**Activity One: System Testing Policy**

1. The purpose of testing is to ensure that the entire system functions as expected in a real scenario and meets the needs and expectations of the customer. It is designed to identify any errors, glitches, or areas for improvement before the system is released.
2. The scope of system testing will cover all components and functions of the system: user interface, database interaction, and any external integrations. The performance, security, and usability aspects of the system will also be tested.
3. It is best to find classmates or friends to help test, because familiar with their own code, should avoid testing.
4. Test frequency should be performed at the end of each iteration.
5. My team should be in constant communication with the testers. The test team would report any errors or problems to me in a timely manner, and I would fix the bugs.
6. All tests will be documented, including the steps to reproduce the tests, the expected results, and the actual results. The error report is also documented in detail, including an overview of the error, recurrence steps, expected and actual behavior, and the severity and priority of the error.

**Activity Two: Detailed System Testing Plan**

1. **Pre - testing Preparation**
2. Prepare a test environment that is highly similar to the production environment, including the same operating system, databases, and any external services.
3. Determine and prepare necessary test data. Ensure that the initial state of the system is known and that test data is available to test all aspects of system functionality.
4. Find the right tester
5. **Test phase**
6. Perform quick tests to ensure that the basic functions of the system are functioning properly.
7. Test all functions of the system against what is defined in user stories and requirements. Includes testing student login, student question answering.
   1. User login function: use the correct and incorrect JCU student account login test to verify the correctness of the account password.
   2. Question asking function: After logging in as a JCU student, enter various types of questions in the question box, such as:
8. What do new students need to bring to school?
9. How to handle STP?
10. Where is the ICA address?
11. How to participate in the student physical examination?
12. How do new students pay tuition fees?
13. Do new students need to clock in every day?

Verify that the system receives and handles problems correctly. Check the response of the page after the question is asked, whether there is a delay or an exception message.

* 1. Solution function: For submitted questions, check whether the answers given by the system are accurate and complete. Verify that the answer is relevant to the question, especially for complex questions, and that the answer covers the whole picture.
  2. Feedback function: Input different types of feedback on the feedback page, such as: question feedback and suggestion feedback, and fill in the contact information to test whether the feedback submission function is normal. After submitting feedback, check whether the system gives a prompt indicating that the submission is successful, and check whether the feedback information is correctly recorded in the database. Try to submit incomplete feedback and make sure the system prompts you accordingly.

1. Measure the performance of the system under different loads. Check response times, resource utilization, and any potential problems.
2. Check for security vulnerabilities such as SQL injection, cross-site scripting attacks, and unauthorized access.
3. Evaluate the usability of the system from an end user perspective. Check the ease of navigation, clarity of instructions, and overall user experience.
4. **Bug reporting and tracking**
5. When a bug is found, the tester will submit a detailed error report in the error tracking system.
6. I will review bug reports regularly. Errors are prioritized based on their severity and impact on the system. The high priority errors will be fixed first, and I will update the error status in the error tracking system.
7. **Regression Testing**

After the bug is fixed, regression testing is performed to ensure that the fix does not introduce new problems.

1. **Final Validation**

After all errors are resolved and regression testing is successfully completed, the system is finally validated.