**Quality Management Plan**

**Shrine of the Five Wounds: A web-based Church Request Management System**

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# Introduction

Quality management plan for the “Shrine of The Five Wounds: A Web-Based Church Request Management System” is essential to maintain the project’s quality. With this guide, the team can evaluate the system for the betterment of it. Additionally, the plan has a framework for evaluating the quality. Its primary objective is to delineate the processes and procedures for ensuring that quality planning, assurance, and control are effectively conducted.

The Web-Based Church Request Management System will operate completely functionally, have a user-friendly interface, and be compatible with the organization's existing technology infrastructure. The Quality Management Plan will cover both the system and process quality standards. The plan will outline specific procedures, tools, and techniques for monitoring and reporting quality performance.

A quality management plan's tools include:

|  |  |
| --- | --- |
| **Definition of Done** | A clear explanation of what makes a finished product increment. |
| **Acceptance Criteria** | Criteria must be met for it to be approved by the project manager. |
| **Continuous Integration** | Regularly updates the code to make sure it is good for releasing. |
| **Test-Driven Development** | A way that emphasizes creating tests prior to writing code to ensure that the resulting code meets the desired quality standards. |

Definition of Done

The Definition of Done (DoD) for the Shrine of the Five Wounds Project ensures that each deliverable meets established criteria before release. This includes functional completion of all system features, adherence to quality assurance standards through testing and bug resolution, comprehensive documentation of technical aspects and user guides, successful deployment to the production environment, provision of training for administrative staff, establishment of support channels, and approval from stakeholders. By meeting these criteria, the project ensures the successful implementation of the web-based Church Request Management System and meets the needs of the parish community.

As a result, the quality management plan will create a comprehensive framework for efficiently overseeing project quality throughout its duration. It will ensure that the project meets or surpasses stakeholder expectations and provide a clear structure of processes, resources, and responsibilities for identifying and addressing quality concerns.

# Quality Management Approach

The Quality Management Plan for the Web-Based Church Request Management System project will leverage scrum methodology to ensure that the project meets or exceeds all stakeholders' quality expectations. This approach will prioritize delivering high-quality products per work package and meeting customer requirements through a step-by-step process.

The following are the roles and duties for the quality management plan:

|  |  |
| --- | --- |
| Roles | Description |
| Project Manager | The Project Manager oversees establishing the standards and making sure the final product satisfies all stakeholders. |
| Project Team Leader | The Project Team Leader is responsible for ensuring that the team is following the Scrum framework and works with the Product Owner, Product Manager, and Development Team to enhance the final product. |
| Project Development Team | The Project Development Team’s responsibilities include producing a high-caliber product and upholding the specified quality policies and standards |
| Project Sponsor | Provides executive support and approval for the project. |

Every aspect of the project will integrate quality management, involving the entire team. The team will aim to create a Minimum Viable Product (MVP) so that they may receive early feedback from users and thus improve the product. The approach will include the following steps:

|  |  |
| --- | --- |
| Set Quality Standards | The project manager will establish quality standards aligned with Agile and Scrum methodologies, emphasizing the delivery of value to the client. |
| Quality Planning | Collaborating closely with stakeholders, the team will identify project requirements and prioritize essential features. The creation of a Product Backlog will ensure each project iteration adheres to established standards. |
| Quality Control | Testing will be conducted during each sprint to detect issues or bugs, enabling the team to manage and maintain project quality in alignment with its goals. |
| Quality Assurance | Proactive measures will be implemented through quality assurance to prevent problems throughout the project lifecycle. Rigorous testing procedures will ensure adherence to established standards. |
| Continuous Improvements | The team will continually monitor and evaluate project performance to ensure ongoing functionality. Feedback from stakeholders will be gathered and used to identify areas for improvement, facilitating adjustments to enhance overall project quality. |
| Communication | Maintaining open communication with stakeholders is essential for project success. Regular updates on the project's status and solicitation of feedback will ensure stakeholders remain informed and engaged throughout the process. |

A risk management strategy will be developed to identify and mitigate any potential quality issues that may arise during the project's duration. In essence, the quality management approach for the Web-Based Church Request Management System will prioritize the utilization of Hybrid Project Management to ensure the delivery of a high-quality product that meets the client's specifications. To ensure that all quality requirements are met or exceeded, the methodology will be flexible and subject to continuous improvement.

