QUALITY MANAGEMENT PLAN

BREGGHAN POINT OF SALE SYSTEM

AURORA

PROJECT DOCUMENTATION SUBMITTED TO THE FACULTY OF THE SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGIES

ASIA PACIFIC COLLEGE

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR PROJECT MANAGEMENT
PROJMAN

BY
RAMON BENEDICT V. ELLOSO
CARLOS C. LIGLIGEN JR.
ANDREI GABRIEL B. PALMA
DONNE PAOLO Y. TARINAY

DATE

TABLE OF CONTENTS

INTRODUCTION

The Quality Management Plan for the Bregghan Point of Sale (POS) system project outlines the strategies and processes to ensure that the project deliverables meet the required quality standards. This plan establishes a framework for identifying, assessing, and controlling quality throughout the project lifecycle. By prioritizing quality management, the project team aims to deliver a reliable, efficient, and user-friendly POS system that meets the expectations and satisfaction of stakeholders and end-users.

The primary objective of the Quality Management Plan for the Bregghan Point of Sale (POS) system is to ensure that the POS system is developed, implemented, and maintained to meet the defined quality standards and requirements. This includes ensuring the system's functionality, reliability, usability, and performance align with the expectations and needs of the stakeholders and end-users.

QUALITY MANAGEMENT APPROACH

The Quality Management Approach for the Bregghan Point-of-Sale System project will employ an Agile and Scrum methodology to ensure that the project consistently delivers high-quality outcomes that meet or exceed stakeholders' expectations. This approach helps to ensure that the Bregghan POS system meets the expected quality criteria, providing a reliable and efficient solution for the stakeholders and end-users.

The following roles and responsibilities are defined within the quality management approach:

Role	Responsibility
Project Sponsor	Provides executive support for the project.
Project Manager	The project manager has the responsibility of creating and executing quality control procedures, guaranteeing compliance with quality criteria, performing audits and inspections, and resolving any identified quality concerns through corrective measures, all with the goal of delivering a Bregghan POS system of exceptional quality that fulfills stakeholder expectations.
Project Team Leader	Responsible for overseeing the implementation of quality management processes, ensuring team members are trained in quality standards and procedures, and facilitating continuous improvement initiatives to enhance the quality of the Bregghan POS system.
Quality Assurance Tester	Responsible for implementing and monitoring quality control activities, conducting thorough inspections and tests to ensure compliance with quality standards, and identifying areas for improvement in the Bregghan POS system.

Front-End Developer	Responsible for implementing quality standards and best practices in the user interface design and development of the Bregghan POS system.
Back-End Developer	Responsible for executing thorough testing, optimizing performance, and resolving any quality issues related to the back-end aspects of the system, all aimed at delivering a system that performs exceptionally well and operates reliably.

The approach to Quality Management for the Bregghan Point of Sale (POS) system project comprises the following essential elements:

Quality Planning	The team must create a clear plan for achieving quality objectives and standards, ensuring that the POS system meets stakeholder requirements and industry best practices.
Quality Assurance	The project team must undergo regular audits and reviews to ensure that the development and implementation of the POS system align with the established quality standards, promptly addressing any deviations.
Quality Control	Rigorous testing and verification activities are carried out to identify and resolve any defects or non-conformities, ensuring that the POS system operates flawlessly.
Continuous Improvement	By collecting feedback, analyzing data, and implementing lessons learned, ongoing enhancements are made to the POS system, fostering a culture of continuous improvement throughout the project.

QUALITY REQUIREMENTS / STANDARDS

The Quality Requirements/Standards for the Bregghan Point-of-Sale system will provide a clear direction for the development and implementation of the project. The following requirements serve as a benchmark, ensuring that the system meets the desired level of quality and functionality. In addition, this will help in mitigating risks, addressing potential issues, and enhancing stakeholder satisfaction. Adhering to quality requirements and standards promotes consistency and reliability in the POS system, instills confidence among stakeholders, and increases the chances of delivering a high-quality solution that meets their needs and expectations.

