PROJECT MANAGEMENT

“BREGGHAN Point of Sale System”

Aurora

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

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

PROJECT MANAGEMENT

PROJMAN

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Registered Name:	Bregghan Mini Grocery Store
Company Logo:	BREGGHAN
Address:	#68 Mt. Makiling Street, Post Proper Southside, Makati City, Metro Manila, Philippines
Telephone Number:	09473261135
Line of Business:	Mini Grocery Store
Type of Customers:	Grocery shoppers
Date of Registration:	Not Established
Business Owner/President:	Ms. Devilyn Ligligen
Number of Employees:	2

Table I Company Profile

The Bregghan mini grocery store is a family-owned business which is managed by Ms. Devilyn Ligligen. It is located at Mt. Makiling Street. Makati City. On a regular basis, the grocery store is managed by 2 staff personnel, and both sell the products to customers. The grocery store supplies retail/wholesale/bulk to residents and “sari-sari” stores in the area. The store only accommodates 1-5 people walking in. In addition, the store offers different varieties of products ranging from Dairy, Beverages, Liquor, Frozen foods, Canned goods, etc.

On a daily basis, the mini grocery store currently uses a pen and paper to track the stocks and sales that are going in and out of the store. In addition, the store’s current Point of Sales System is the manual computation and the receipts which are handwritten. Furthermore, the mini grocery store’s fast and slow-moving products are not being observed properly and they only replenish the stocks when they see that an item is already out of stock. Moreover, the store only relies on the records of receipts in tracking their inventory and sales which is tedious for the staff since they need to take care of the receipts to know the stocks that are left, and they only rely with the information that are in those receipts.

Project: Bregghan Point of Sale System

This project will aid the staff and manager of Bregghan mini grocery store in terms of providing a better way of monitoring the stocks and sales in real time and in a digitized way because human errors and the workload that they gain within the day can be lessened by the application. Moreover, the system will aid the users in terms of listing the stocks that are left and the items that are sold.

The proposed solution of the developers is a responsive webapp that can manage the Bregghan mini grocery store's stocks and sales. The webapp will only be accessed by the admin which is the admin(client) and the cashier which has the control of the POS system device. The admin has control of managing the inventory, viewing of sales reports, and viewing the analytics report wherein it shows which specific items are high or low in demand in a day, week, month. The cashier, however, has control of the POS device where the transactions will be held and be recorded for the database.

2. Business Case

2.1 Executive Summary

Bregghan Mini Grocery Store is a family-owned business that supplies retail, wholesale, and bulk products to residents and sari-sari stores in the area. The store's current system for tracking sales and stocks is manual, using pen and paper, which has led to difficulty in monitoring inventory and potential loss of sales due to items being out of stock.

To address these pain points, our team aims to develop a responsive webapp that digitizes the recording of stocks and sales, notifies the user when stocks are at a critical level, and automates the computation of sold items. In addition, the webapp will also produce a basic report that shows the items sold.

2.1.1 Issue

- **Manual inventory tracking**
  The current system at Bregghan mini grocery store involves manual recording of stocks and sales on paper, which can be time-consuming and prone to errors. The lack of a proper inventory management system can result in out-of-stock items and missed sales opportunities.

- **Inefficient sales tracking**
  The current sales tracking process relies on hand-written receipts, which can lead to errors in the computation of sold items and total sales. This can result in inaccurate sales data and hinder the store's ability to make informed business decisions.

- **Lack of real-time monitoring**
  Without a digital system, the staff at Bregghan mini grocery store are unable to monitor stocks and sales in real-time. This can result in missed opportunities to replenish stock levels and can make it difficult for the store to keep up with customer demand.

2.1.2 Anticipated Outcomes

- **Improved inventory management**
  The implementation of a digitized sales and stock tracking system will allow Bregghan mini grocery store to have accurate and real-time data on their inventory. This will enable them to make informed decisions on when to replenish stock, which products to order, and how much stock to order, leading to a reduction in stockouts and overstocking.

- **Increased sales:**
  With the implementation of a Point-of-Sale (POS) system, the checkout process will be faster and more efficient. Customers will have a better experience and may be more likely to return. The system will also be able to generate reports on the top-selling products, which can help the store to make informed decisions on product placement and marketing strategies**.**

- **Reduced errors:**
  The automated computation of items sold will significantly reduce the occurrence of human errors, which can lead to miscounting of inventory and discrepancies in sales records. This will result in more accurate sales and inventory data.

- **Increased productivity:**
  The implementation of a digitized sales and stock tracking system will reduce the workload of the staff, as they will no longer have to manually record sales and inventory. This will free up their time, allowing them to focus on other tasks that can improve the store's operations.

2.1.3 Recommendation

To address the identified business problem of inefficient stock and sales monitoring at Bregghan mini grocery store, the developers recommend developing a responsive web application that digitizes the recording of stocks and sales, automates computation of sold items, and produces reports. By implementing this solution, the staff and manager of Bregghan mini grocery store will be able to monitor stocks and sales in real-time, reducing workload and minimizing human error. This will lead to more efficient inventory management and faster checkouts, resulting in improved customer satisfaction. The system will also provide alerts when stock levels reach a critical point, allowing the store to replenish inventory on time and avoid potential revenue loss due to out-of-stock items. Furthermore, the application's capability to produce detailed sales reports will provide useful insights to the business, allowing for data-driven decision-making to further optimize operations and profitability. To conclude, the developers believe that the proposed solution will address the identified business problem and provide significant benefits to Bregghan mini grocery store, its staff, and its customers.

2.1.4 Justification

Bregghan mini grocery store recognizes the need for improvement in its operational processes, particularly in sales and inventory tracking. The current manual system in place is time-consuming and prone to errors, hindering overall efficiency. To address these challenges, the store proposes implementing a digitized system that offers numerous benefits.

By adopting a digital system, the staff, and managers at Bregghan can track sales and inventory in real-time, reducing the workload and improving efficiency. The proposed project will enable more accurate inventory tracking, ensuring timely restocking to avoid stockouts and potential sales losses. With better inventory management and automated sales tracking, the store can meet customer demands more effectively, leading to increased sales and greater customer satisfaction.

In addition to sales and inventory improvements, the implementation of a point-of-sale (POS)-like system will enhance the overall customer experience. Customers will benefit from faster checkouts and more accurate receipts, resulting in improved service quality. Furthermore, by embracing digitalization, Bregghan mini grocery store can remain competitive with other stores that have already implemented similar systems, maintaining its position in the market.

Failure to implement the proposed project would have negative consequences for the store. The current manual system would continue to hinder efficiency and accuracy, resulting in wasted time and potential revenue loss. Inaccurate inventory tracking could lead to stockouts, lost sales, and dissatisfied customers. Furthermore, without keeping pace with competitors who have already embraced digital systems, Bregghan mini grocery store risks losing customers to these technologically advanced stores. Therefore, it is imperative for the store to proceed with the implementation of the proposed project to drive efficiency, sales growth, customer satisfaction, and maintain a competitive edge in the market.

2.2 Business Case Analysis Team

The roles and responsibilities of the team members involved in the plan development are illustrated in Table 2.

Designation	Name
Project Sponsor:	Ms. Devilyn C. Ligligen
Project Advisor:	Doc. Manuel L. Calimlim Jr.
Project Manager:	Ramon Benedict V. Elloso
Project Team Leader:	Carlos C. Ligligen Jr.
Team Member:	Andrei Gabriel B. Palma
Team Member:	Donne Paolo Y. Tarinay

Table II Business Case Analysis Team

2.3 Problem Definition

2.3.1 Problem Statement

Bregghan mini grocery store is currently facing several issues in their daily operations, which are mainly caused by their manual recording and tracking system. Specifically, the store has trouble in monitoring their inventory, which can result in insufficient stocks or overstocking. Additionally, the manual computation

of sold items often leads to errors, which affects the accuracy of their sales records. As a result, the store loses potential customers due to a lack of available items, leading to decreased profits. Furthermore, the current process of tracking sales and stocks is time-consuming, which can lead to slower checkouts and longer queues. Overall, the business problem is the need for a more efficient and accurate system to monitor inventory and sales to improve the overall customer experience and increase revenue.

2.3.2 Organizational Impact

The implementation of the proposed project will have a significant impact on the organizational processes, tools, hardware, and software of Bregghan mini grocery store. It will require the adoption of new technology and the implementation of new processes to manage sales and inventory in a digitized and automated way. The system will replace the traditional pen-and-paper method of tracking sales and inventory, which will require staff to be trained in the use of the new technology.

New roles will be created to manage the system and ensure its proper functioning. The system will also require the creation of a database of products that the store offers, and this will need to be updated and maintained regularly.

The proposed project will bring a positive impact to the organizational processes, increasing the efficiency and accuracy of sales and inventory tracking. The store staff will be able to manage the stock level in real-time, making restocking more efficient and reducing the risk of stockouts.

2.3.3 Technology Migration

The plan for the Bregghan POS System involves the creation of a website and mobile application that will be powered by Amazon Web Services (AWS) for the database. AWS is a type of cloud service that allows businesses to rent computing resources like servers, storage, and databases. The developers chose AWS for the mini grocery store due to its scalability, allowing the store to scale up or down easily to meet changing demands in the future without worrying about managing their infrastructure. AWS is also highly reliable and can handle large volumes of traffic and data without slowing down. The data migration process will ensure that all necessary data is transferred to the new system, and the new system will undergo thorough testing to ensure reliability, efficiency, and security.

2.4 Project Overview

This section provides a broad overview of the Bregghan POS System, which encompasses a description, its goals and objectives, performance criteria, assumptions, constraints, and major milestones.

2.4.1 Problem Description

The project will develop a Point-of-Sale system to address the business problem of Bregghan mini grocery store which is the lack of efficient monitoring of their stocks and sales. The purpose of the project is to develop a digital application that will provide the staff and manager of the store with an efficient way of monitoring their stocks and sales in real time, reducing the workload and potential for human errors. The project will consist of developing a POS system where users can monitor the items that go in and out of the store and can compute the total prices, and a system for generating and storing digital copies of receipts. The system will be developed using modern software development practices and technologies. The project will be executed in different phases, with clear milestones and deliverables to ensure that it stays on track and within scope.

2.4.2 Goals and Objectives

The project team intends to accomplish the project as effectively as possible to help and improve the current system of Bregghan Store. The following listed objectives are the team needed to accomplish:

- To develop a responsive web application that accurately tracks sales and inventory for Bregghan mini grocery store, enabling real-time monitoring and reporting.
- Decreases the number of steps that the user can do in the whole transaction for faster checkouts.
- To fully digitize the recording of stocks and sales for Bregghan mini grocery store, ensuring that all inventory and sales transactions are accurately captured and stored electronically.
- To implement a notification system that alerts the user when stock levels reach a critical threshold, ensuring timely replenishment and avoiding stockouts.
- To automate the computation of sold items, ensuring accurate and efficient tracking of sales data.

2.4.3 Project Performance

Assessing the project performance of a Point of Sale (POS) system project involves evaluating various aspects of the project to determine its progress, adherence to objectives, and overall success. Listed below are the project assessment of the Bregghan Point of Sale System:

- **Schedule Performance**
  The team will have to evaluate the project's schedule performance by comparing the planned timeline with the actual progress. This assessment involves monitoring the achievement of milestones and deliverables within the defined timeframes and analyzing the schedule variance and schedule performance index. These indicators help determine if the project is progressing as scheduled or if there are delays.

- **Project Cost Performance**
  The project team must assess the project's cost performance by comparing the planned budget with the actual expenditure. This evaluation involves analyzing the cost variance and cost performance index to determine if the project is staying within the budget or if there are cost overruns. It is also essential to evaluate the effectiveness of cost control measures in place to manage expenses effectively.

- **Quality Performance**
  The project team must evaluate quality performance by assessing the project's adherence to quality objectives and metrics defined for the POS system. This assessment involves examining the level of compliance with quality standards and customer requirements, as well as identifying and addressing any quality issues, defects, or customer complaints. The effectiveness of corrective actions taken to resolve quality issues should also be assessed.

- **Scope Performance**
  The scope performance should be assessed by reviewing the alignment of project deliverables and scope with the initial project requirements and objectives. This evaluation involves analyzing any scope changes that have occurred and assessing their impact on the project's timeline and budget. It is crucial to evaluate the scope variance and the effectiveness of scope control measures implemented to ensure that the project stays on track.

- **Risk Performance**
  The risk performance should be evaluated by the project team by assessing the identification and mitigation of project risks. This involves examining the effectiveness of risk response strategies implemented and identifying any emerging risks that may pose a threat to the project's success. Proactive risk management is essential to minimize the impact of risks on the project.

- **Stakeholder Satisfaction**
  Finally, it is crucial for the project team to gather feedback from various stakeholders, including users, management, and other relevant parties, to ensure their satisfaction. Obtaining feedback from these stakeholders helps assess their level of involvement and contentment with the project's results. Additionally, it provides valuable insights that can be used to pinpoint areas that require enhancement based on the stakeholders' input.

2.4.4 Project Assumptions

- All necessary funding and resources will be secured and available for the duration of the project.

- All stakeholders will be available and able to provide input as needed throughout the project lifecycle.

- There will be no major technological or market disruptions that would impact on the project's success.

- The project team will have the necessary expertise and skill sets to complete the project successfully.

- All regulatory and legal requirements will be met, and any necessary permits or approvals will be obtained.

- The project will be completed within the proposed timeline and budget.

- The project scope will remain consistent throughout the project lifecycle, and any changes will be managed through a formal change control process.

- The project team will be able to effectively communicate and collaborate throughout the project lifecycle.

- The project will not have a significant negative impact on the environment, community, or stakeholders.

- The project will result in the anticipated benefits and outcomes as described in the business case.

