**A PROPOSED OFFERING OF ENHANCING BARANGGAY SERVICES IN NBBS PROPER: THE DEVELOPMENT OF A REQUEST SYSTEM VALENZUELA BRANCH**

A Testing Documentation Presented to the

Faculty of Datamex College of Saint Adeline, Inc.

In Partial Fulfillment of the Requirements for the

Degree of Bachelor of Science in Information Technology

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October 2025

**TESTING DOCUMENTATION**

**INTRODUCTION**

The purpose of this testing phase is to make sure that the Online Request System for Barangay NBBS Proper is working correctly before it is used by the residents and staff. This testing is an important step because it helps find any problems or errors that might happen when people use the system. It also helps check if the system is easy to understand and use by everyone, especially by the barangay staff who will manage the requests. Through this process, we can see if the system really helps make transactions faster, more organized, and more convenient for both residents and the barangay.

This system was made to help residents send their requests for different barangay documents online, such as Barangay Clearance, Certificate of Indigency, and other certificates. Instead of going to the barangay hall and waiting in line, they can simply use the system on their phone or computer. Because of this, it is important to test every part of the system. The testing checks if the registration, login, request submission, and approval features work properly. It also ensures that the data is saved safely and that the information being shown to the users is correct and complete.

The testing also focuses on how fast and smooth the system runs. It checks if the system can handle many users at the same time without slowing down or crashing. It also looks at how the system reacts when users make mistakes, like entering wrong or missing information. If errors appear, they will be fixed right away so that the system will be easier and more comfortable to use. This step also helps the developers find parts that need improvement to make the system more reliable and stable before launching it to the public.

Lastly, the goal of this testing phase is to make sure that the Online Request System for Barangay NBBS Proper can truly help improve the barangay’s services. By testing and improving the system, the barangay can serve residents faster, lessen paperwork, and make communication between staff and residents better. This process also gives confidence that once the system is officially used, it will perform well and meet the needs of the community. With successful testing, the barangay can move forward in using technology to give better and more efficient service to the people of NBBS Proper.

**TESTING ENVIRONMENT**

Hardware Specification

The testing of the Online Request System for Barangay NBBS Proper was done using regular desktop and laptop computers to make sure the system works well on common devices. These computers were used to see how the system performs during normal use by both barangay staff and residents. The specifications of the computers used for testing are listed below:

Processor: Intel Core i3 or higher

RAM: 8 GB or more

Storage: 256 GB SSD or larger

Operating System: Windows 10 or Windows 11 (64-bit)

These devices were used to test the speed, performance, and stability of the system. The goal was to make sure it runs smoothly and can handle different tasks like logging in, sending requests, and approving documents.

Software Requirements

The software used in testing includes all the programs and tools needed for the Online Request System to work properly. These tools help make sure that every part of the system functions correctly and connects well with each other.

Database Management: MySQL Server or SQL Server

Development Environment: Visual Studio or PHP/HTML Editor

Operating System: Windows 10 / 11

Additional Tools/Frameworks: .NET Framework, Laravel, Bootstrap (for website design)

These software tools were used to build, test, and run the system. They helped the developers check if the features—like user registration, request submission, and record management—work as expected.

Test Data

Sample data was created to test the Online Request System and see if it works properly in real-life situations. This test data was made to act like actual barangay transactions.

Residents: Full name, address, age, contact number, and uploaded documents such as valid ID or proof of address.

Requests: Barangay Clearance, Certificate of Indigency, Business Permit, and other common barangay documents.

Staff Accounts: Barangay employees who check, approve, or reject requests.

The testing used this data to make sure all features work correctly—like logging in, sending requests, approving requests, and printing certificates. It also helped test if the system saves data properly, shows the right information, and prevents errors when users enter wrong or incomplete details.

By using this test data, the developers confirmed that the Online Request System can handle real situations smoothly and can help make barangay transactions faster and more organized.

**TESTING METHODOLOGY**

The system was tested mainly through User Acceptance Testing (UAT). This type of testing makes sure that the Online Request System for Barangay NBBS Proper works properly and is easy to use for both the barangay staff and the residents. During the testing, real users and testers tried to do the same things that people would normally do in real life, such as creating an account, logging in, sending a request, checking its status, and approving or rejecting requests. This helps see if the system really works well and fits the needs of the users.

