Test Plan

According to the actual usage scenarios and usage requirements of the system, tests are mainly conducted in the following aspects.

1. function test:

Including the functional test of the management background and the functional test of the client.

Management background function test:

Administrator account login:

Enter the wrong account or password, and click Login. Expected result: Unable to log in, indicating that the account or password is wrong.

Enter the correct account and password, and click Login. Expected result: Log in successfully and jump to the management page.

Hotel management:

Add hotel, set hotel information, click save. Expected result: The hotel is successfully added and displayed in the hotel list.

Edit the hotel information and click Save. Expected result: The modified hotel information is successfully saved, and the hotel information in the list is updated to the latest information.

Enter the hotel keyword in the search box and click Search. Expected result: The hotel list shows all hotels that can match the search criteria.

Delete the hotel. Expected result: The hotel is successfully deleted and disappeared from the hotel list.

Click the room button to view the room information list. Expected result: All room information of this hotel is displayed correctly.

Click Add Room to add a room to the newly added hotel. Expected result: The room information is successfully added and displayed in the room list.

Click to modify the room information and click to save. Expected result: The modified room information is successfully saved,

The room information in the room list is updated to the latest information.

Click to delete the room. Expected result: The room is successfully deleted and disappears in the room list.

User Management:

Add a new user. Expected result: The user information is successfully added and displayed in the user list.

Edit user information. Expected result: The modified user information is successfully saved, and the user information in the list is updated to the latest information.

Search for users by keywords. Expected result: The user list shows all users who can match the search criteria.

delete users. Expected result: The user is successfully deleted and disappears in the user list.

Order management:

Enter the username keyword in the search box and click Search. Expected result: The order list shows all orders of all users who can match the search criteria.

Click Delete order. Expected result: The order is successfully deleted and disappears in the order list.

sign out:

Click Logout to exit. Expected result: The administrator account successfully logs out and jumps to the login page.

Register a new user:

Without adding a username or password, click Register. Expected result: Registration fails, and relevant prompt information is displayed.

Fill in the correct information and click register. Expected result: The user is successfully registered and transferred to the login page.

User login:

Fill in the wrong user name or password, and click Login. Expected result: The login fails and the user name or password is incorrect.

Fill in the correct user name and password, and click Login. Expected result: login is successful, jump to the main page.

View user information:

Enter the user center page to view user information. Expected result: The user information is consistent with the information filled in during registration.

Edit user information:

Enter the user modification page, modify the avatar, mobile phone number and other information, and save the modification. Expected result: Saved successfully,

Go to the user center page, and the user information is displayed correctly.

View the list of hotels:

Go to the hotel list page to view hotel information. Expected result: All hotel information is displayed, and the information is consistent with the corresponding information in the management background.

To book a hotel room:

Check the room list. Expected result: Show all room information and available dates under the hotel, consistent with the management background information.

Don’t choose a check-in time slot, just click to book. Expected result: The reservation fails, and it is prompted to choose a check-in time slot.

Choose your check-in time. Expected result: The room list is refreshed, and only the rooms available in the selected time period are displayed.

Click to book a room without filling in personal information. Expected result: The order fails, and it prompts that personal information must be filled in.

Fill in personal information and click pay. Expected result: The booking is successful and you will be redirected to the order list page.

Check order information:

Enter the order list and view all order information. Expected result: The order information is consistent with the actual reservation information.

Check the display of the order status. Expected result: Unsubscribe button is displayed for orders that have not been unsubscribed. The comment button is displayed for unsubscribed orders.

View the reservation information of the corresponding room in the management background. Expected result: The order is added to the room reservation list.

Unsubscribe the room:

Select the check-in order and click unsubscribe. Expected result: The room is unsubscribed successfully, and the status of the order becomes completed,

The unsubscribe button is no longer displayed, but the comment button is displayed.

Order Comments

Select the unsubscribed order and click the review button. Expected result: The evaluation fill-in page is displayed.

Do not fill in the evaluation information and submit it directly. Expected result: The evaluation fails, and it is prompted to fill in the evaluation content.

Select the score, fill in the evaluation content, and submit the evaluation. Expected result: The evaluation is successful, and the corresponding room evaluation information can be viewed in the management background.

sign out:

On the personal center page, click the logout button. Expected result: The user logs out and goes to the login page.

2. Stress test:

Perform stress test on the server interface part of the system to evaluate the operation of the system interface under high concurrency.

Test operating environment:

Server hardware information:

CPU: Intel(R) Xeon(R) Platinum dual core

Memory:8GB

Bandwidth:5M

System information:CentOS-7.8(x86\_64)

Application deployment: Tomcat is used as the application server, and MySQL is deployed on the same server.

Testing tool::JMeter

Preparation: Configure JMeter, design and generate 5000 test users.:

Test module:

The process of booking a room: Check if the user is logged in, get a list of hotels, and randomly select hotels.

Randomly generate the booking time period and obtain the corresponding room list information, select the room,

Call the order interface to start booking a room.

Test duration: 30 minutes

Test objective: Collect the load of the server during the test and analyze the load pressure of the server.

View the running information of MySQL, and check whether MySQL can run normally and provide services.

Check whether the interface can operate normally under this load condition and the response time is within the acceptable range.

3Installation and uninstallation test:

Generate the apk file and install it on several different Android phones to simulate the special situation during the installation process.

Test expected results:

(1) The installation file can be installed correctly on different mobile phones.

(2) Whether the software can operate normally after installation, and there is no abnormal operation.

(3) No redundant directory structure and files are generated after the software is installed.

(4) After the phone is shut down or restarted during the software installation process, it can be installed normally again.

(5) When the installation space is insufficient, the corresponding prompt message will be displayed.

Uninstall the application to simulate the special situation in the uninstall process.

Test expected results:

(1) Directly delete the installation folder to uninstall, and display a prompt message.

(2) After a crash or restart during the uninstall process, the application is uninstalled normally.

(3) All installation folders have been deleted after uninstallation.

4. Weak network environment test:

Test environment: Use Charles as a proxy tool to simulate a weak network environment.

Test point:

Whether the client can run stably in a weak network environment.

In a weak network environment, the operation response time for users to view and book a room.

Whether there are related prompt messages in the disconnected environment.

Whether to automatically resend the request in a disconnected network environment.

In a disconnected environment, whether requests for room reservations will accumulate.

After the network is restored, whether there is an accumulation of reservation requests that results in multiple reservations.