**CS673 Software Engineering** 

**Team 2 - Rental Ninja**

**Software Test Document**

| Team Member | Role(s) | Signature | Date |
| --- | --- | --- | --- |
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| Jiacheng Ding | Security Lead | *Jiacheng Ding* | 09/08/2024 |
| Yueyang He | Design and Implementation Lead | *Yueyang He* | 09/08/2024 |
| Xueqi Zhou | Requirement Lead | *Xueqi Zhou* | 09/09/2024 |
| Rundong Zhong | Configuration Lead | *Rundong Zhong* | 09/08/2024 |
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|  |  |  |  |

**Revision history**

| **Version** | **Author** | **Date** | **Change** |
| --- | --- | --- | --- |
| **v1.0** | **Jiachen Ding** | **09/09/2024** | **initial** |
| **v1.1** | **Yongjing Wu** | **20/09/2024** | **Testing Summary** |
| **v2.0** | **Xiang Zhang** | **04/10/2024** | **Update Testing Report** |
| **v2.1** | **Xiang Zhang** | **07/10/2024** | **Update Testing Report** |

[Testing Summary](#_heading=h.gjdgxs)

[Manuel Tests Reports](#_heading=h.30j0zll)

[Automated Testing Reports](#_heading=h.1fob9te)

[Testing Metrics](#_heading=h.3znysh7)

[References](#_heading=h.2et92p0)

[Glossary](#_heading=h.tyjcwt)

# Testing Summary

## Test Objectives

* + - Verify that all essential functionalities are implemented correctly.
    - Ensure integration with other services is seamless.
    - Validate the security features of the platform.

## Test Criteria

* + - All test cases must pass without errors.
    - No critical or high-severity defects should remain unresolved.

## Test Scope:

* + - Unit Test
    - UI Test
    - API Test
    - Integration Test
    - System Test
    - Security Test
    - Initial test code added for **qa-backend** and **qa-frontend**, covering core functionalities for both backend and frontend components.

# Manual Testing Report

### Issues Found and Recommendations (Iteration 2)

1. **Access to Profile Page Without Logging In**:
   * **Issue**: Users can access the profile page without being logged in, allowing them to view and update the default name and email.
   * **Recommendation**: Implement access control. Check the user's login status before allowing access to the profile page. Redirect to the login page or display a prompt if the user is not logged in.
2. **File Upload Occurs Immediately Without Confirmation (Profile Picture)**:
   * **Issue**: When users select a file, it is uploaded immediately without any confirmation step.
   * **Recommendation**: Add a confirmation step. Display a preview of the selected file and provide "Save" or "Confirm" buttons. Proceed with the upload only after the user confirms.
3. **Ability to Change Password Without Logging In**:
   * **Issue**: Users can change their password without being logged in, which is unusual behavior.
   * **Recommendation**: Ensure users are logged in before allowing them to change their password.
4. **Ability to Post Without Logging In**:
   * **Issue**: Posting is allowed without user authentication, which may pose a security risk.
   * **Recommendation**: Enforce user authentication before allowing posts.
5. **"About Us" and "Contact Us" Pages Are Empty**:
   * **Issue**: These pages currently do not display any content.
   * **Recommendation**: Add content retrieval from the backend for these pages to ensure relevant information is displayed.
6. **UI Elements Obstructed; Adjustments Needed for Font and Element Sizes**:
   * **Issue**: Some UI elements are obstructed or overlap.
   * **Recommendation**: Adjust the dimensions of fonts and UI elements to ensure a clear, unobstructed user interface.

## Testing Case Sample:

***Test Case ID: TC0001***

Test Name: Test User Post API

New or Old: New

Test Items: post()

Test Priority: High

Dependencies: None

Preconditions: The database must contain project data.

Input Data: JSON payload with project details.

Test Steps:

Send a GET request to /apiv1/rental\_nijia/post.

Postconditions: The response should contain a success.

Expected Output: A JSON array of responses.