2.4.5 Project Constraints

- **Budget constraints:** The project cannot exceed a certain budget, which may limit the scope or timeline of the project.

- **Time constraints:** The project must be completed within the designated timestamp.

- **Resource constraints:** The project team may have limited staff, expertise, or technology available to complete the project.

2.4.6 Major Project Milestones

Milestone	Duration
Project Initiation	03/28/2023 - 04/28/2023
Project Planning and Preparation	05/01/2023 - 05/18/2023
Phase I: Analysis	05/19-2023 - 05/26/2023
Phase II: Design and Development	05/29/2023 - 07/08/2023
Phase III: Testing	07/11/2023 - 08/15/2023
Phase IV: Implementation	08/16/2023 - 10/19/2023
Project Closeout/Completion	10/20/2023 - 11/20/2023

Table III Major Project Milestones

2.5 Strategic Alignment

The strategic alignment of the Bregghan Point of Sale (POS) system refers to how well the project aligns with the organization's overarching strategic objectives and goals. The POS system should be designed and implemented in a manner that supports the organization's long-term vision and strategic initiatives.

To achieve strategic alignment, it is crucial for the project team to have a deep understanding of the organization's strategic direction and determine how the POS system can contribute to its success. This entails conducting a comprehensive analysis of the organization's business processes to identify areas where the POS system can enhance efficiency, improve the customer experience, or drive revenue growth.

Moreover, the project team must align the scope, features, and functionalities of the POS system with the organization's strategic priorities. This involves prioritizing the development and implementation of system components that are most critical to achieving the organization's strategic objectives.

Regular and effective communication and collaboration between the project team and key stakeholders, including senior management, play a vital role in ensuring strategic alignment. It is essential to actively involve stakeholders throughout the project lifecycle and seek their feedback to validate that the POS system is meeting strategic goals and delivering the desired impact on the organization's overall performance.

2.6 Cost Benefit Analysis

The following section in the document provides a detailed examination of the costs and benefits of the Bregghan POS System project. The aim of this analysis is to assess the financial viability of the project, considering the expenses as well as the projected advantages of the suggested system. The findings of the analysis will assist in determining if the project is a valuable investment for the client.

The costs considered in the cost benefit analysis include both upfront expenses, such as software development, hardware, and implementation costs, as well as ongoing operational costs like maintenance, upgrades, and support. These costs are carefully estimated and aggregated to provide a comprehensive understanding of the financial investment required for the POS system.

Costs:

Approved Budget	₱	1,000,000.00
Manpower Cost:	₱	546,240.00
Hardware Cost:	₱	178,418.00
Software Cost:	₱	3,654.00
Miscellaneous Cost	₱	88,200.00
Contingency Cost:	₱	81,651.20
Total Project Cost:	**₱**	**898,163.20**

Table IV Costs

Benefits:

Implementing a Point of Sale (POS) system in the Bregghan store can bring about a multitude of valuable advantages. Listed below are the several potential benefits:

- **Improved Efficiency**
  A POS system automates various processes, such as inventory management, sales tracking, and transaction processing. This will reduce the number of steps of the current manual system of Bregghan store.

- **Enhanced Accuracy**
  With a POS system, the chances of human errors in recording sales, calculating prices, or managing inventory are minimized. This leads to more accurate data and reduces discrepancies in stock levels and financial records.

- **Real-time Inventory Management**
  A POS system allows for real-time tracking of inventory levels, enabling the store to maintain optimal stock levels, avoid stockouts or overstocks, and improve inventory turnover. This ensures that popular products are readily available for customers while minimizing holding costs.

- **Improved Customer Service**
  With a POS system, store staff can quickly access product information, inventory availability, and customer purchase history, enabling them to provide personalized and efficient customer service. This enhances the overall shopping experience and fosters customer loyalty.

2.7 Alternative Analysis

Alternative systems offer different approaches to address the limitations of the current manual system and provide various benefits to the Bregghan store.

- **Status Quo:** The first alternative considered was to maintain the current process and not implement any changes.

  Pros: No upfront costs or disruption to existing processes and systems.

  Cons: Manual data entry and calculations are susceptible to human errors, such as miscounts, data inaccuracies, or calculation mistakes, which can impact inventory management, sales tracking, and financial records. Manual systems may struggle to handle increased volumes of data or

business growth, as they often lack the scalability and efficiency of automated systems. Manual systems typically do not provide real-time data updates, making it challenging to have immediate insights into inventory levels, sales performance, and other critical business metrics.

- **Manual Process Improvement**: The second alternative considered was to improve the existing manual process by introducing new tools and technologies, such as automation software.

  Pros: By introducing new tools and technologies, the manual process can be enhanced incrementally, allowing for a smoother transition, and minimizing disruption to ongoing operations.

  Cons: While introducing new tools and technologies can enhance the manual process, it may not fully automate all tasks, leading to ongoing manual effort and potential inefficiencies. The effectiveness of the improved manual process is still dependent on human input and diligence, making it susceptible to human errors, inconsistencies, and potential variations in execution.

- **Outsourcing:** The third alternative considered was to outsource the process to a third-party vendor. However, this option was rejected due to the lack of control over the process and potential security risks associated with sharing confidential company information with external parties.

  Pros: Outsourcing provides access to specialized skills and expertise that may not be available within the organization. This allows for the optimization of the process through industry knowledge and experience. By outsourcing, Bregghan can save costs by avoiding the need to hire and train additional staff, invest in infrastructure, and maintain software or hardware systems.

  Cons: Outsourcing relinquishes control over certain aspects of the process, such as decision-making, quality control, and data security, potentially affecting effective management and oversight. Working with external vendors may introduce challenges related to communication and coordination, including time zone differences, language barriers, or cultural variations. These can lead to misunderstandings and project delays.

3. Project Charter

3.1 Executive Summary

Ever since the establishment of the Bregghan mini grocery store, it has been using a pen and paper to track the stocks and sales that are going in and out of the store. In addition, the store's current Point of Sales System is a manual computation, and the receipts are handwritten. With the integration of the project, it will provide technology solutions which produces efficiency among workload in the said company.

3.2 Project Purpose Justification

This section of the paper will explain the purpose of the project that will be implemented which is the Bregghan Point of Sale System. Furthermore, the business case will also discuss on why the project is needed since it is with relation to how the small business operates.

3.2.1 Business Need/Case

The Bregghan Point of Sales System Application is created to change the manual recording of pen and paper which is used by the company to track sales and stocks, into a digitized version that will be used by the owner and their employee. This integration of technology solution will aid the client in utilizing stocks, analytical reports, and faster recording of sales throughout a day. The Bregghan mini grocery store perceived that the use of pen and paper to records stocks and sales takes up the time and efficiency. The company also noticed that an integration of this technology solution will allow them to ease the workload when checking the stocks and manual recording of sales.

3.2.2 Business Objectives

The business objectives for the project are listed below:

- Supply grocery needs to sundry stores in the area.
- Provide grocery needs to people in the area.
- Provide transparent pricing for items.
- Provide faster checkouts for customers.

3.3 Project Description

This integration of technology solution will aid the client in utilizing stocks, analytical reports, and faster recording of sales throughout a day. The Bregghan mini grocery store perceived that the use of pen and paper to records stocks and sales takes up the time and efficiency and the company also noticed that an integration of this technology solution will allow them to ease the workload when checking the stocks and manual recording of sales. This will be accomplished by the implementing systems for the admin and its employee which relates to each other, the admin monitoring the sales and stocks while the employee's system or Point-of-Sale will handle outgoing stocks from the grocery.

3.3.1 Project Objective and Success Criteria

The project team intends to accomplish the project as effectively as possible to help and improve the current system of Bregghan Store. The following listed objectives are the team needed to accomplish:

- To develop a responsive web application that accurately tracks sales and inventory for Bregghan mini grocery store, enabling real-time monitoring and reporting.
- Decreases the number of steps that the user can do in the whole transaction for faster checkouts.
- To fully digitize the recording of stocks and sales for Bregghan mini grocery store, ensuring that all inventory and sales transactions are accurately captured and stored electronically.
- To implement a notification system that alerts the user when stock levels reach a critical threshold, ensuring timely replenishment and avoiding stockouts.
- To automate the computation of sold items, ensuring accurate and efficient tracking of sales data.

3.3.2 Requirements

To achieve success, the project must meet the following requirements:

- **User-Friendly Interface:** The system should have a user-friendly interface for the staff and administrators of Bregghan can navigate and operate with ease.

- **Sales and Inventory Management:** The system should enable to track sales and manage inventory. Stock quantities should automatically update when purchases are made. It should provide real-time monitoring.

- **Reports and Analytics:** The system should generate transaction reports and analytics, including the top selling products, sales and which category of products are sold often.

- **Flexibility:** Different businesses have unique needs; the system should offer customized options to adapt the business rules.

3.3.3 Constraints

The following constraints pertain to the Bregghan Point of Sale System:

- **Budget constraints:** The project cannot exceed a certain budget, which may limit the scope or timeline of the project.

- **Time constraints:** The project must be completed within the designated timestamp.

- **Resource constraints:** The project may have limited staff, expertise, or technology available to complete the project.

3.3.4 Assumptions

The following is the list of the assumptions. Upon agreement and accepting this document at the end, all parties acknowledge that these assumptions are true and correct:

- The completed system will only be accessible for the client (Bregghan Mini Grocery Store).

- The developers that will work on this project will utilize open-source development tools and all the necessary tools for the testing environment will be provided by the client.

- The Bregghan Mini Grocery Store has the environment to reinforce the development, implementation, and the maintenance of the project.
- The budget and the project timeline will remain unchanged throughout the development of the project.

- The project will be managed and foreseen by the project sponsor and stakeholder. All the approvals or permission necessary will be gained promptly.

- The staff and the manager of the of the Bregghan Mini Grocery Store will gain all the necessary knowledge and skills to adapt to their new system as the developers will provide adequate time to teach them.

3.3.5 Preliminary Scope Statement

The scope of the project contains the development of two systems one for the manager and one for the cashier. The system will include features that can help the manager track the remaining stocks left and identify which items are sold. Furthermore, it can be used to transact items with customers, and it holds all the sales transacted within the day. The system will also include analytical reports for the manager to successfully restock on time. The project's completion will be determined by the success of its deployment to the client and its staff. Another part that will determine the completion of the project is with the implementation of the new system to the client and completely digitizing the current use manual pen and paper. Moreover, the project will include the support needed and training for the manager and the cashier of the mini grocery store.

3.4 Risks

The following risks for the PBL project are identified. The project manager should implement avoidance strategies appropriate to minimize the likelihood of these risks:

1. **Equipment failure**: Backlogs due to equipment break down.
2. **Limited resources**: the risk of insufficient resources which are budget, personnel, and equipment to attain the completion of the project.
3. **Human error**: There might be a risk of mistakes made by the project developers which can affect the completion of the project.
4. **Unforeseen instances**: There is a risk that could impact the project in unforeseen scenarios like natural disasters.
5. **Scope creep**: There is a risk that the scope may gain growth (additional requirements or features) that may lead to delays and budget overrun.
6. **Dependencies on other parties**: There is a risk that the project may depend on the performance and capabilities of external parties that can lead to other issues such as backlogs.
7. **Technological Changes**: There is a risk that there might be some changes in technology or the industry standards that may result in additional work or resources to the project.

3.5 Project Deliverables

The deliverables listed must be met to acknowledge the completion of the project. All changes that might arise within these deliverables must be approved by the project sponsor.

1. An Admin system that can monitor the sales of the mini grocery store.

2. An Admin system that can give analytical reports for the manager showing the top selling items.

3. A system that keeps tracks of the items left on the grocery store.

4. An Admin system that generates a sales report showing the trend for the total amount.

5. A cashier POS that can compute for the items bought by the customer.

6. A cashier POS that can print a receipt for a customer.

3.6 Summary Milestone Schedule

The project Summary Milestone Schedule is presented below. As requirements are more clearly defined this schedule may be modified. Any changes will be communicated through project status meetings by the project manager.

Summary Milestone Schedule	
Project Milestone	**Target Date**
Project Initiation	March 28, 2023
Project Planning and Preparation	May 01, 2023
Phase I - Analysis	May 19, 2023
Phase II - Design Completion	May 29, 2023
Phase III - Testing	July 11, 2023
Phase IV - Implementation	August 16, 2023
Project Close-out/Completion	October 20, 2023

Table V Summary Milestone Schedule

3.7 Summary Budget

The table below shows the summary budget for the project. This will include all the categories like the description and their estimated costs, and the proposed cost. The assessed budget is necessary for the project's completion.