# Quality Requirements / Standards

The Web-Based Church Request Management System places an emphasis on high-quality requirements and standards; thus, the team will collaborate to develop and document them. The client's feedback, tests, and assessments will make sure that these criteria are followed. The following criteria and standards will be followed by the Web-Based Church Request Management System project:

**Requirements for Product Quality:**

* Functionality: The system should fulfill its intended purpose and meet functional requirements specified by the Stakeholders and users. It should perform the task in an efficient manner.
* Reliability: The system should work consistently without issues, breakdowns, or failures over a specified period.
* Performance: The system should meet optimal performance and or exceed the expected standards.
* Design: The system should have an intuitive UI/UX where the users will have an easy time using the application.
* Compatibility: The system should be compatible with the existing devices of APC and its users. It should also be compatible with newer devices.
* Control: A control version of the system must always be available in case of issues.

**Requirements for Ensuring Quality of Processes:**

* Standardization: All processes must be well-defined and documented in a standardized manner to ensure consistency.
* Clear Roles and Responsibilities: Each should understand their roles and specific responsibilities.
* Continuous Improvement: Processes should be ongoing and always have room for improvement. The development team will apply feedback mechanisms and testing to figure out what parts of the project can be improved and what parts have issues.
* Monitoring: All processes must be monitored by the Project Manager; this will ensure the quality of the deliverables.

**Compliance Demonstration:**

* Before being delivered to the client, the system will go through extensive testing and evaluation to make sure it satisfies the necessary quality requirements.
* The development team will keep thorough records of all testing and quality assurance procedures, which the client can request.
* The customer will participate in a formal acceptance test to ensure the system satisfies their needs and expectations.
* To guarantee that the system continually complies with the defined quality requirements eventually, the development team will offer ongoing support and maintenance services.

The development team will set up a strategy for continuous improvement by routinely collecting and reviewing client feedback, monitoring system performance, and conducting internal reviews to identify potential improvement opportunities. These procedures will be used in the project to ensure that the Web-Based Church Request Management System actively adapts to meet shifting client needs while maintaining the required level of quality.

# Quality Assurance

To ensure quality is attained throughout the development of the project, the team will incorporate quality assurance practices within the Agile and Scrum methodology. The approach will involve the following processes:

* **Define Quality Standard:** The team will collaborate with the project’s stakeholders which includes parish secretary, priest, and project adviser, to define and establish the quality standard for the church request management system. It will ensure that the quality standards will reflect the needs and expectation of stakeholders and for the team to prioritize for improvement and allocate resources more effectively.
* **Agile Quality Auditing:** The Scrum Master will lead sprint review meetings every three weeks to assess development updates on the church request management system. During these meetings, the team will demonstrate completed work and gather feedback from stakeholders to ensure alignment with project goals. After each sprint, a sprint retrospective will be conducted to reflect on the process and identify areas for improvement. Backlog refinement sessions will also be held to prioritize tasks and plan upcoming sprints. Daily scrum meetings will ensure ongoing coordination, allowing the team to quickly address any issues and maintain focus on project objectives.
* **Quality Metrics:** The project team will apply the following metrics to track and report on the system’s performance against defined quality standards:
* **Sprint Reviews:** It tracks the team’s progress regarding system’s development and documentation based on the Agile Methodology led by the Scrum Master.
* **Defect Density:** It is calculated by dividing number of defects by the size of the component which measures the code’s quality and alignment to industry standard.
* **Defect Severity:** It is calculated through summing the product of each defect's count and its severity level, then dividing by the total number of defects. The result measures the impact of the defect on the planned system functionality which will aid development team to focus on addressing critical issues to maintain to project quality and functionality.
* **Test Case:** It helps monitors the development of the main five use cases from the front and back-end of the system. It allows the team to monitor which use cases and features are finished and ensure that they are functioning correctly.
* **Continues Improvement:** The team will continue to improve the product based on updates from agile auditing, results in quality metrics, and feedback from key stakeholders through Backlog Refinement sessions.
* **Compliance with Industry Standards:** The project team will ensure the church request management system will meet current industry standards from code quality, security standards and privacy regulations before deployment. It will be checked by project adviser who has extensive experience in quality assurance in their professional career.
* **Reviewing Feedback:** Throughout the development of the system, the team will review feedback from its key stakeholders and panelist to make sure its adherence to industry standards and defined quality standards.

