their own published product information. This is shown in the figure below.



Finally, you can also click Change password here to change your own password. This is shown in the figure below.