Bregghan Point of Sale System				
Budget			Project Duration	
Project Cost Estimate (in Php)				
Manpower Cost				
Role	Monthly Salary	Number of Persons	Number of months	Total Cost
Project Manager	₱ 38,720.00	1	9	₱ 348480
Front-end Developer	₱ 19,040.00	1	3	₱ 57,120.00

Back-end Developer	₱ 28,640.00	1	3	₱ 85,920.00
Quality Assurance Tester	₱ 27,360.00	1	2	₱ 54,720.00
			Total Manpower Cost	**₱ 546,240.00**
Hardware Cost Estimate				
Name	Price	Units	Total Cost	
Acer Aspire Vero Intel Core i5 512GB16GB"	₱ 40,950.00	4	₱ 163,800.00	
Xiaomi Redmi Pad Mi Tablet 64GB 90Hz	₱ 12,999.00	1	₱ 12,999.00	
XP-9100G Wired/Wireless 1D Portable Scanner"	₱ 864.00	1	₱ 864.00	
XPRINTER-58mmIID Bluetooth+USB Thermal Printer	₱ 755.00	1	₱ 755.00	
			Total Hardware Cost	**₱ 178,418.00**
Software Cost Estimate				
Name	Price (monthly)	Number of licenses	Number of months	Total Cost
OpenProject	₱ 406.00	4	9	₱ 3,654
Visual Studio Code	Free	4	-	-
GitHub	Free	4	-	-
			Total Software Cost	**₱ 3,654.00**
Miscellaneous Cost				
Name	Price (monthly)	Count	Number of months	Total Cost
Monthly rent (Makiling St. Makati City)	₱ 5000.00	1	9	₱ 45,000.00
Electricity Bill	₱ 2500.00	1	9	₱ 22,500.00
Water Bill	₱ 800.00	1	9	₱ 7,200.00

Internet Bill	₱ 1500.00	1	9	₱ 13,500.00
			Total Miscellaneous Cost	**₱ 88,200.00**
			Total Cost Estimate	**₱ 816,512.00**
Contingency Cost Estimate				
Contingency Cost (10% of Total Cost Estimates)	₱ 81,651.20		₱ 81,651.20	
			Total Project Cost	**₱ 898,163.20**

Table VI Summary Budget

4. Work Breakdown Structure (WBS)

4.1 Introduction

The Work Breakdown Structure (WBS) is a vital project management tool that offers a structured method for organizing and overseeing project deliverables, tasks, and subtasks. This introductory section seeks to provide a thorough understanding of the WBS, its objectives, and the advantages it offers in project planning and execution. The main goal of introducing the WBS is to establish a shared understanding among stakeholders, project managers, and team members regarding the importance of the WBS. It highlights the significance of developing a well-organized WBS, which acts as a guide for achieving project success.

4.2 Outline View

The Outline view in a Work Breakdown Structure (WBS) presents a hierarchical depiction of the project's deliverables, tasks, and subtasks. It provides a structured and systematic approach to dividing the project scope into manageable parts, enhancing the ability to plan, track, and manage the project effectively.

1. Bregghan Point of Sale System

1.1 Project Initiation

1.1.1 Business Case
1.1.2 Feasibility Study
1.1.3 Project Charter
1.1.4 Identify Stakeholders
1.1.5 Final Review

1.2 Project Planning and Preparation

1.2.1 Project Description
1.2.2 Cost Management Plan

4.3 Hierarchical Structure

The hierarchical structure shares similarities with the outline view, but it does not include indentation. Instead, it utilizes levels, WBS Code, and Element Name to divide and classify the components.

Level	WBS Code	Element Name
1	1	Bregghan Point of Sale System
2	1.1	Project Initiation
3	1.1.1	Business Case
3	1.1.2	Feasibility Study
3	1.1.3	Project Charter
3	1.1.4	Identify Stakeholders
3	1.1.5	Final Review
2	1.2	Project Planning and Preparation
3	1.2.1	Project Description
3	1.2.2	Cost Management Plan
3	1.2.3	Schedule Management Plan
3	1.2.4	Scope Management Plan
2	1.3	Phase I: Analysis
3	1.3.1	Project Risk Analysis
3	1.3.2	Cost Benefit Analysis
2	1.4	Phase II: Design and Development
3	1.4.1	Admin System
4	1.4.1.1	Admin Log-in
4	1.4.1.2	Admin Home Page
4	1.4.1.3	Inventory
4	1.4.1.4	Transactions
4	1.4.1.5	Analytics Report
3	1.4.2	Point of Sale System
4	1.4.2.1	Cashier Log-in
4	1.4.2.2	Home Screen
4	1.4.2.3	Checkout Screen
4	1.4.2.4	Generate Receipt
2	1.5	Phase III: Testing
3	1.5.1	Requirement Analysis
3	1.5.2	Test Planning
3	1.5.3	Test Design
3	1.5.4	Test Execution
3	1.5.5	Test Evaluation

3	1.5.6	System Integration Testing
3	1.5.7	User Acceptance Testing
3	1.5.8	System Testing
2	1.6	Phase IV: Implementation
3	1.6.1	Deployment Planning
3	1.6.2	Installation
3	1.6.3	Data Migration
3	1.6.4	User Training
3	1.6.5	Monitor Progress
3	1.6.6	Post Implementation Review
2	1.7	Project Closeout/Completion
3	1.7.1	Finalize Project Deliverables
3	1.7.2	Confirm Project Completion
3	1.7.3	Review All Contracts
3	1.7.4	Review Documentation

Table VII Hierarchical Structure

4.4 Tabular View

The tabular view in a Work Breakdown Structure (WBS) presents the project's deliverables, tasks, and subtasks in a structured table format. It provides a clear and organized representation of the project's breakdown, allowing for easy tracking, analysis, and management of project components.

Level 1	Level 2	Level 3	
1. Bregghan Point of Sale System	1.1 Project Initiation	1.1.1 Business Case 1.1.2 Feasibility Study 1.1.3 Project Charter 1.1.4 Identify Stakeholders 1.1.5 Final Review	

	1.2 Project Planning and Preparation	1.2.1 Project Description 1.2.2 Cost Management Plan 1.2.3 Schedule Management Plan 1.2.4 Scope Management Plan	
	1.3 Phase I: Analysis	1.3.1 Project Risk Analysis 1.3.2 Cost Benefit Analysis	
	1.4 Phase II: Design and Development	1.4.1 Admin System 1.4.2 Point of Sale System	1.4.1.1 Admin Log-in 1.4.1.2 Inventory 1.4.1.3 Admin Home Page 1.4.1.4 Inventory 1.4.1.5 Transaction 1.4.2.1 Cashier Log-in 1.4.2.2 Home Screen 1.4.2.3 Checkout Screen 1.4.2.4 Generate Receipt
	1.5 Phase III: Testing	1.5.1 Requirement Analysis 1.5.2 Test Planning 1.5.3 Test Design 1.5.4 Test Execution 1.5.5 Test Evaluation 1.5.6 System Integration Testing 1.5.7 User Acceptance Testing 1.5.8 System Testing	

	1.6 Phase IV: Implementation	1.6.1 Deployment Planning 1.6.2 Installation 1.6.3 Data Migration 1.6.4 User Training 1.6.5 Monitor Progress 1.6.6 Post Implementation Review	
	1.7	1.7.1 Finalize Project Deliverables 1.7.2 Confirm Project Completion 1.7.3 Review All Contracts 1.7.4 Review Documentation	

Table VIII Tabular View

4.5 Tree Structure View

The tree structural view in a Work Breakdown Structure (WBS) illustrates the project's scope, tasks, and subtasks using a hierarchical tree format. It visually depicts the project's decomposition into smaller elements, showcasing the connections and dependencies between different levels of the WBS.

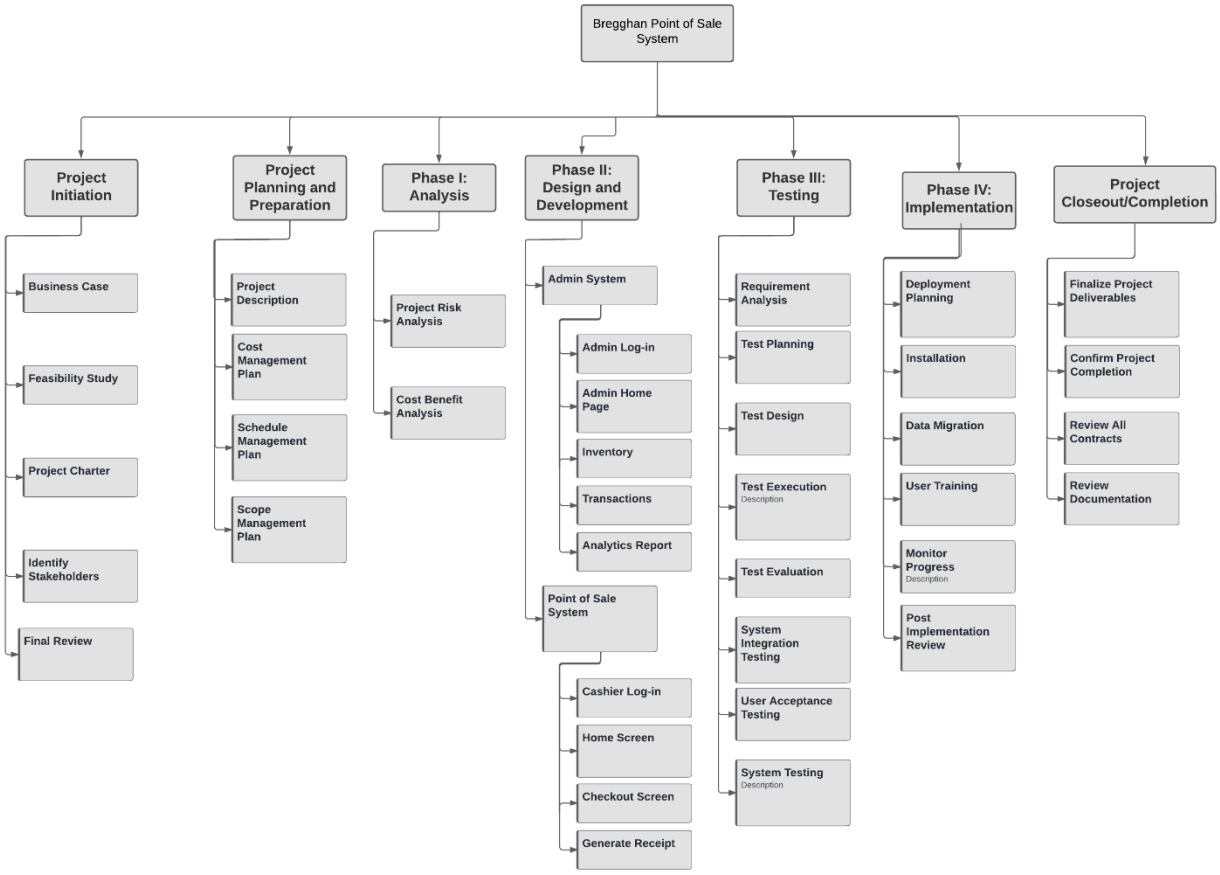

Figure 1 Tree Structure View

4.6 WBS Dictionary

A WBS Dictionary, also known as a Work Breakdown Structure Dictionary, is a document that contains in-depth information about the elements listed in a Work Breakdown Structure (WBS). It complements the WBS by providing additional details, descriptions, and specifications for each element. The WBS Dictionary includes essential information such as WBS codes, names, and descriptions. It serves as a valuable resource for project teams, stakeholders, and other involved parties, ensuring a shared understanding of the project's work breakdown structure and its associated components.

Level	WBS Code	Element Name	Description
1	1	Bregghan Point of Sale System	
2	1.1	Project Initiation	Define project objectives, scope, and stakeholders
3	1.1.1	Business Case	Why the project should be pursued
3	1.1.2	Feasibility Study	Analyze the project's potential
3	1.1.3	Project Charter	Define the purpose, objectives, and scope of the project
3	1.1.4	Identify Stakeholders	Determine the people or groups from whom the project will benefit
3	1.1.5	Final Review	Final review before proceeding to the next phase
2	1.2	Project Planning and Preparation	Initial phase to establish solid foundation for the project’s execution
3	1.2.1	Project Description	An overview of the purpose and objectives of the project
3	1.2.2	Cost Management Plan	An outline how the project’s costs will be estimated

3	1.2.3	Schedule Management Plan	An outline of the project's timeline on how it will be monitor, developed, and controlled
3	1.2.4	Scope Management Plan	An outline how the scope of the project will be defined
2	1.3	Phase I: Analysis	Assess project risks and costs benefits
3	1.3.1	Project Risk Analysis	Identifying and analyzing risks that may impact the project
3	1.3.2	Cost Benefit Analysis	Comparison of total cost and benefits
2	1.4	Phase II: Design and Development	Creation of the system of the project
3	1.4.1	Admin System	Start of creation of the admin system
4	1.4.1.1	Admin Log-in	Creation of log-in for the admin system
4	1.4.1.2	Admin Home Page	Creation of home page for the admin system
4	1.4.1.3	Inventory	Creation of inventory page for the admin system
4	1.4.1.4	Transactions	Creation of transactions page for the admin system
4	1.4.1.5	Analytics Report	Creation of analytics report for the admin system
3	1.4.2	Point of Sale System	Start of creation of the point of sale (POS) system
4	1.4.2.1	Cashier Log-in	Creation of log-in for the cashier
4	1.4.2.2	Home Screen	Creation of home screen for the cashier
4	1.4.2.3	Checkout Screen	Creation of checkout screen for the cashier
4	1.4.2.4	Generate Receipt	Generation of receipt that includes transaction details
2	1.5	Phase III: Testing	Processing of testing and evaluating the system
3	1.5.1	Requirement Analysis	Analysis of steps to pursue the project
3	1.5.2	Test Planning	Test plan that outlines testing strategy, objectives, scope, and resources required for testing

3	1.5.3	Test Design	Designing test cases that maximize the chances of detecting defects
3	1.5.4	Test Execution	Testing of project requirements
3	1.5.5	Test Evaluation	Analyzing of test results to determine if the project meets the requirements
3	1.5.6	System Integration Testing	Examines how integrated components interact and interface with one another.
3	1.5.7	User Acceptance Testing	Checking if project meets the user acceptance
3	1.5.8	System Testing	Quality assurance testing of the system
2	1.6	Phase IV: Implementation	Execution of planned solution
3	1.6.1	Deployment Planning	Determination of steps needed before deployment
3	1.6.2	Installation	Setting up of the system for the client
3	1.6.3	Data Migration	Encoding of data into the system
3	1.6.4	User Training	Administration and cashiers' system-use training
3	1.6.5	Monitor Progress	Tracking of project's progress
3	1.6.6	Post Implementation Review	Evaluation of the project's implementation
2	1.7	Project Closeout/Completion	Final stage of the project
3	1.7.1	Finalize Project Deliverables	Finalization of project deliverables
3	1.7.2	Confirm Project Completion	Confirmation of project completion
3	1.7.3	Review All Contracts	Checking of all contracts
3	1.7.4	Review Documentation	Evaluation of all the documentations of the project

Table IX WBS Dictionary

A WBS Dictionary, also known as a Work Breakdown Structure Dictionary, is a document that contains in-depth information about the elements listed in a Work Breakdown Structure (WBS). It complements the WBS by providing additional details, descriptions, and specifications for each element. The WBS Dictionary includes essential information such as WBS codes, names, and descriptions. It serves as a valuable resource for project teams, stakeholders, and other involved parties, ensuring a shared understanding of the project's work breakdown structure and its associated components.