# Quality Control

The quality control process for the church request management system will involve the following steps:

1. **Continues Testing and Feedback:** Throughout the development of the system, the team will regularly test and gather feedback based on defined quality assurance testing to ensure it meets project requirements and stakeholders' expectations.
2. **User Acceptance Testing (UAT):** To ensure alignment to stakeholders’ expectations and requirements, a UAT will be conducted with key users including priests, secretaries, and parishioners. This process ensures that the system meets real-world needs and offers an opportunity to address any issues with the user interface, enabling further refinement for a better user experience.
3. **Compatibility Testing:** After the system is hosted, the team will test it across various platforms, devices, and browsers to ensure consistent layout, performance, functionality. This test is important to make sure it is usability to all users and their devices with various specifications and network configurations.
4. **Continues Monitoring:** After the system is deployed to the parish office and becomes accessible to church parishioners, the team will monitor its performance to ensure stability and reliability. It involves tracking uptime and response times, ensuring that secretary, priest, and parishioners have a smooth and secure experience when using the system.
5. **Tracking and Documenting Quality Evaluations**: Proper tracking and documentation ensure that the quality control process is accurately recorded and that any defects or areas for improvement are identified and addressed. These records will guide the development team in implementing corrective actions and provide a reference for future quality assurance activities. Consistent documentation also facilitates accountability and traceability throughout the project lifecycle.
6. **Continues Improvement**: Once all quality control findings and feedback are documented, the team can prioritize and implement corrective actions to enhance the system's overall quality and user experience. Furthermore, at the end of the project timeline, these records serve as a valuable resource for the church as a comprehensive guide for o maintenance and future development.

# Quality Control Measurements

The Agile and Scrum methodology will be utilized in monitoring and inspecting the Church Request Management System project's progress and quality. The team will utilize Jira and OpenProject to document quality control measurements at each stage of development, allowing the team to identify and address areas requiring additional testing, categorize areas that have been tested and confirmed to meet quality standards, and pinpoint those that still require validation or refinement, ensuring a consistent quality control process throughout the project's lifecycle. Furthermore, each quality control task will have an assigned team member responsible for completing it and an accountable team member who ensures the tasks are completed correctly and on time.

The following information will be seen and monitored on each platform:

* Date of measurement
* Measurement Type (Defect Density, UAT, Test Case)
* Results or status of measurement (in testing, tested, test, failed, and rejected)
* Standards and Requirements basis for comparison
* Assignee for measurement, comparison, review of measurement, and revision

Using Jira and OpenProject, the team can efficiently track project progress and manage quality control. Both platforms offer built-in features like customizable dashboards, Gantt charts, and automated notifications, providing the team with a clear view of ongoing tasks, project timelines, and quality metrics. These tools allow the team to monitor deadlines, identify potential bottlenecks, and assess the completion status of deliverables in real-time, ensuring that the project stays on track and meets the expected quality standards. Furthermore, these platforms assist the team in Sprint Reviews, Retrospectives, and Backlog Refinement by providing a clear visualization of the project's status helping team easily identify areas needed to be done, review, and improve.

**Sponsor Acceptance**

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Description automatically generatedApproved by the Project Sponsor:

Date: June 26, 2024

Princess Malatag

Church Secretary