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

A Project Proposal 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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**DEPLOYMENT DOCUMENTATION**

**INTRODUCTION**

The Barangay Request System was developed to modernize how Barangay NBBS Proper in Navotas City manages resident requests such as barangay clearances, permits, and certificates. Traditionally, these services relied on manual processes—paper forms, handwritten logs, and face-to-face submissions—which often led to long lines, misplaced records, and slow processing.

The purpose of deploying this system is to replace the manual workflow with a digital platform that makes the process faster, more transparent, and easier for both barangay staff and residents.

The objective of this deployment is to ensure that the system is properly installed, tested, and ready to support daily barangay operations. The scope of this deployment includes a full rollout at the barangay hall, where staff and residents will access the system via a local server.

**DEPLOYMENT PLAN**

The deployment will follow a phased approach to ensure stability and minimize risks.

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| --- | --- | --- | --- | --- |
| Phase | Description | Start Date | End Date | Status |
| Pre-Deployment | Preparing the environment, installing XAMPP, and configuring MySQL database | 09/15/2025 | 09/18/2025 | Completed |
| Deployment | Installing the system on the local server, uploading files, and configuring system settings | 09/19/2025 | 09/20/2025 | In Progress |
| Post-Deployment | Testing, performance monitoring, and providing staff support/training | 09/21/2025 | 09/25/2025 | Pending |

**DEPLOYMENT ENVIRONMENT**

Hardware Requirements

Server: Windows 10/Server 2016, Intel i5 or higher, 8GB RAM, 500GB SSD storage

Client Devices: Windows 10 PCs/laptops, minimum 4GB RAM, Chrome/Firefox browser

Network: Stable LAN connection within the barangay hall

Software Requirements

XAMPP (Apache, PHP 8.0, MySQL)

Browser: Latest Chrome or Firefox

Database: MySQL with automated backup enabled

Hosting Information

Deployment is local-server based within the barangay office.

Access through LAN/intranet.

All data stored in MySQL with regular backup schedules.

**DEPLOYMENT PROCEDURES**

Step-by-step guide on how to deploy the system.

Pre-Deployment Steps

Backup existing resident/request records (if available).

Install and configure XAMPP on the dedicated server.

Import SQL database schema via phpMyAdmin.

Create initial Admin account.

Check network connectivity between client devices and server.

**DEPLOYMENT EXECUTION**

Upload PHP system files into XAMPP htdocs directory.

Configure database credentials in config.php.

Enable secure sessions and role-based access control.

Run initial system tests (login, request submission, report generation).

**Post-Deployment Steps**

Test system with sample requests.

Monitor error logs and performance.

Provide on-site training to barangay staff.

Collect feedback for adjustments.

**User Training & Support**

Training Schedule: A 2-day workshop for barangay officials and staff. Day 1: basic usage (adding residents, processing requests). Day 2: advanced features (reports, user management, troubleshooting).

User Guide: A printed manual and PDF quick-reference guide.

Support: Barangay IT student-developers (project team) will provide first-level support during the transition phase.

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**RISKS & CONTINGENCY PLAN**

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| --- | --- | --- |
| Risk | Impact | Mitigation Strategy |
| Server downtime | High | Keep backup server and ensure regular database backups |
| Database connection failure | Medium | Test connections before launch; enable failover scripts |
| User resistance | Low | Provide training, manuals, and on-call support |
| Data loss during migration | High | Maintain backup copies of database before deployment |
| Slow system performance | Medium | Optimize database queries and enable caching mechanisms |

**DEPLOYMENT VERIFICATION & SIGN-OFF**

After deployment, the system will undergo User Acceptance Testing (UAT) with barangay staff. If all core functions request submission, approval, printing documents, and reporting work smoothly, the deployment will be signed off by both the Project Manager and the Barangay Captain/Authorized Representative.

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| --- | --- | --- | --- |
| Stakeholder | Role | Signature | Date |
| Project Manager | Student Developer |  |  |
| Client Representative | Barangay Official |  |  |