4.7 Glossary of Terms

Level of Effort:	Level of Effort (LOE) is how much work is required to complete a task.
WBS Code:	A unique identifier assigned to each element in a Work Breakdown Structure for the purpose of designating the elements' hierarchical location within the WBS.
WBS Level:	The WBS is organized into different levels, each level presents specific detail of the project.

5. Project Management Plans

5.1 Stakeholder Management Plan

Introduction

This document's purpose is to identify and analyze all stakeholders of this project as they will have an impact and interest on the project. Moreover, this document will serve as a strategic roadmap to gain a better relationship with stakeholders and attain an efficient utilization of stakeholder support. In addition, the information about the stakeholders adjacent to the deliverables is found within this document.

Identify Stakeholders

Identifying stakeholders is important to attain continuous updates and refinement as the project progresses as they will be the ones that will give support and communication to ensure success on the project development. The stakeholder identification will include the internal and external stakeholders which contains the project team members, sponsors, owner, and customers. To identify the prioritization of stakeholders, the project team utilizes a stakeholder analysis which identifies the power and interest of each stakeholder. Furthermore, having methodologies such as

consultation meetings and document reviews can help the team in further identifying those people that have a personal interest in the project.

Key Stakeholders

The key stakeholders of the Bregghan Point of Sale System are the business owner/manager and their cashier. These individuals will directly impact the project as they are the people that will use the system and cater to their mini grocery store's customers. Moreover, the needs and the concerns of these key stakeholders must be met during project development. With the usage of the Bregghan Point of Sale System, it would enable the stakeholders to integrate a faster approach with regards to transactions and stocks management.

Name	Position	Internal/External	Contact Information
Ms. Devilyn Ligligen	Business Owner/Manager	Internal	bligligen@gmail.com
Cashier	Cashier Employee	Internal	bregghan@gmail.ccom
Ramon Benedict Elloso	Project Manager	Internal	bedictmann@gmail.com
Carlos Ligligen	Team Member	Internal	ccligligen@gmail.com
Andrei Gabriel Palma	Team member	Internal	gabriel.palmaandrei@gmail.com
Donne Paolo Tarinay	Team member	Internal	donnetarinay@gmail.com
Customer	Customer	External	-

Table X Stakeholder Register

Stakeholder Analysis

The stakeholder analysis is an important part of this documentation as it helps the project manager identify which stakeholders have the biggest influence on the project. In addition, having a stakeholder analysis can determine which stakeholders should be considered throughout the project development. With this part of the document, the project team could identify stakeholders that need prioritization so that they would know how to communicate with them throughout the project's development. The table listed identifies the project stakeholders which shows their corresponding impact on the project.

Name	Power	Interest	Roles	Stakeholder Contribution	Strategic Engagement on Stakeholder
Ms. Devilyn Ligligen	High/High	High	Project Sponsor/Internal User of the system	Approval of the Project and usage of the system	Schedule meetings
Cashier	Low/High	High	Internal user of the system	Usage of the system	Schedule meetings
Ramon Benedict Elloso	High/High	High	Project Manager	Manage the team and project development	Schedule meetings
Carlos Ligligen	Low/High	High	Back-End Developer	Create the back-end system	Schedule meetings
Andrei Gabriel Palma	Low/High	High	QA (Quality Assurance) Tester	Test functionality and usability of the system	Schedule meetings
Donne Paolo Tarinay	Low/High	High	Front-End Developer	Create the front-end of the system	Schedule meetings
Customers	Low/Low	High	-	-	-

Table XI Stakeholder Analysis

5.2 Scope Management Plan

INTRODUCTION

The Bregghan Mini Grocery business has adopted a traditional method of keeping records for their daily sales, using a pen and paper. Additionally, the store's current point-of-sale system depends on handwritten receipts and manual calculations to track transactions coming in and going out. The mini-grocery store only replenishes its stocks when they realize that a particular item is running critically low, and they are not efficiently keeping track of both the fast-selling and slow-selling items.

To establish a solid groundwork for achieving the project objectives and the desired outcomes in each sprint, the team made a concerted effort to gather as many client requirements as possible before initiating the project. This was done to gain a deeper understanding of the circumstances surrounding the Bregghan Mini-Market. Additionally, the store currently relies solely on receipt records to track sales and inventory, which places a heavy burden on the employees as they must maintain and refer to these receipts to determine the availability of stock. By integrating a responsive web application for inventory management and point of sale, the team aims to enhance the existing system and improve the store's inventory management and point of sale operations. Consequently, by the end of the project or deployment, the transition to digital sales activities in the mini grocery store should be apparent, facilitating easier use and accurate calculation of purchased items for customers. The project deliverables primarily consist of regularly updated documentation and progress reports, in addition to the final product itself.

SCOPE MANAGEMENT APPROACH

The scope approach of the project team ensures that every deliverable will be given in allotted time to the business owner. The client's criteria, which include a system that allows users to efficiently obtain copies of the goods that are sold, a sales and stock tracer, and other requirements, are the only ones that can be included in the project's management scope.

As for who has the authority and responsibility, the product manager is held accountable for the outcomes as for the scope measure to when we can call it verified for deployment. The project will reach the completion stage once all inquiries of the client are met and all commands that are developed by the project team are implemented from back to front end. The project deliverables are verified or approved by the client and the project manager before final changes.

ROLES AND RESPONSIBILITIES

Project Team	Roles	Responsibilities
Ms. Devilyn Ligligen	Project Stakeholder	Review deliverables provided by the team within specified dates.
Ramon Benedict Elloso	Project Manager	Responsible for overseeing and coordinating all aspects of the project, ensuring its successful planning, execution, and completion.
Carlos Ligligen	Back-end Developer	Develop the back-end architecture and ensure the proper functioning of the server, database, and APIs (Applications Programming Interface).
Andrei Gabriel Palma	Quality Assurance Tester	Identifying and reporting bugs, conducting various testing methodologies, and collaborating with the development team to resolve any issues.
Donne Paolo Tarinay	Front-end Developer	Responsible for creating the user interface and user experience of a website or application.

Table XII Roles and Responsibilities

SCOPE DEFINITION

The scope of the Bregghan Point-of-Sale System involves creating and deploying a robust software solution that optimizes point of sale operations for Bregghan stores. This includes functionality for managing product inventory, processing sales transactions, handling payment, generating receipts, reports, and analytics. Additionally, the scope encompasses the hardware and infrastructure components necessary for the system's successful deployment and operation.

To finalize the scope of the Bregghan POS (Point of Sale) System, the project team utilized meetings, whether in-person or virtual, to ensure clear communication and

alignment on the project objectives. These meetings provided an opportunity to discuss and refine instructions, address any questions or concerns, and establish a shared understanding of the desired scope. The project team, comprised of a project manager, front-end and back-end developers, and a quality assurance tester, worked collaboratively to define the specific features, functionalities, and goals that the project system should aim to achieve. Through expertise and contributions, the team ensured that the scope was comprehensive and aligned with the needs and requirements of Bregghan stores.

PROJECT SCOPE STATEMENT

Table XIII Project Scope Statement

Project Scope Description	• To develop a responsive web application that digitizes the recording of stocks and sales, automates computation of sold items, and produces reports. By implementing this solution, the staff and manager of Bregghan mini grocery store will be able to monitor stocks and sales in real-time, reducing workload and minimizing human error. This will lead to more efficient inventory management and faster checkouts, resulting in improved customer satisfaction. The system will also provide alerts when stock levels reach a critical point, allowing the store to replenish inventory on time and avoid potential revenue loss due to out-of-stock items. Furthermore, the application's capability to produce detailed sales reports will provide useful insights to the business, allowing for data-driven decision-making to further optimize operations and profitability.

Project Acceptance Criteria	• 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. • 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. • 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.
Project Deliverables	• To develop a responsive web application that accurately tracks sales and inventory for Bregghan mini grocery store, enabling real-time monitoring and reporting. • Decreases the number of steps that the user can do in the whole transaction for faster checkouts. • To fully digitize the recording of stocks and sales for Bregghan mini grocery store, ensuring that all inventory and sales transactions are accurately captured and stored electronically. • To implement a notification system that alerts the user when stock levels reach a critical threshold, ensuring timely replenishment and avoiding stockouts. • To automate the computation of sold items, ensuring accurate and efficient tracking of sales data.
Project Exclusions	• The Bregghan Point of Sales System is only accessible within the Bregghan mini grocery store.

Project Constraints	• Budget constraints: The project cannot exceed a certain budget, which may limit the scope or timeline of the project. • Time constraints: The project must be completed within the designated timestamp.
Project Assumptions	• All necessary funding and resources will be secured and available for the project's duration. • All stakeholders will be available and able to provide input as needed throughout the project lifecycle. • There will be no major technological or market disruptions that would impact on the project's success. • The project team will have the necessary expertise and skill sets to complete the project successfully.

WORK BREAKDOWN STRUCTURE

Bregghan Point of Sale System

1.1 Project Initiation

1.1.1 Business Case

1.1.2 Feasibility Study

1.1.3 Project Charter

1.1.4 Identify Stakeholders

1.1.5 Final Review

1.2 Project Planning and Preparation

1.2.1 Project Description

1.6.3 Data Migration

1.6.4 User Training

1.6.5 Monitor Progress

1.6.6 Post Implementation Review

1.7 Project Closeout/Completion

1.7.1 Finalize Project Deliverables

1.7.2 Confirm Project Completion

1.7.3 Review All Contracts

1.7.4 Review Documentation

SCOPE VERIFICATION

This section is verifying Bregghan Point of Sales System to match with the features allocated by the project team. It ensures that every detail that is within the scope and objectives as well as specifications of the project will be met by the end of the project sprint and will be able to provide satisfactory results to the client the verification process is to be discussed by the project team as well as the project stakeholders.

Furthermore, Inspection of the final output will be done regularly by the developers to ensure that all features and programs will work accordingly to the original blueprint to compare, a thorough understanding of the scope and the actual deliverable is necessary. Following the inspection process to be done by the project team a set of factors like quality and performance measurements should be considered to provide consistency with the product structure and will reach an acceptance rate by the project stakeholders.

SCOPE CONTROL

The Scope Control of the project as stated from the verification shows how the product will undergo different series of inspection by the project team, developers, stakeholders, and project manager. This part covers every aspect of the final product, including its features, functionalities, service, and quality. The project team also ensures that the product is regularly inspected to ensure that all developer-specified goals are achieved by the conclusion of the sprint.

During the inspection that will be done by the project team whenever there would be changes that needs to be conducted within the product the project manager will be the one tasked to ensure the monitoring of the progress should there be one and with the collaboration from the stakeholders as well as the developers and that any changes to

the system should be documented to keep track of the output milestones however not any changes will be based on the project manager. The stakeholders, developers, and the project team can also inquire about changes they think that can improve the user experience of the client by the time the project is released and to also brainstorm every aspect that needs to be improved during this stage.

5.3 Cost Management Plan

INTRODUCTION

The Cost Management Plan is developed to ensure effective management of project costs throughout the project's lifecycle. It outlines the procedures and guidelines for measuring, reporting, and controlling costs associated with the Bregghan Store Point of Sale System. This plan's purpose is to identify the cost management approach, roles and responsibilities, and procedures for managing costs consistently and effectively.

This plan is to establish a systematic method for efficiently overseeing and regulating the financial components of the POS (Point of Sale) system project. It empowers Bregghan to make well-informed choices, optimize the allocation of resources, and guarantee that the project is accomplished within the set budgetary limitations.

COST MANAGEMENT APPROACH

The cost management approach for the Bregghan Store POS project will be to ensure that all costs are identified and monitored throughout the project lifecycle. This will be done by tracking all costs associated with the project and comparing them against the project budget. Any deviations from the budget will be analyzed, and corrective action will be taken to keep costs within the approved budget.

The cost management approach for Bregghan Store POS System will be based on the following principles:

a) **Clear definition of costs**
   This will create and establish an estimate financial resource required for the POS system implementation. It ensures that all relevant expenses are identified and accounted for, enabling us to develop a realistic budget.

b) **Budget development and tracking**
   This involves creating a comprehensive budget plan that will help set clear

financial parameters and constraints for the POS system project. It involves estimating the costs associated with hardware, software, licensing, implementation, training, maintenance, and any other relevant expenses. By defining the budget, this will determine the financial boundaries within which the project should be executed.

c) **Cost estimates**
By having a clear understanding of the anticipated costs, this will evaluate different options, assess their financial feasibility, and select the most suitable solutions for the POS system.

d) **Cost variance analysis**
Through the comparison of actual incurred costs and budgeted costs, this will evaluate the project's alignment with the intended financial plan. This assessment allows for a comprehensive understanding of the project's effective management of financial resources.

e) **Cost management roles and responsibilities**
This guarantees that every team member understands their individual responsibilities in overseeing costs. With clearly defined roles, team members can actively participate in activities such as estimating costs, creating budgets, tracking expenses, and implementing cost control measures.

f) **Approval process for changes**
By establishing an approval process, this can thoroughly assess and evaluate any suggested modifications to the project's scope, requirements, or budget to determine their potential cost implications. This structured approach enables a thorough examination of the financial consequences before proceeding with any changes.

g) **Reporting and communication**
This will allow timely decision-making, as stakeholders can assess the financial health of the project and take necessary actions if deviations from the plan occur. Additionally, clear communication channels enable effective coordination and collaboration among team members, ensuring that everyone is aligned with the project's financial goals and responsibilities.