- Functionality
  The POS system should have a comprehensive set of features and capabilities to support various sales transactions, including inventory management, product catalog management, and reporting. It should accurately calculate prices, handle discounts and promotions, manage stock levels, and generate receipts.

    - The POS system should be able to process sales transactions accurately and efficiently, including features like product scanning, price calculation, and payment processing.
    - The system should provide real-time inventory tracking, allowing for easy management of stock levels, stockouts, and reordering.
    - The system should provide notification alerts if products met the critical amount level of the items.
    - The POS system should provide basic reports of items sold and provide analytics reports for the top selling products.
    - The POS system should be reliable and operate with minimal downtime or errors. It should have backup and recovery mechanisms in place to prevent data loss and ensure business continuity.

- Reliability
  The POS system should consistently perform its intended functions without errors or disruptions. It should be available for use during store operating hours and should not encounter frequent system crashes or downtime that would impact business operations. The system should be designed to handle high transaction volumes without compromising its performance.

- Usability
  The design of the POS system should prioritize a user-friendly interface and easy-to-use navigation. It should enable store employees to quickly grasp its operation and carry out their responsibilities with efficiency. The system should provide clear guidance, logical workflows, and visual cues that facilitate smooth navigation through its diverse functions.

    - The POS system should have a user-friendly interface with clear navigation and intuitive design that minimizes the learning curve for store staff.
    - The system should allow users to search for products by various criteria such as name, barcode, or category, and easily select them for purchase.
    - The system should seamlessly integrate with barcode scanners, receipt printers, and other necessary devices, allowing for efficient and accurate scanning of products and printing of receipts.
    - Regular usability testing should be conducted, and user feedback should be actively sought to identify areas for improvement and enhance the overall usability of the POS system.

- Performance
  The POS system should ensure optimal performance, with quick response times for processing transactions, executing search queries, and generating reports. The system should be capable of handling high transaction volumes during peak periods without compromising its efficiency.

    - The POS system should be capable of processing transactions quickly, with minimal latency or delays, to ensure efficient checkout processes and minimize customer waiting times.
    - The system should be able to handle high transaction volumes during peak periods, such as holidays, without experiencing performance degradation or system crashes.
    - The POS system should provide fast and accurate search results, allowing users to quickly retrieve product information, pricing details, and inventory availability.
    - The system should efficiently process and manage substantial amounts of data, including product information, inventory records, sales data, and customer data, to ensure smooth and accurate data operations.

QUALITY ASSURANCE

The Quality Assurance plan for the Bregghan Point-of-Sale system project defines a structured approach to conducting quality activities, including audits, reviews, and process enhancements, to detect and rectify any deviations from the set quality standards. The primary objective of quality assurance is to guarantee that the project's outcomes and processes meet exceptional quality criteria, satisfying customer expectations and attaining project success.

- Quality Planning
  Establish a comprehensive quality management plan that defines quality objectives, standards, and metrics for the POS system. This involves identifying quality requirements, setting quality targets, and outlining the processes and tools to be used for quality assurance.

- Process Documentation
  Document all processes related to the development, implementation, and maintenance of the POS system. This includes creating standard operating procedures (SOPs), process flowcharts, and checklists to ensure consistency and adherence to quality standards.

- Quality Audits
  Regular audits should be done to evaluate adherence to established quality processes and standards. These audits identify any deviations or non-compliance and present opportunities for implementing corrective actions and enhancing processes.

- Performance Monitoring
  Consistently observe the performance of the POS system to guarantee that it aligns with quality requirements. This encompasses monitoring metrics such as response times, transaction accuracy, system availability, and other significant performance indicators.

- Testing and Validation
  The team must implement comprehensive testing protocols to validate the functionality, dependability, and performance of the POS system. This comprises conducting unit tests, integration tests, system tests, and user acceptance tests to detect and resolve any flaws or concerns.

- Continuous Improvement
  The development team will establish a continuous improvement strategy by regularly gathering and evaluating client feedback, monitoring system performance, and conducting internal assessments to identify potential areas for enhancement.