**Testing Tools and Frameworks:**

* The system was tested manually using the actual online request system interface.
* The testing focused on observing the system’s behavior, checking the results, and making sure all features work correctly based on what is expected

**Test Cases and Criteria:**

Test cases were made to check all the important parts of the system and the common things that users do. Each test case has a short explanation of what to do, the steps to follow, what result should show, and how to know if the test is successful.

A test is considered successful if the system:

* Performs the correct action as expected.
* Shows the right and complete information.
* Handles wrong or missing input properly without crashing.
* Runs smoothly and is easy to use for everyone.

The test cases focus on the main functions of the system such as:

* User login and registration.
* Sending an online request.
* Checking the status of the request.
* Approving or rejecting the request.
* Printing or viewing the requested document

By following these criteria, the testing ensures that the system is functional, reliable, and ready for actual users.

**TEST CASES**

The table below shows the User Acceptance Testing (UAT) for the Online Request System of Barangay NBBS Proper. It lists each test case with its ID, description, steps, expected result, actual result, status, and remarks. This helps testers and users easily see which parts of the system, like login, registration, sending requests, and printing documents, were tested and if they worked properly.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Description | Test Steps | Expected Output | Actual Output | Status | Remarks |
| UAT001 | Login with correct username and password | 1. Enter correct username  2. Enter correct password  3. Click Login | The user should go to the main dashboard. | The user was directed to the dashboard after login. | Pass | N/A |
| UAT002 | Login with wrong password | 1. Enter correct username  2. Type a wrong password  3. Click Login | The system should show an error message. | An error message appeared saying the password is incorrect. | Pass | N/A |
| UAT003 | Register a new user | 1. Click Register  2. Fill in user details  3. Upload valid ID  4. Click Submit | The system should save the new account information. | The account was created successfully and appeared in the user list. | Pass | N/A |
| UAT004 | Forgot password | 1. Click “Forgot Password”  2. Enter email  3. Check email for reset link | A password reset link should be sent to the user’s email. | The user received a password reset link through email. | Pass | N/A |
| UAT006 | Send a new request | 1. Log in to account  2. Click “New Request”  3. Fill out form  4. Click Submit | The system should record the request and show it in the list. | Correct client(s) displayed | Pass | N/A |
| UAT007 | Edit a request | 1. Go to “My Requests”  2. Select a request  3. Click “Edit”  4. Update details  5. Click Save4. Update details  5. Click Save | The request information should update successfully. | The request details were changed and saved correctly. | Pass | N/A |
| UAT008 | Delete a request | 1. Go to “My Requests”  2. Select a request  3. Click “Delete”  4. Confirm delete | The request should be removed from the list. | The request was deleted and no longer appears in the list | Pass | N/A |
| UAT009 | Approve a request (Admin) | 1. Admin logs in  2. Open pending request  3. Click “Approve” | The status should change to “Approved.” | The request status updated to “Approved.” | Pass | N/A |
| UAT010 | Reject a request (Admin) | 1. Admin logs in  2. Open pending request  3. Click “Reject” | The request should be marked as “Rejected.” | The system displayed the status as “Rejected.” | Pass | N/A |
| UAT011 | Search for a request | 1. Type request name or ID in search box  2. Click Search | The system should show matching results. | The searched request appeared correctly on the list. | Pass | N/A |
| UAT012 | View all requests | 1. Admin logs in  2. Click “All Requests” | All submitted requests should appear. | The full list of user requests was shown to the admin. | Pass | N/A |
| UAT013 | Print certificate | 1. Open an approved request  2. Click “Print” | The certificate should open and be ready for printing. | The document appeared and was ready to print. | Pass | N/A |
| UAT014 | Add a new staff account | 1. Admin goes to Staff Page  2. Click “Add Staff”  3. Fill in details  4. Click Save | A new staff account should be added successfully. | The staff account was created and saved in the list. | Pass | N/A |
| UAT015 | Update user profile | 1. Go to “My Profile”  2. Click “Edit”  3. Change details  4. Click Save | The user profile should show the updated information. | The profile was updated and displayed the new details. | Pass | N/A |
| UAT016 | Logout from system | 1. Click “Logout” button  2. Confirm logout | The user should return to the login page.login. | The system logged out successfully and went back to login. | Pass | N/A |