MEASURING PROJECT COSTS

The Cost Management Plan for the Bregghan POS System project will include a detailed approach for measuring project costs using Earned Value Management (EVM). This will include analyzing and reporting on various Earned Value metrics, such as:

The project team intends to assess the project's schedule performance by computing the Schedule Variance (SV) through subtracting the Planned Value (PV) from the Earned Value (EV). The Earned Value refers to the actual value obtained in the project, while the PV pertains to the value anticipated in the project plan for the current point. By considering the deviation between the planned and actual value, the project team can determine if the project is on schedule, ahead of schedule, or behind schedule, according to the baseline schedule in the project plan.

The team will determine the project's budget performance by calculating the Cost Variance (CV), obtained by subtracting Actual Costs (AC) from Earned Value (EV). EV represents the actual value earned in the project, while AC reflects the actual costs incurred to date. Therefore, by subtracting the actual costs from the EV, the team can determine whether the budget is above or below budget. If the CV is zero, it means the project is on budget. A CV greater than zero indicates that you are earning more value than planned, and the project is under budget.

Thea team will use Schedule Performance Index (SPI) to evaluate the actual progress made against the planned progress. It is calculated by dividing EV by PV. If the value of EV is equal to PV, then the SPI is 1. If EV is lower than PV, the SPI is less than 1, indicating the project is behind schedule. If EV is greater than PV, the SPI is greater than 1, indicating the project is ahead of schedule. An efficient project should have an SPI that is as close to 1 as possible, or even slightly below 1.

The team will utilize the Cost Performance Index (CPI) to contrast the value of completed work with the corresponding actual cost. The CPI is calculated using the formula EV/AC, with EV denoting the actual value achieved in the project and AC representing the total actual costs incurred thus far. If the CPI equals 1, the project is within the budgetary confines. If the CPI surpasses 1, the project is operating under the budget, while a CPI below 1 indicates that the project is exceeding the budget.

REPORTING FORMAT

The team will provide provides a structured and standardized way to communicate cost-related information within the project.

The report will include the following:

1. Earned Value Metrics
    - Cost Performance Index (CPI): [CPI Value]
    - Schedule Performance Index (SPI): [SPI Value]
    - Cost Variance (CV): [CV Value]
    - Schedule Variance (SV): [SV Value]

The monthly project status report will feature a specific segment dedicated to cost management. Within this section, the report will display the earned value metrics, including the cost performance index (CPI), schedule performance index (SPI), cost variance (CV), and schedule variance (SV).

2. Cost Variances
   Any cost variances outside the thresholds specified in the Cost Management Plan will be reported, including the following details:
    - Description of the variance
    - Magnitude of the variance
    - Impact on project budget
    - Planned corrective actions to address the variance.

Any cost discrepancies that surpass the predetermined thresholds outlined in the Cost Management Plan will be documented and reported. This includes providing a detailed explanation of the variance, quantifying its magnitude, assessing its impact on the project budget, and outlining the corrective actions that are planned to address the deviation.

3. Change Requests

Change Requests triggered by project cost overruns will be identified and tracked in this report, including the following details:

- Description of the change request
- Reason for the change
- Estimated impact on project cost.
- Status and progress of the change request

Any change requests triggered by cost overruns will be identified and tracked, including their description, reason, estimated impact on project cost, and status. The report will

also summarize the overall project cost, including the total budgeted cost, actual cost incurred to date, remaining budget, and estimated cost at completion.

4. Summary
    - Provide a summary of the cost management status and any significant findings or observations related to project costs.

The conclusion section will summarize the cost management status and highlight any notable findings or observations related to project costs.

5. Attachments
    - Include any relevant supporting documents or reports related to cost management.

COST VARIANCE RESPONSE PROCESS

The Cost Variance Response Process for the Point-of-Sale System project is outlined below:

- **Identify and Assess Cost Variances**
  The project team reviews the financial information and evaluates it in relation to the predefined thresholds or benchmarks outlined in the Cost Management Plan. When there is a substantial difference between the actual costs and the planned budget, it signifies the presence of a cost variance.

- **Analyze the Causes**
  The project team will examine the underlying causes and investigate various elements such as changes in scope, unexpected expenses, resource allocation issues, inaccurate cost estimations, or external factors impacting the project budget.

- **Assess the Impact**
  Assess the consequences of the cost variances on the project's schedule, resources, and overall goals while considering the potential impact on other project constraints, including quality, scope, and stakeholder contentment.

- **Develop Corrective Actions**
  After analyzing the root causes and evaluating the consequences, the project team will identify and outline precise corrective measures to tackle the cost variances. These measures might involve modifying the budget, reallocating resources, reevaluating the project scope, or implementing cost-reduction strategies.

- **Implement Corrective Actions**
  The project team must implement the defined corrective actions and closely monitor their efficacy in mitigating or resolving the cost variances. This could entail adjusting the project plan, reallocating resources, renegotiating contracts, or pursuing additional funding if required.

- **Monitor and Control**
  The project will have to monitor and regularly observe its financial progress and assess the impact of the applied corrective measures through ongoing monitoring.

COST CHANGE CONTROL PROCESS

The cost change control process will adhere to the existing procedure for project change requests. The team will ensure that any proposed changes related to project budget or costs are carefully evaluated, documented, and reviewed by relevant stakeholders.

- Identification of Change
  All suggested alterations that could affect the project's expenses are recognized and recorded. This encompasses modifications to the project's scope, requirements, resources, or any other aspect that could potentially result in financial consequences. Any proposed changes to the project budget or costs must be submitted to the project manager in writing using the Cost Change Request Form.

- Change Assessment
  The proposed change is assessed to determine its impact on the project budget. A comprehensive analysis is performed to gauge the financial implications, considering the potential increase or decrease in costs.

- Cost Estimation
  The project team evaluates the monetary consequences of the suggested alteration. This entails estimating the direct and indirect expenses linked to implementing the change, considering factors such as labor, materials, equipment, and overhead costs.

- Cost Analysis
  The analyzed cost estimates are examined to comprehend the broader effect on the project's budget. This examination aids in evaluating the practicality of the change and its alignment with the project's financial goals.

- Approval Process
  The proposed change is presented for approval using the established change management process. Relevant stakeholders such as project sponsor and key decision-makers evaluate the change request and decide considering its impact, feasibility, and alignment with the project's financial limitations.

- Implementation
  Once the change receives approval, it is executed following the agreed-upon protocols. This could entail modifying the project plan, adjusting the budget, reallocating resources, or undertaking any required measures to accommodate the approved change.

- Documentation
  All changes, including the associated costs, approvals, and implementation details, are documented for future reference. This documentation helps in maintaining an accurate record of cost changes and provides a historical reference for similar situations in the future.

PROJECT BUDGET

The budget for this project is detailed below. Costs for this project are presented in various categories:

Table XIV Project Budget 1

Approved Budget	₱	1,000,000.00
Manpower Cost:	₱	546,240.00
Hardware Cost:	₱	178,418.00
Software Cost:	₱	3,654.00
Miscellaneous Cost	₱	88,200.00
Contingency Cost:	₱	81,651.20
Total Project Cost:	**₱**	**898,163.20**

Bregghan Point of Sale System				
Budget			Project Duration	
Project Cost Estimate (in Php)				
Manpower Cost				
Role	Monthly Salary	Number of Persons	Number of months	Total Cost
Project Manager	₱ 38,720.00	1	9	₱ 348480
Front-end Developer	₱ 19,040.00	1	3	₱ 57,120.00
Back-end Developer	₱ 28,640.00	1	3	₱ 85,920.00
Quality Assurance Tester	₱ 27,360.00	1	2	₱ 54,720.00

			Total Manpower Cost	**₱ 546,240.00**
Hardware Cost Estimate				
Name	Price	Units	Total Cost	
Acer Aspire Vero Intel Core i5 512GB16GB"	₱ 40,950.00	4	₱ 163,800.00	
Xiaomi Redmi Pad Mi Tablet 64GB 90Hz	₱ 12,999.00	1	₱ 12,999.00	
XP-9100G Wired/Wireless 1D Portable Scanner"	₱ 864.00	1	₱ 864.00	
XPRINTER-58mmIID Bluetooth+USB Thermal Printer	₱ 755.00	1	₱ 755.00	
			Total Hardware Cost	**₱ 178,418.00**
Software Cost Estimate				
Name	Price (monthly)	Number of licenses	Number of months	Total Cost
OpenProject	₱ 406.00	4	9	₱ 3,654
Visual Studio Code	Free	4	-	-
GitHub	Free	4	-	-
			Total Software Cost	**₱ 3,654.00**
Miscellaneous Cost				
Name	Price (monthly)	Count	Number of months	Total Cost
Monthly rent (Makiling St. Makati City)	₱ 5000.00	1	9	₱ 45,000.00
Electricity Bill	₱ 2500.00	1	9	₱ 22,500.00
Water Bill	₱ 800.00	1	9	₱ 7,200.00
Internet Bill	₱ 1500.00	1	9	₱ 13,500.00
			Total Miscellaneous Cost	**₱ 88,200.00**
			Total Cost Estimate	**₱ 816,512.00**
Contingency Cost Estimate				

Contingency Cost (10% of Total Cost Estimates)	₱ 81,651.20	₱ 81,651.20	
		Total Project Cost	**₱ 898,163.20**

Table XV Project Budget II

Maintenance Cost Estimate

The maintenance cost estimate helps the project team project the costs linked to continuous system maintenance and support tasks. It supports the team in planning and distributing the required resources and budget for sustaining the POS system once it is implemented. By estimating the maintenance costs, the project can guarantee the availability of adequate funds to address routine updates, bug fixes, system improvements, and technical support needs.

Maintenance Cost Estimate (per year after project completion)			
Name	Price (annually)	Units	Total Cost
Hosting: Amazon Web Services	₱ 3,000.00	1	₱ 3,000.00
Software Maintenance	₱ 8,000.00	1	₱ 8,000.00
Hardware Maintenance	₱ 10,000.00	1	₱ 10,000.00
		Total Maintenance Cost	**₱ 21,000.00**

Table XVI Maintenance Cost Estimate

5.4 Schedule Management Plan

Introduction

The Schedule Management Plan offers instructions for creating, tracking, and managing the project schedule. It contains details on the schedule creation, identifying project milestones, tracking, and reporting progress, and managing schedule adjustments. The schedule management plan will also include how the team will monitor the project's schedule and manage the changes in accordance with the approved baseline schedule.

Schedule Management Approach

This schedule management approach creates an outline for the processes used for the project. This section of the paper will also ensure that the project will be completed on time, within the given budget, and the client's features and requirements are met. All changes to the project schedule will be communicated to the stakeholders promptly. To ensure that the project is on time and in adherence to the schedule, monitoring of the project should be implemented.

- Regular meetings are required for the team to discuss all the progress and address any issue that may arise.

- The assigned project manager will be responsible for the regular status reports to all stakeholders and the project sponsor for them to be informed about the project's progress.
- The assigned project manager will be responsible for monitoring the project's progress regarding the schedule, budget, issues, potential delays, and risk mitigation.
- The project team will utilize software on project management to attain a strong adherence to the deadlines.

Schedule Control

The schedule control will ensure that the schedule is being followed and maintained by the team in accordance with the project's progress. The procedure the team will incorporate to manage the project's schedule control is schedule reporting.

The team's project schedule will be constantly monitored by the project manager and the stakeholder. With this, any changes will be constantly reviewed. In addition, the project manager is also responsible for the updates with regards to the meetings, reports, and schedule.

The project team is also responsible for the weekly updates in coordination with the project manager. Furthermore, they are the ones that will communicate any changes of dates to the project manager.

The project stakeholder is responsible for maintaining awareness of the project schedule and will review or approve any changes that might occur in the future in collaboration with the project manager.

The team process to control the project schedule is by using schedule reporting. This will be done in a weekly basis and should adhere to the following:

- Report of the members stating the percentage of their task completion within a given time.
- Weekly team meetings
- Risk and mitigation strategies raised by the project team members.
- Communication with stakeholders every week

Schedule Changes and Thresholds

All the changes that will occur or be raised will be reviewed by the project manager, and he will request a meeting with the team and the stakeholders for the change's evaluation. With these, before a change is implemented, its effects on the project schedule and other project parameters must be assessed. After the assessment of the change, the project

manager will determine if the changes should be addressed and will proceed to the submission of the schedule change request which can be found at the end of this document. Only the project manager can submit the schedule change request form to the stakeholder/project sponsor. Once done, the project manager must inform the project team members about the changes and must update the project schedule.

Submittal of a schedule request change request to the project stakeholder for approval is required if either of the following conditions is true:

- The proposed modification will either result in an individual work package's duration increasing or decreasing by 10% or more.
- If the approach will reduce or increase the project's duration with regards to the schedule by 10%.

With the establishment of processes and thresholds for the schedule changes, the team will have control over the project's progress. Furthermore, having these will ensure that all the changes will be monitored, reviewed, and will be addressed in a timely manner.

Scope Change

All changes in project scope approved by the project sponsor will require the team to assess the scope change's effect in the current schedule. The proposal of a change would be possible is when a problem develops in the project that necessitates a significant modification of the project scope. Furthermore, any change should be approached by the team with caution as any outcome would positively or negatively affect the project's progress. The changes can be raised by any team member and the project stakeholder must receive all the change requests in the form of a project change request document.

5.5 Human Resource Management Plan

Introduction

This section outlines the strategies and practices necessary to effectively manage the human resources involved in the project. By aligning the project's goals with the skills and expertise of the team members, the Human Resource Management Plan ensures the project is staffed with the right individuals, promotes a collaborative work environment, and supports the achievement of project objectives.

