**AN INTEGRATED DEVELOPMENT OF A YOUTH PROGRAM MANAGEMENT AND PARTICIPATION SYTEM FOR BARANGGAY LONGOS**

A Thesis Project Presented to the

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**TESTING DOCUMENTATIONS**

**INTRODUCTION**

This is a testing document that explains how the Youth Program Management and Participation system that was developed to SK Barangay Longos would be tested. The core idea of testing is to ensure that the system is functional, user friendly, and fulfills the requirements of the users, including SK officials and youth participants. By testing, we are able to detect and correct any mistakes that could occur in the system prior to its formal implementation that makes it more reliable and effective. Tester aims are to determine whether everything is operating correctly, any flaws and to check that the system is functioning well. This test plan will help us conduct the testing given that it will help us set our goals, strategies, as well as what sections of the system we would be paying attention to. Testing covers all primary functions of the system user login, creation of the program, registration of participants, and generation of reports. With the proper planning and carrying out of such tests, we will be able to ensure that the system is prepared and fully operational to the community

**TESTING ENVIRONMENT**

All testing was conducted in a controlled environment which was simulated to the actual usage set up. The test server and a standard desktop PC Windows 10, 8 GB RAM, 500 GB disk were used as their hardware. The software setup was a web server Apache, MySQL database and PHP using XAMPP which is basically a mirror of the production environment. Web interface testing was done on browsers such as Chrome. We also made test data sample youth profiles, SK official accounts, and sample program events, such that every test case would be operated on realistic input.

**TESTING METHODOLGY**

We test on multiple levels to ensure we address all aspects of our system:

Black-box Testing: Testers evaluated the systems by providing inputs through the Graphical User Interface. They observed whether the outputs matched their expectations, without any knowledge of the underlying code. For example, testers might try to add a new program or register a youth user and check if the output was what they expected.

UAT: Real users, including SK officials and youth representatives, tested the system once it was completed to see if it met their needs. We held a few UAT sessions with SK Council Members and youth volunteers to operate in a staged environment.

Other Testing: We also included regression tests, which involve re-running previous tests after making fixes, and basic integration checks. Since the project is relatively small, most testing was done manually. Testers used tools like browser developer consoles and spreadsheets to manage test cases.

**TEST CASES**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Description | Test Steps | Expected Output | Actual Output | Status | Remarks |
| TC01 | User login with valid credentials. | 1. Navigate to login page. 2. Enter correct username and password. 3. Click Login. | User is logged in and redirected to Dashboard. | User is logged in and redirected to Dashboard. | Pass | N/A |
| TC02 | Add a new youth program event | 1. Log in as admin. 2. Go to Create Program page. 3. Enter event details. 4. Click Submit. | New program appears in the program list. | Program added and listed as expected. | Pass | N/A |
| TC03 | Register youth to program | 1. Log in as youth user. 2. Browse available programs. 3. Select a program and click Register. 4. Confirm registration | Registration confirmation message is shown and user is listed in the program participants. | Registered successfully message shown. | Fail | Problem encountered |
| TC04 | Generate participation report | 1. Log in as SK official. 2. Go to Reports page. 3. Select program | A report listing all registered participants is produced | No output; blank report. | Fail | Bug found in report feature. |
|  |  |  |  |  |  |  |

**BUG TRACKING AND ISSUE LOG**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bug ID | Description | Severity | Reported By | Status | Resolution |
| B001 | Program report generation shows no data | High | Annel Josh Bognalbal | Fixed | Bug fixed in code, report now shows entries correctly. |
| B002 | Logout button not visible on small screens | Medium | Annel Josh Bognalbal | Open | UI needs update for mobile layout. |
| B003 | Typo in program description label 'Descrption' | Low | Annel Josh Bognalbal | Resolve | Fixed spelling in the UI text. |

**USER ACCEPTANCE TESTING UAT RESULTS**

To ensure that the system is ready for real use, we carried out User Acceptance Testing (UAT) with selected SK officials and some youth representatives from Barangay Longos. The goal of UAT was to allow actual users to test the system and see if it meets their needs and expectations. During the testing sessions, users performed typical tasks like logging in, creating programs, registering participants, and generating reports. Overall, the testers confirmed that the system met the main requirements and worked as expected. They completed their tasks successfully without major problems.

**Here is a summary of the feedback we received:**

Positive Feedback: Users liked the simple and clean interface, which made navigating the system easy. The workflow was smooth and easy to follow, even for those with limited technical skills. Users were satisfied with the speed of the system and found response times quick during common tasks.

**Suggested Improvements**

Users suggested adding an email notification feature to notify SK officials when a participant registers for a program. They pointed out that the mobile layout could be improved for better viewing and usability on smaller screens. Another useful suggestion was to add an Export to Excel option for reports to simplify data management and sharing during meetings or presentations. We appreciate these suggestions and will consider them for the next version of the system.

**Conclusion and Recommendations**

In conclusion, the testing process, which included both functional testing and user acceptance testing, showed that the Youth Program Management and Participation System is working well and meets the main goals set during development. Most test cases were passed successfully, and we resolved the few issues found right away. The UAT results were mostly positive, indicating that users are happy with the system's features and performance. The system assists SK officials in organizing programs and allows youth to register and participate effectively. This confirms that the system is ready for deployment and can be used in real-world situations in Barangay Longos.

**Recommendations:**

Implement Suggested Improvements - We should take user feedback seriously. We recommend adding: Email notifications for new registrations to keep SK officials informed. Enhancements to the mobile layout so users have a better experience on smartphones and tablets. An Export to Excel feature in the reports section for easier data management and offline use.

Continue User Training and Support - Even though the system is user friendly, it is a good idea to hold a short orientation or training session for SK officials and other users. This will help them make the most of the system and prevent confusion.

Monitor Usage and Gather Feedback - Once the system is live, we should monitor its performance regularly and continue collecting feedback from users. This will assist in planning future updates and improvements. By following these recommendations, we can ensure that the system remains useful, efficient, and responsive to the community's needs.