Table 1: Test Cases

**BUG TRACKING AND ISSUE LOG**

During the testing stage, all the problems and errors found in the system were written down and checked one by one. Each problem was given a Bug ID, a short description, how serious it was, who found it, and what action was done to fix it. The bugs were grouped based on how much they affected the system. "High” means it caused a big problem in using the system, “Medium” means it caused some errors but still usable, and "Low” means it was a small issue that did not affect the main functions.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bug ID | Description | Severity | Reported By | Status | Resolution |
| B001 | Login page stops working when wrong password is entered | High | Tester | Fuixed | Updated login error handling |
| B002 | Some requests take too long to load | Medium | Tester | Fixed | Improved page loading speed |
| B003 | Uploaded ID image not saving correctly | Medium | Tester | In Progress | Adjusted file upload size limit |
| B004 | Search bar does not show results for partial words | Low | Tester | Fixed | Added better search matching |
| B005 | Print button sometimes not responding | Mesuidium | tester | Fixed | Rechecked print function and code |
| B006 | Request form allows blank fields | High | tester | Fixed | Added input validation |
| B007 | Logout button not working on mobile view | Low | tester | Fixed | Adjusted mobile layout script |

Table 2: Bug Tracking

This bug tracking process helped the developers find and fix problems early before the system was used by real users. Writing and tracking each bug made it easier to see what still needed fixing and to make sure the Online Request System runs smoothly and without errors. It also helped improve the system’s speed, stability, and ease of use for both residents and barangay staff.

**USER ACCEPTANCE TESTING**

The User Acceptance Testing (UAT) was done to make sure that the Online Request System for Barangay NBBS Proper meets the needs of both the barangay staff and the residents. The testing focused on real situations that usually happen when people request documents from the barangay, such as Barangay Clearance, Certificate of Indigency, and other common forms. This testing helped see if the system is really useful and easy to use for everyone.

The main test cases included logging in using correct and wrong passwords, creating new user accounts with complete information, sending and editing online requests, uploading required documents, checking request status, approving or rejecting requests, searching for records by name or ID, and printing approved certificates. Each of these actions was tested to make sure that all parts of the system work properly and smoothly.

During the testing, barangay staff and sample users joined in using the system to see how it performs in real use. Most users said that the system is easy to understand and simple to navigate. They were able to send and manage requests without any problem. Some small suggestions were given, such as adding clearer messages when users forget to fill out a required field, making the search faster, and improving the loading time of uploaded documents. All these suggestions were listed for the next system update.

In general, the User Acceptance Testing showed that the Online Request System for Barangay NBBS Proper is working well, dependable, and ready to use. Only a few small improvements are needed to make it even faster and easier for users. The system successfully helps make barangay transactions quicker, more organized, and more convenient for both residents and staff.

**CONCLUSION AND RECOMMENDATIONS**

The testing phase of the project “Enhancing Barangay in NBBS Proper Development of an Online Request System” showed that the system works well, is easy to use, and meets its main purpose. All important parts of the system such as logging in, sending requests, checking request status, approving or rejecting requests, saving data, and printing certificates were tested and worked as expected. The system also handled wrong inputs correctly, saved data safely, and showed updated information at all times.

The testing proved that the features of the system work smoothly and are simple to use, even for barangay staff with little computer experience. It helped make the daily work faster, more organized, and with fewer mistakes. There were some small issues found during testing, such as slow loading of search results and a few problems when uploading large files, but these were already listed for fixing and improvement.

Based on the results, several suggestions are given to make the system better: improve form checking to avoid user errors, make the search and report features load faster, add clearer warning and success messages, and do regular maintenance to keep the system secure and working properly. Short training sessions for barangay staff are also recommended so that they can use all the features confidently.

Overall, the Online Request System for Barangay NBBS Proper is ready to use. By applying the suggested improvements, it will become even more reliable, easier to use, and more helpful in making the barangay’s services faster, organized, and more convenient for the residents.