By utilizing this strategy, the project manager and team can efficiently oversee the project by guaranteeing that each team member comprehends their tasks and obligations, promoting transparent and efficient communication, and monitoring and handling performance in a manner that contributes to the overall achievement of the project.

Roles and Responsibilities

An effective human resource plan is necessary for the execution of the Bregghan Point-of-Sale project. This will ensure the project team has the appropriate skills and expertise to effectively execute the project. By clearly defining roles and responsibilities, the human resource plan helps minimize confusion, improve coordination and collaboration among team members, and increase overall project efficiency. It also facilitates effective communication and accountability within the project team, leading to better project outcomes.

Roles	Authority	Responsibility	Competency
Project Sponsor	The project sponsor plays a role in endorsing the project's business case and budget, offering strategic guidance, allocating resources, facilitating stakeholder support, and resolving significant challenges and disputes.	Make critical decisions related to the project, including approving the project's initiation, scope, and major changes. Provide guidance and direction to the project manager, endorse the allocation of resources, and facilitate stakeholder engagement.	Have a diverse set of skills and abilities that allow them to effectively carry out their responsibilities. These encompass exceptional leadership and persuasive skills, strategic thinking, the capability to align projects with organizational objectives, expertise in stakeholder management and communication, financial proficiency, and a comprehensive understanding of the organization's operations and industry.

Project Manager	Overseeing and managing the entire project from initiation to completion.	Make decisions and take necessary actions within the project's scope. Have the power to allocate resources, set timelines, and enforce project policies and procedures.	Accountable for the project's outcomes and ensuring that it meets its objectives. Responsible for creating a project plan, defining deliverables, managing risks, and ensuring that the project is executed within budget and on schedule.
Frond-end Developer	Responsible for creating the user interface and user experience of a website or application.	They have the authority to design and implement the visual elements, layout, and interactivity, ensuring a seamless and visually appealing user interface.	It is crucial for a front-end developer to possess strong coding skills, proficiency in front-end technologies such as HTML, CSS, and JavaScript, and a deep understanding of user-centered design principles to effectively fulfill their role.
Back-end Developer	Accountable for creating and executing the server-side logic and database features of a website or application.	Develop the back-end architecture and ensure the proper functioning of the server, database, and APIs (Applications Programming Interface).	Proficiency in programming languages such as Java, Python, or PHP, database management, server administration, and problem-solving skills to handle complex back-end operations and ensure smooth data processing and retrieval.
Quality Assurance Tester	Evaluate and test software	Identifying and reporting bugs,	Strong analytical skills, attention to

	applications or systems to ensure they meet quality standards and requirements.	conducting various testing methodologies, and collaborating with the development team to resolve any issues.	detail, proficiency in testing tools and techniques, and the ability to effectively communicate and document test results.
Manager (User of Admin System)	Holds the responsibility of overseeing the entire store's operations, which encompass sales and inventory tracking, facilitated by the digitized system. The manager plays a vital role in fostering efficiency, enhancing inventory management, boosting sales, improving the customer experience, and upholding a competitive edge.	The manager possesses significant decision-making power concerning the admin system, exerting high authority in this regard. They are accountable for making strategic choices concerning the system's implementation, customization, and utilization. Additionally, the manager has the authority to allocate resources efficiently, encompassing budgetary decisions for the system's implementation and ongoing maintenance.	Responsible for providing guidance and support to the staff in utilizing the admin system, ensuring that it is used to its full potential. They are also responsible for tracking key performance indicators, analyzing data generated by the system, and making informed decisions based on the insights obtained.
Staff (User of POS (Point of Sale) System)	Responsible for utilizing the system to process customer transactions, manage inventory, and provide accurate sales information.	The staff members have the authority to access and operate the POS system within their designated roles. They can perform tasks such as scanning products, processing payments, updating	The staff members are responsible for using the POS system accurately and efficiently. This includes ensuring that all customer transactions are processed correctly, maintaining

		inventory levels, and generating sales reports.	accurate inventory records, and promptly reporting any system issues or discrepancies to the manager.

Table XVII Roles and Responsibilities

Project Organizational Charts

This portion offers a visual representation of the Bregghan Point-of-Sale System project's tasks and team members. The objective is to demonstrate the responsibilities of each team member in relation to the project tasks. The Business owner oversees managing the admin system and the project's overall success. Next in line is the Project Manager who oversees the entire project from initiation up to the completion phase of the project. Additionally, the front end and back-end developers of the project team are responsible for creating the Bregghan Point-of-Sale System that will be used by the store manager and the cashier of the Bregghan store. The organizational chart functions as a valuable resource for defining the duties and obligations of each team member, encouraging synchronization with the project's goals, and facilitating efficient teamwork.

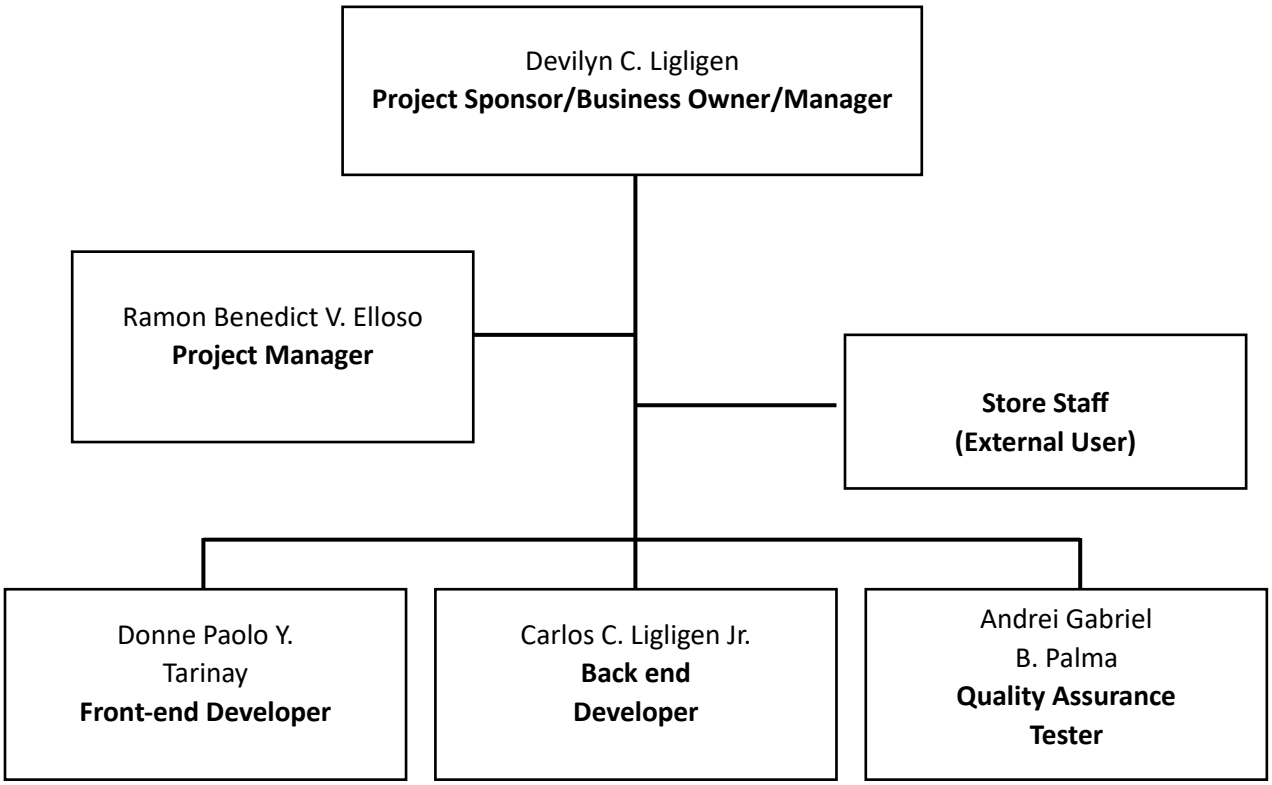

Table XVIII Project Organization Charts

Staffing Management

The Staffing Management Plan is a vital element of the Bregghan Point-of-Sale system project, playing a crucial role in its effective implementation. It details the approaches and procedures for acquiring, overseeing, and releasing human resources during the various stages of the project.

- The staffing management plan will outline the process for acquiring the necessary human resources for the POS project. This includes determining the required skill sets, job roles, and responsibilities, and identifying the recruitment methods to attract qualified candidates.

- The staffing management plan will address any skill gaps identified among the project team members. It will define the training and development programs to enhance their skills and ensure they have the necessary competencies to perform their roles effectively.

- The plan will establish a framework for conducting performance reviews to assess the individual and team performance on the project. It will outline the criteria for evaluation, the frequency of reviews, and the process for providing feedback to team members.

- The staffing management plan will include a rewards and recognition system to motivate and acknowledge the achievements of team members. It will define the criteria for rewards, such as bonuses or promotions, and outline the process for recognizing exceptional performance.

Role	Project Responsibility	Skills Required	Performance Reviews	Recognition and Rewards
Project Team Leader	Responsible for overseeing and coordinating all aspects of the project, ensuring its successful planning, execution, and completion.	Being a project team leader requires strong leadership, communication, and problem-solving skills, and the ability to effectively manage resources, mitigate risks, and drive	Assess the ability to effectively lead the team, meet project objectives, foster collaboration, and demonstrate strong decision-making and	Acknowledging their exceptional leadership, successful project delivery, and the ability to inspire and motivate team members, resulting in project success and

		project progress.	problem-solving skills.	positive outcomes.
Project Team Member	Actively participating in project activities, collaborating with team members, and delivering assigned tasks and deliverables within the given times.	Effective collaboration and communication skills, the ability to work well in a team environment, and a strong commitment to meeting project objectives and deadlines. This will also include skills like web development, database management, etc.	Assess each contribution to the project, adherence to deadlines, quality of work, teamwork, and their ability to meet project objectives.	Provide exceptional performance, dedication, teamwork, and valuable contributions to the project's success.

Table XIX Staffing Management

5.6 Change Management Plan

INTRODUCTION

This plan intends to direct and aid in the smooth changeover from the existing system to a new innovative system. Bregghan will experience major change when a new POS (Point of Sale) system is implemented since it affects many distinct parts of operations, procedures, and personnel.

This Change Management Plan's objective is to present an organized plan that will aid in ensuring a seamless transition to the new POS system. It will offer a precise road map for dealing with change's difficulties, including stakeholders, and promoting the adoption and integration of the new system into routine operations. We want to reduce interruptions, increase user acceptability, and achieve the intended business objectives by actively managing the transition.

A new POS system's implementation is a major work, but with a well-organized change management strategy in place, the business may effectively manage the transition. The business may accomplish a seamless adoption of the new POS system and enjoy its

advantages by addressing difficulties, including stakeholders, offering training and support, and maintaining excellent communication. The project will be guided by this change management plan, which will ensure that every component of change is properly controlled and tracked.

CHANGE CONTROL BOARD

A crucial step in the change management procedure of an organization is the Change Control Board (CCB). It acts as a governing body charged for examining, assessing, and accepting or rejecting suggestions for modifications to the documentation inside a project or throughout the entire business. The main goal of the CCB is to make sure that all changes or updates to documents are well studied, in line with business objectives, and compliant with accepted standards and procedures. The table below shows the information of each stakeholder in charge of Change Control Board:

Change Control Board Role	Role	Name	Contact	Responsibilities
Change Control Board Chair	Project Sponsor	Ms. Devilyn C. Ligligen	bligligen@gmail.com	• Approve or deny high • impact changes. Has the responsibility to review the minimal impact changes and can overturn decisions made by the Project Manager about change requests.
Change Control Board Member	Project Manager	Ramon Benedict V. Elloso	bedictmann@gmail.com	• Determines if the impact of the change request is high or low. • Approve or deny minimal impact • changes. Responsible for formulating an action plan to implement the change request, if approved. • Communicates the required actions to implement the changes. • Update the project plan, budget, and schedule as needed.

Change Control Board Member	Change Coordinator	Carlos C. Ligligen	ccligligen@gmail.com	• Ensures that the Change Management process is properly • implemented. Responsible for • updating the change logs accordingly. Prepare Change Status Report. • Create a report at the end of each month summarizing the status of the contents of the change control logs.

Table XX Change Control Board

ROLES AND RESPONSIBILITIES

The responsibilities for each project participant during the change management process are listed in the following table:

Name	Project Role	Responsibilities
Ms. Devilyn C. Ligligen	Project Sponsor	• Communicate the change message effectively to all stakeholders. • Engage and influence stakeholders throughout the change process. • Identify, assess, and manage risks associated with the change effort.
Store Manager	Internal user of the system	• Test and quality assurance. • Monitor the system performance and gather feedback.
Cashier Staff	Internal user of the system	• Test and quality assurance. • Monitor the system performance and gather feedback.
Ramon Benedict V. Elloso	Project Manager	• Assess the impact of proposed changes on various aspects such as processes, systems, and personnel. • Coordinate the implementation of changes, ensuring that they are executed according to plan and within specified timelines. • Manage the entire change request process in collaboration with the Change Coordinator.
Carlos C. Ligligen	Back-End Developer	• Review and understand proposed changes to the back-end systems. • Collaborate with the project team to plan and implement back-end changes.
Andrei Gabriel Palma	QA (Quality Assurance) Tester	• Review and understand proposed changes and their impact on the system.
Donne Paolo Y. Tarinay	Front-End Developer	• Review and understand proposed changes to the back-end systems • Collaborate with the project team to plan and implement front-end changes.