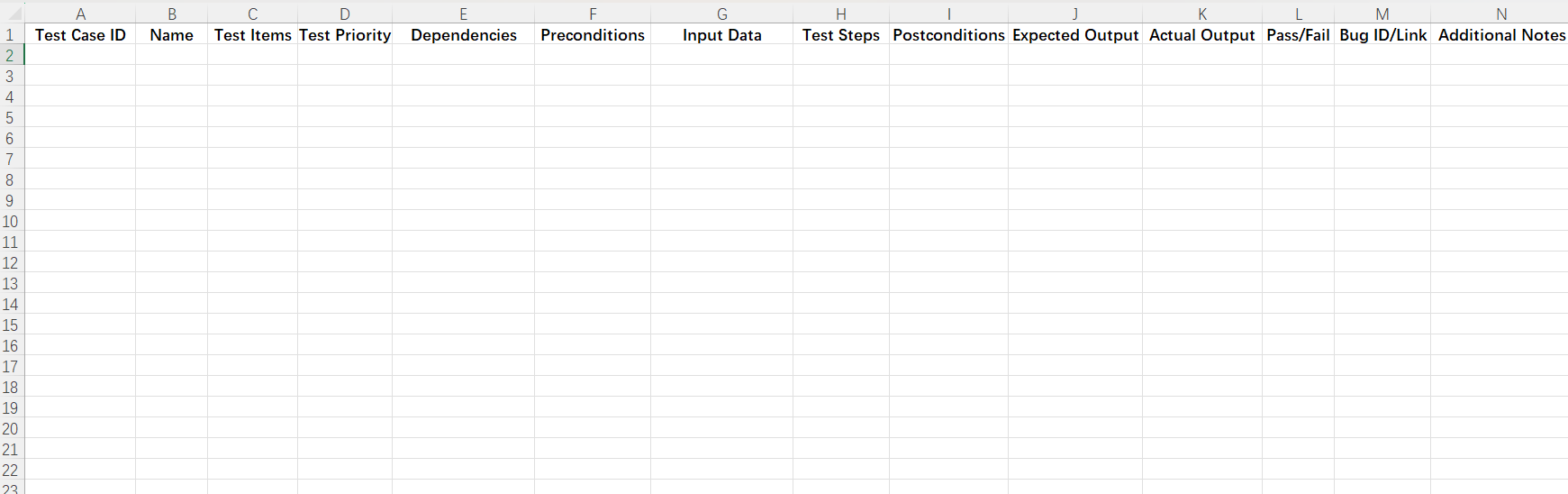
Actual Output: None

Pass or Fail: Pass

Bug ID/Link: None

Additional Notes: None

## Testing Report Form:



# Automated Testing Report

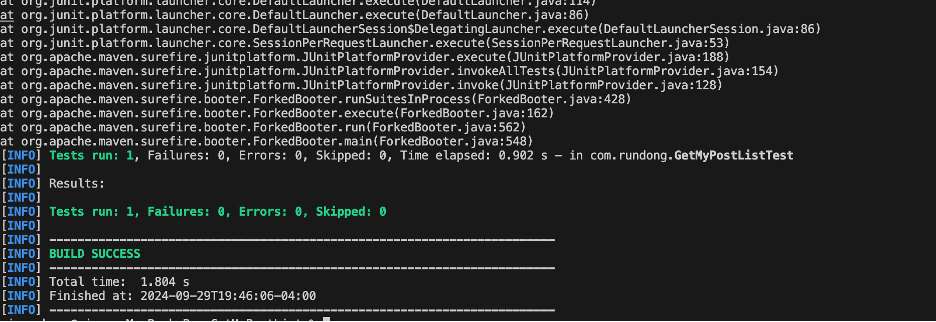
Unit Tests: JUnit for backend tests and Jest for frontend components.

Integration Tests: Postman for API testing.

E2E Tests: Cypress for testing the complete user flow.

Initial tests have been added to **qa-backend** using JUnit for backend API verification, and **qa-frontend** using Jest to test key Vue components.

Below is the screenshot showing the successful execution of the test case TC0001, which verifies the proper functioning of the User Post API.



# Testing Metrics

Number of test cases: 20 test cases

Test coverage: 85% code coverage

Defect rate: 5%

Resolution rate: 100% of identified defects were resolved.

# References

# Glossary