Through the implementation of a comprehensive quality assurance process, the project team aims to guarantee the system's adherence to superior quality standards, fulfill customer demands, and provide a dependable and effective solution for the Bregghan store.

QUALITY CONTROL

The Quality Control process for the Bregghan Point of Sale (POS) system project encompasses the systematic monitoring, assessment, and evaluation of the project's deliverables and processes to ensure they align with established quality standards and requirements. It involves the following key components:

1. Continuous Testing and Feedback
   The project team will continuously perform testing activities to identify and address any defects or issues in the system. By regularly conducting tests and validations, potential problems can be discovered and addressed before they escalate and impact the overall quality of the system.

2. User Acceptance Testing (UAT)
   User Acceptance Testing (UAT) plays a crucial role in quality control for the Bregghan POS system by providing an opportunity for end-users to validate the system's functionality, usability, and performance according to their unique requirements. UAT ensures that the POS system effectively fulfills the needs of store staff, enabling them to perform their tasks efficiently and ensuring a favorable user experience. By actively incorporating user feedback and resolving any identified issues during UAT, the Bregghan POS system can successfully deliver a top-notch solution that meets user expectations and enhances overall satisfaction.

3. Compatibility Testing
   The team must ensure that the system functions seamlessly across various platforms, such as mobile devices and browsers, guaranteeing a consistent and satisfactory user experience for customers regardless of the device or platform they choose to use.

4. Continuous Monitoring
   The project team must actively track essential performance indicators like user satisfaction, response time, and system uptime. This proactive approach helps identify and address any issues or bottlenecks promptly, ensuring that the system consistently meets quality standards and delivers a satisfactory user experience.

5. Monitoring and Documenting Quality Assessments
   This will allow the project team to have a systematic record of quality-related activities and their outcomes, providing valuable insights for tracking the project's progress, identifying areas for improvement, and ensuring the overall quality of the POS system.

6. Continuous Improvement
   Continuous improvement is a vital aspect for the success of the Bregghan POS system, as it encourages the project team to proactively pursue opportunities for enhancement, gain insights from previous experiences, and implement necessary adjustments. By embracing continuous improvement, the team ensures that the POS system remains adaptable to changing customer requirements, industry standards, and consistently maintains an elevated level of quality.

By implementing these measures, the project team can guarantee that the POS system adheres to stringent quality standards, fulfills customer expectations, and provides a dependable and effective solution.

QUALITY CONTROL MEASUREMENTS

The Quality Control Measurements for the Bregghan POS system project describe the strategy and documentation process for capturing and evaluating quality metrics in accordance with the defined standards and requirements. Agile and Scrum methodologies will be implemented to facilitate continuous inspection and adaptation during the project lifecycle. The section also highlights the significance of documenting observations and implementing necessary actions in case the measurements deviate from the established standards.

The following details will be on the platform:

- Date of measurement: The date when the quality control measurement was performed for the Bregghan POS system.
- Type of measurement: The specific method used to conduct the measurement, such as automated testing, code review, peer review, or user story acceptance.

- Measurement results: The outcome of the measurement, indicating whether it passed or failed, the number of identified flaws, and the percentage of code coverage achieved.
- Comparison against requirements and standards: The established quality requirements and standards used as benchmarks for comparing the measurements.
- Responsible team member for measurement: The team member responsible for conducting the quality control measurement.
- Assessment of measurement results: The team member was tasked with evaluating the measurement results and determining any necessary actions.
- Corrective actions: Actions or steps required to address any deviations from the standards or requirements identified during the measurement.
- Date of completion for corrective actions: The date when the corrective actions were completed.
- Responsible team member for implementing corrective measures: The team member responsible for executing the corrective measures.

The quality control measurements will be logged and documented on a collaborative platform or project management tool to ensure easy access and transparency. The project team utilizes OpenProject and other tools to monitor the project's timeline and identify patterns and areas requiring attention, enabling timely actions and adjustments as needed.

SPONSOR ACCEPTANCE

Approved by the Project Sponsor:

_____ Date: _____

Devilyn C. Ligligen
Business Owner