Table XXI Roles and Responsibilities

CHANGE CONTROL PROCESS

The process of change control for a document encompasses a sequence of steps and protocols to effectively handle alterations, revisions, and updates to the document. It guarantees thorough review, approval, implementation, and communication of changes. Below is an outline of the change control process for a document:

Figure 2 High level view of the change request process flow

Process step	Description	Change Log Status
Change Request Initiation	Any stakeholder who identifies the need for a change in the document will initiate a change request. This can be done by communicating through a meeting.	Submitted
Change Request Review	The change request will be reviewed by the project team. They evaluate the characteristics, consequences, and practicality of the suggested modifications.	In Review
Change Impact Assessment	A comprehensive evaluation is conducted to analyze how the proposed changes will affect the document. This assessment encompasses an examination of their potential impact on the project schedule.	In Review

Approval	Change control board reviews and grants approval for the change request, ensuring that the proposed modifications are in accordance with organizational standards, regulatory obligations, and document management policies.	Approved or denied
Change Implementation	After receiving approval for the change request, the document undergoes the necessary modifications.	Ready for Implementation

Table XXII Flow of the change request process

To monitor the progress of change requests, each step is associated with a specific status, as indicated in the table provided below:

Status	Description
Submitted	A change request log submitted by a member of the project team or key stakeholders awaits review by the Change Control Board to perform an impact analysis.
In Review	An analysis is being conducted to assess the potential impact
Approved	The change request has received approval and is now ready for implementation

Denied	The change request has been rejected.
Ready for Implementation	The change request is prepared and ready to be implemented.

Table XXIII Change request status description

5.7 Communications Management Plan

Introduction

The communication management plan will provide a structured approach for managing ang controlling project communications. Furthermore, it will help guarantee that all the information delivered to the stakeholders are true, accurate, and correct by using the most effective communication channels. With this, the team can mitigate risks, engage more with the stakeholder, and improve coordination.

This document also supports the processes for communication which can help minimize misunderstandings and facilitate project success. Furthermore, it defines the communication methods, key messages, and certain expectations on how the communication will flow. With this document, the team can identify which type of communication best suits a specific scenario for an effective communication within the project and ensure that every information conveyed to the stakeholders is true and correct.

Communications Management Approach

The Communications Management Approach will be handled by the project manager and will ensure effective communication in the project. Furthermore, the project manager will ensure foreseeing the project and reporting the performance of each team member. He will also be responsible for seeing with the project stakeholders and is responsible for organizing meetings, meetings with the team members, and implementing a project plan.

The main communication zone for the team would be the creation of a team in Microsoft Teams in which all the documentation, minutes of the meeting, and status reports would be placed. Moreover, implementing this would ensure that all the team members would collaborate with each other in terms of accomplishing their tasks and at the same time adhere to the deadlines. With this, the project manager can convey all the necessary information to ensure stakeholder satisfaction.

Communications Management Constraints

Effective project-related communications will be made possible by the project manager. The project manager will be held responsible for monitoring the project and reporting on its progress to the project team members and stakeholders. With this, there are some constraints that might hinder the project's progress, and it is important to identify these for the project manager and the team to produce risk mitigation. Some of the constraints that could limit the communication process among the stakeholders are within these factors:

- **Stakeholder availability**: With busy schedules and conflicting priorities, project stakeholders might find it difficult to attend meetings which can hinder the team in obtaining feedback which might lead to delayed communication.

- **Time constraints**: This factor might affect the communication process of the team and the project due to the strict adherence to the deadlines, it can limit the communication activities which can result in a limited opportunity. These things are spending more time on meetings for in-depth discussions which can have an impact resulting in more comprehensive communication.

- **Technical issues**: This would affect the communication process as there would be times when online meetings are necessary. Some of the factors that affect this would be the internet connection, the condition of the device, and the technological experience.

Stakeholder Communication Requirements

The stakeholder communication requirements emphasize identifying the guidelines needed for effective communication throughout the project. Moreover, this part of the document will show all the requirements needed to build trust, credibility, and satisfaction among stakeholders. These are the things that are necessary to be standardized to attain a better relationship with the stakeholders:

- **Ensure information accuracy and relevance:** the project team should understand and identify the specific needs of each stakeholder and it should be tailored within their interests, responsibilities, and roles. Furthermore, only the relevant information should be conveyed to each stakeholder to ensure confidentiality.

- **Identify the communication channels:** identify the most effective communication channels for the stakeholders. This would ensure the project team had a better engagement with the stakeholders.

- **Give rapid regular updates: this** would ensure that all the possible risks that might arise are conveyed to the stakeholders as soon as possible. Furthermore, this would also guarantee that all necessary or relevant information is conveyed to the stakeholders promptly.

Roles

Project Sponsor

The project sponsor is one of the key stakeholders which provides support for the project. They are also responsible for reviewing any changes to the project. Furthermore, they provide finances and processes necessary for the direction of the project. Lastly, their involvement and support are vital for the project's successful completion.

Project Manager

The project manager is the one that plans, executes, and oversees the successful completion of the project. He/she is also responsible for maintaining the schedule, scope, budget, and the resources. In addition, their role is vital to the project team coordination as they will convey all the necessary requirements and critical decisions that would lead to a successful project. Lastly, their role is vital in communication with project stakeholders as they will be the ones that will convey all the changes and updates.

The project manager is also responsible for all the documentation needed for the project. He/she is the one that gives updates that might occur in the project development. Furthermore, their role is to ensure that all the documentation in the project lifecycle is up to date, accurate, and accessible.

Development Team

The development team are the ones responsible for implementing the technical aspects of the project. They are the ones responsible for developing, testing, and designing the project. Furthermore, their role is to ensure that the project's vision will turn into reality. Lastly, their task is to achieve the project's objectives.

Project Team Directory

The following table presents contact information for all persons identified in this communications management plan. The email addresses and phone numbers in this table will be used to communicate with these people.

Role	Name	Title	Type of stakeholder	Email
Project Sponsor	Devilyn Ligligen	Bregghan Mini Grocery store owner	Internal	bligligen@gmail.com
Project Manager	Ramon Benedict Elloso	Project Manager	Internal	ramonbenedict@gmail.com
Development Team	Donne Paolo Tarinay	Front – end developer	Internal	donnetrainay@gmail.com
Development Team	Carlos Ligligen	Back-end developer	Internal	ccligligen@gmail.com
Development Team	Andrei Gabriel Palma	Quality Assurance Tester	Internal	gabriel.palmaandrei@gmail.com

Table XXIV Project Team Directory

Communication Methods and Technologies

For effective communication with the stakeholders, the project team needs consistent communication, especially when it comes to meetings. With this, misunderstandings would be prevented, and better relationships or rapport will be established between the stakeholders and the project team. In addition, constant updates and the project team being open with each other, including the stakeholders, will result in a decent work environment which can result in giving the best quality output. With this relationship, the project team members can give timely updates and offer the stakeholders a better understanding of project development.

Having the necessary utilities such as project management software and Microsoft Teams will help the project team in conveying all the necessary information to the stakeholders for them to be updated and satisfied.

Some of the factors determined to have the best communication methods are:

- **Budget Aligned:** the method of communication should be adjacent to the allocated budget.
- **Preference of Stakeholders:** To attain the best communication, it is important to adjust with the chosen stakeholders on whatever communication channels are available (face to face, or online)**.** Both can work, and the team can schedule a meeting by then.
- **Conveying Information:** depending on the stakeholders, the team can utilize both sending an email and links of documents. The document's links would include the weekly reports or updates, issues that might arise, and all requirements needed to assure stakeholders.

Communication	Purpose	Delivery media	Frequency	Audience
Project Planning	Maintain the progress of the project team	Teams Meeting	Once before	Project Team, Project Manager, Project Sponsor
Sprint Planning	Have a monthly goal	Teams Meeting	Once before and after the development of a feature	Project Team, Project Manager, Project Sponsor
Release Planning	Handle all the dependencies	Teams Meeting	Once every month	Project Team, Project Manager, Project Sponsor
Product Backlog	Notify all the stakeholders about the unfinished processes	Teams Meeting	If necessary, only	Project Team, Project Manager, Project Sponsor
Project Consultation	Maintain project coordination	Teams Meeting	Once every week	Project Team, Project Manager,

				Project Sponsor
Project Updates	Progress or updates about the project	Teams Meeting	Once every week	Project Team, Project Manager, Project Sponsor

Table XXV Communication Matrix

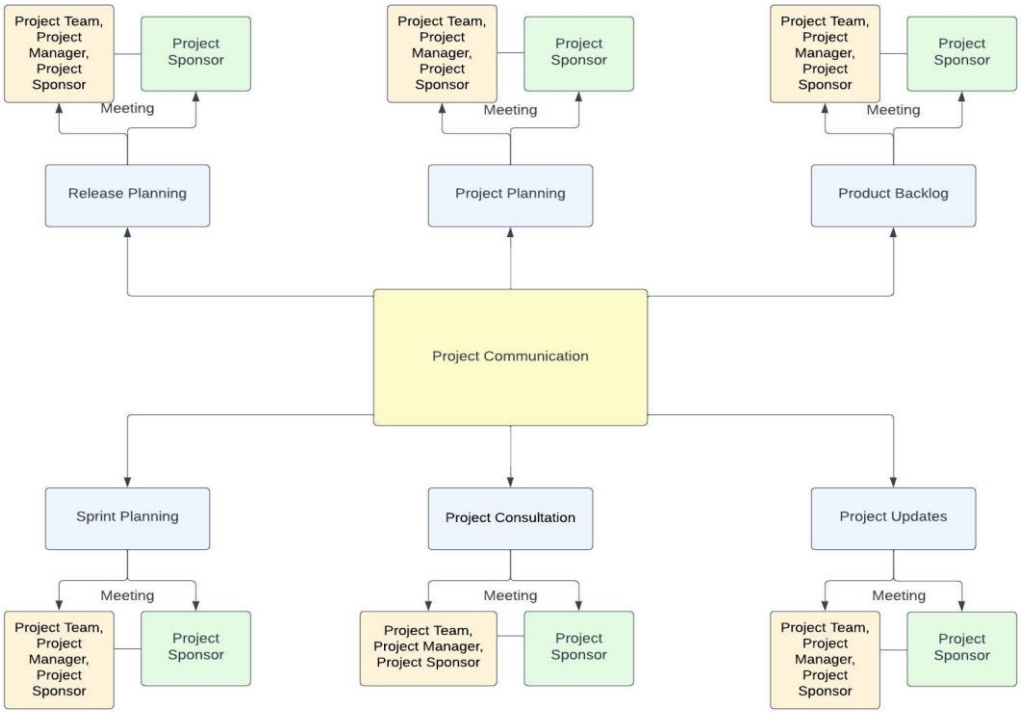

Table XXVI Communication Flowchart

Guidelines for Meetings

The guidelines for meetings part of the document make sures that all the meetings held in the project lifecycle are well-organized and contribute to the success of the project. Furthermore, the guidelines will serve as an outline on how the project team should run a meeting with or without the project stakeholders. With this, the project team can enhance their communication and collaboration with one another which can help create a positive impact in the project development.

The following steps will aid the project team members with regards to scheduling a successful meeting:

1. **Define the purpose and objectives:** the meeting should have a clearly defined purpose and objective correlated to the project.

2. **Make an agenda:** making an agenda with the outlines of the topics should be present and it is important to prioritize the agenda items based on their relevance to the project's objectives.

3. **Identify the attendees and the roles:** it is important to identify the necessary participants regarding their roles and responsibilities. Furthermore, it is important to include the key stakeholders that impact the topic being discussed.

4. **Meeting Facilitation:** managing the time effectively is important in a project team meeting as it will allow efficient progress through the topics or agendas. Furthermore, it is important to start the meeting on time to minimize delays.

5. **Encourage active participation and engagement:** it is encouraged for all the project team members to speak up with relevance to the topic. This will promote open communication and active listening.

6. **Meeting Minutes:** creating minutes for the meeting will help the project team in identifying the resources that need attention. This will also serve as an attendance and progress report on where the project team is on the project. Furthermore, sending the minutes to participants after the meeting is necessary as it will serve as their reminder aid about the future topics and topics discussed.

7. **Meeting Evaluation:** Meeting effectiveness should be evaluated to improve project communication by participant feedback. In addition, giving meeting updates based on past meetings is also important as it raises the possibility if a project team member successfully finished his/her assigned task.

Communication Standards

- **Clear and concise communication:** terminologies must be clear and easily understood by stakeholders. Furthermore, communication should focus on the relevant information and is based on objectives.

- **Active listening:** it is important for the project team members to attain active listening as it encourages a great environment for the meeting, and it encourages honesty and openness.

- **Proper Engagement:** it is important to seek input and feedback from the relevant stakeholders as it may help emphasize any suggestions for improvement. Proper engagement can also promote collaboration as it requires each member to ask relevant questions and seek clarifications. Lastly, it is important to avoid unnecessary questions that may lead to uncertainty.

- **Summarize from discussions:** this can attain improvement on any topic that needs clarifications from discussions, and it can help each team member retain focus on every meeting as everyone is on the same page.

- **Communication channels:** identifying the best communication channel can help the team in conveying necessary resources with each other and the stakeholders. Moreover, it is important that each team member should know the appropriate communication channel (email, online meeting platforms, or project management tools).

- **Schedule regular team meetings:** the project team should schedule team meetings every week to discuss any updates, issues, or progress. This will also ensure that everyone is complying with the project schedule and that all assigned tasks are completed promptly.

Communication Escalation Process

The communication escalation process ensures that the communication issues are identified and resolved effectively, resulting in better project communication among the project team members and stakeholders. The escalation process should be adaptable along with the project lifecycle as it can ensure that all communication issues can be resolved quickly.

The communication escalation process for the Bregghan Point of Sale System is listed below:

1. **Communicate directly to the project team members:** With this, risks and issues can be resolved promptly. In addition, other topics such as discussions and updates should be directly communicated as a part of a routine.

2. **Manager involvement:** Escalate the issue to the team's designated project manager if any communication issues persist. It is necessary for the team to escalate the communication problem to the project manager if they cannot resolve it. The project manager's role is to help the team produce the best decision and try to resolve the issue.

3. **Involvement of the Project Stakeholder:** Whenever there are issues related to the end users and is not resolvable in the team level, it is important to escalate it to the project stakeholder and with this, necessary steps such as scheduling a meeting or sending a report stating how the team tried to resolve it should be taken into consideration.

4. **Written report about the issue:** After resolving any communication problem, a written report will be issued to prevent any future communication problems. Furthermore, this can help the team analyze and improve on the communication issues that arise.

Glossary of Communication Terminology

Terms	Definition
Information Accuracy	All the information given is true and up to date.
Active Listening	Giving your full attention, focus, and understanding to a speaker.
Communication channels	These are various methods or mediums to which certain information is conveyed.
Team Meetings	Team Meetings refer to the scheduled meetings scheduled by the project manager to get updates and reports from one another.
Meeting Minutes	A type of document that includes the timeline, attendance, and topics/agendas discussed in a scheduled meeting.
Meeting Evaluation	Meeting evaluation refers to the feedback gained from a team member after every meeting.
Project Manager	An assigned person that plans, executes, and oversees the successful completion of the project.
Meeting Facilitation	The process of identifying if the meeting duration is consumed effectively and efficiently.
Budget Aligned	A term referring to a certain topic that is strictly adhered to the budget allocated.
Proper Engagement	This term refers to the respective actions of each team member on the scheduled meeting.

Table XXVII Glossary of Communication Terminology

5.8 Quality Management Plan

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.

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.

Table XXVIII Quality Management Approach

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

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 have the capability to process sales transactions accurately and efficiently, including features such as 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 quickly 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 large 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 carried out to evaluate adherence to established quality processes and standards. These audits serve to 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 a high 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 assigned with the responsibility of conducting the quality control measurement.

- **Assessment of measurement results**: The team member 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.

5.9 Risk Management Plan

Introduction

Any store that wishes to monitor transactions and keep track of sales information needs a point of sale (POS) system. However, there are always potential hazards that must be recognized and addressed to guarantee project success with any technical endeavor. A risk management plan can help with that.

In a risk management plan, hazards that might occur during a project are listed along with how they will be avoided or reduced and what steps will be taken if they happen. Risks for a POS project could include difficulties with user uptake, security lapses, unforeseen costs, and delays in implementation.

To further develop a risk management plan for a Point-of-Sale System, the following information should be considered:

- Identifying and Assessing Risks: The Point-of-Sale System’s development, implementation, and operation may be subject to hazards, which the project team should identify. Technical problems, vendor dependence, regulatory compliance, cybersecurity, and human factors are just a few of the many potential sources of risk. Risks should be identified and then evaluated for both chance of occurrence and potential effects on the project.

- Risk Mitigation Strategies: After identifying and assessing risks, the project team should develop a plan for mitigating or avoiding the risks. Mitigation strategies should be prioritized based on their effectiveness in reducing risk and their feasibility

in terms of time and cost. Strategies may include contingency planning, redundancy, risk transfer through insurance, and the development of fallback procedures.

- Contingency Planning: The project team should develop contingency plans for significant risks that could significantly impact the project's success. Contingency plans should outline the steps required to minimize the impact of the risk and maintain the project's progress. These plans should be regularly reviewed and updated as the project progresses, and new risks are identified.

- Risk Monitoring and Review: Risk management is an ongoing process that requires continuous monitoring and review. The project team should establish a regular review process to ensure that risk management strategies remain effective, risks are updated, and new risks are identified. The review process should be transparent, with all stakeholders being updated on any changes.

The Point-of-Sale System project team can guarantee the project is effectively finished, achieving all objectives while avoiding potential risks by considering these extra elements in a risk management plan.

Top Three Risks

The project's top three risks are:

1. Failures of hardware or software: The failure of hardware or software components is one of the biggest risks in a POS project. This may lead to a loss of sales, and system downtime. The project team should choose the best hardware and software to carry out thorough testing and quality assurance procedures and create backup plans in case of hardware or software failures to reduce this risk.

2. Unexpected costs: POS projects can be expensive, and unexpected costs can easily send the project off course. The project team should do a thorough cost analysis at the project's start and create a comprehensive budget to reduce this risk. Contingency plans should also be created for unforeseen costs, and the project team should keep a careful eye on costs throughout the project.

3. Human Error: Although human error is a known risk factor, it is also a characteristic of human nature and cannot be completely avoided. Through training, process enhancements, automation, and the implementation of the project team frequently concentrates on reducing human error.

Risk Management Approach

This document provides a thorough overview of the various risks and vulnerabilities related to POS systems and presents a methodical methodology to effectively reduce and manage these risks.

Here is the step-by-step approach to manage the risks of a POS system.

1. **Identify Risks:** The project team will identify the project-related risks through reviewing of related software/projects and brainstorming. Steps like gathering information, brainstorming, and analyzing are a great procedure for identifying the risks.

2. **Assess Risks**: after identifying risks, risk assessment is a process that involves evaluating the potential risk of the Point of Sale (POS) system. This is where ranking comes in each risk is grouped by rank.

3. **Vulnerability Analysis**: This is where the examination of the identified risks happens. Including the hardware, software, database etc. The analysis helps the group to understand the potential weakness of the project.

4. **Risk Monitoring:** The Point of Sale (POS) system's risk management method includes risk monitoring as a crucial step. This procedure entails recording, evaluating, and reviewing identified risks systematically to ensure they are effectively managed over their lifespan. To protect the security, stability, and compliance of the POS system, risk monitoring aims to offer continual oversight and allow prompt reaction and mitigation steps.

5. **Risk Communication**: A critical component of the Point of Sale (POS) system's risk management procedure is risk communication. To promote a shared understanding and support well-informed decision-making, this process entails the timely and efficient exchange of information concerning recognized risks amongst stakeholders. Risk communication is to increase the overall robustness of the POS system, encourage openness, and make proactive risk management possible.

Risk Identification

It is crucial to consider a variety of factors that can affect the security, functionality, and data integrity of a Point of Sale (POS) system when detecting hazards. Listed below are the list of common risks to consider:

- Unauthorized Access
- Hardware Failures
- Software Failures
- Power Outages
- Network Failure

In the entire risk management framework for any project, including the Point of Sale (POS) system, the process of risk identification is of the highest priority. It entails methodically identifying and cataloging any hazards that can negatively affect the security, effectiveness, and operation of the system.

Risk Qualification and Prioritization

The probability of risks happening and their impact on the project is described below:

- High: Risks with a high probability of occurring and a significant impact on the project. These risks require immediate attention, and we need to develop mitigation strategies for them.

- Medium: Risks with a medium probability of occurring and a moderate impact on the project. These risks should be closely monitored, and mitigation strategies should be developed in case they occur.

- Low: Risks with a low probability of occurring and a minor impact on the project. These risks can be monitored periodically, and mitigation strategies can be developed in case they occur.

		Probability		
		1	2	3
Impact	1	Low	Low	Medium
	2	Low	Medium	High
	3	Medium	High	High

Figure 3 Risk and Qualification

The practice of rating detected hazards according to their importance and potential impact on the Point of Sale (POS) system is known as risk prioritization. To establish the order in which risks should be handled and mitigated, it entails evaluating and allocating priority levels to each risk. Risk prioritization is to properly allocate resources, prioritize the most important risks, and reduce any potential negative effects.

Risk Monitoring

The Risk Management Plan of the Bregghan Point of Sale System provides framework for monitoring risks throughout the project. It is a requirement to continuously monitor risks during the project's lifespan.

For a project to be executed successfully and to reduce any risks that could surface during its lifespan, the project manager's involvement in managing risk monitoring is essential. Working closely with the project team and stakeholders to retain visibility and control over hazards, the project manager adopts a proactive strategy to discover, analyze, and monitor risks.

Risk Mitigation and Avoidance

The method of managing risks for the Point of Sale (POS) system focuses on risk reduction and avoidance. These tactics are designed to lessen the possibility and effects of recognized risks on the system's operations, compliance, and security. Organizations may proactively safeguard the integrity and dependability of the POS system by putting into place efficient risk reduction and avoidance strategies.

The project team should identify the risks with the highest possibility and develop plans to avoid them. The following are the key points or options available to the project manager:

- Risk Mitigation: carry out a thorough analysis to comprehend the nature, consequences, and likelihood of detected hazards. This assessment serves as a basis for creating specialized mitigating measures.

- Risk Assessment: after identifying risks, risk assessment is a process that involves evaluating the potential risk of the Point of Sale (POS) system. This is where ranking comes in each risk is grouped by rank.

- Contingency Planning: A crucial step in the risk management procedure for the Point of Sale (POS) system is contingency planning. To manage and

lessen the effects of prospective risks and disruptive occurrences, it entails developing and documenting a set of specified actions, processes, and strategies. By limiting downtime and any negative effects in the case of unforeseen occurrences, contingency planning aims to maintain the POS system's resilience and continuity.

- Communication: A key component in the Point of Sale (POS) system's risk reduction process is effective communication. It is essential for ensuring that pertinent stakeholders are aware of, involved with, and supportive of the plans and actions taken to reduce risk. To improve information sharing, encourage cooperation, and advance a common knowledge of the risks and mitigation actions inside the company, communication related to risk mitigation serves these purposes.

- Agile Approach: Risk management may be done in a flexible and quick manner by using the Agile methodology. The team's use of the Agile approach, which permits continual risk management and the capacity for change, must be ensured by the project manager.

- Change Management: Risk management may be done in a flexible and quick manner by using the Agile methodology. The team's use of the Agile approach, which permits continual risk management and the capacity for change, must be ensured by the project manager.

Risk Register

A risk register is a thorough record that systematically captures and documents all identified risks in a project or organization. It acts as a central storage of vital details for each risk, such as its description, potential consequences, likelihood, status, and assigned responsibilities. The risk register aids in streamlining risk management by offering a consolidated overview of the risks, facilitating prioritization, monitoring, and the implementation of suitable measures to address and mitigate potential hazards.

The following criteria will be used for the risk register:

- Risk ID: Every risk will receive an individual identification number.

- Risk Description: Thorough clarification of the possible adverse outcomes or effects linked to the risk.

- Risk Category: Identification of broad themes or key areas of concern associated with the risks.
- Risk Owner: The task of monitoring and managing each risk will be assigned to a responsible individual or team.
- Probability: Evaluation of the likelihood or frequency at which the risk is expected to occur.
- Impact: Assessment of the potential outcomes or ramifications that could arise from a risky event.
- Status: Current state or condition of the risk

Risk ID	Risk Rank	Risk	Description	Category	Destination/Owner	Probability	Impact	Status
1	1	Hardware Failure	Hardwares like barcode scanner, printer may not work	Technology	System Developer	Medium	High	In Progres
2	1	Software Failure	There is a risk of software failure refers to potential malfunction in the system that could lead to lose track of sales/inventory	Operational Risk	System Developer	Low	High	In Progres
3	1	Potential Departure of Team Member	There is a risk that a team member may leave the project.	Human Resource	Project Manager	Low	High	In Progres
4	1	Limited Resources	There is risk of insufficient resources that could affect the completion of the project	Resource Allocation	Project Team	Medium	High	In Progres

5	2	Human Error	There might be a risk of mistakes made by the project developers which can affect the project's completion.	Workplace	User	Medium	High	In Progres
6	2	Technological Changes:	There is a risk that there might be some changes in technology or the industry standards that may result in additional work or resources for the project.	Operational Risk	System Developer	Low	Medium	In Progres
7	3	Dependencies on other parties	The project may depend on the performance and capabilities of external parties that can lead to other issues like backlogs.	Partnership Risk	Project Manager	Low	High	In Progres

Table XXIX Risk Register

5.10 Procurement Management Plan

INTRODUCTION

The Procurement plan of this project plays a vital role in succeeding the following deliverables as this shows the plans that will be taken as part of the planning process for the program or service. The main idea behind procurement is that proactive scheduling, planning, and bulk buying lead to financial savings, effective corporate operations, and improved value for money.

Bregghan Mini Grocery Stores procurement come from a specific supplier for the items called “Suy Sing” where it serves as the primary base of the mini grocery stores needs during operation hours. This procurement plan will define the projects’ needs and cost as well as the contracts that will be used and this will show the flow that the mini grocery store works in conjunction with Suy Sing to resupply the needs. Of course, risks are without a doubt a part of the procurement plan especially during the pandemic where it limits the incoming items for the mini grocery store it will also be shown in this procurement plan how the project team will mitigate the risks that is being given to avoid loss of sales and utilize the bregghan distribution between customers and suppliers. Therefore, with the monitoring of contracts used and deadlines covered with the suppliers, this procurement management plan will also show the constraints the the project team might face during the creation of the project.

PROCUREMENT RISKS

The procurement of the project plays a big part in determining the different situations the project team might face as we have known the risks that are connected to, as well as the likelihood that procurement processes will fail. Therefore, the team must evaluate procurement risks to optimize their supply chain and reduce the risk of fraud, subpar products, delayed delivery, and cost overruns. In current times Bregghan might be able to face different risks for procurement of the process during work times these includes of course the following:

- Poor vendor selection may affect the operations to be needed. Without proper vendor management the team will offer more time fixing problems and creating solutions rather than improving the project.
- An external hazard like the pandemic may affect the store sales and resupplying of goods from the supplier due to heightened restrictions in the store area.
- Rehabilitation of streets is frequent in the area which may result to a narrower street which is hard for the suppliers of the store to reach it.

PROCUREMENT RISK MANAGEMENT

Procurement risk management of the project will provide means necessary because this risk management field is the process of determining internal and external project risks. Eliminating circumstances that place your firm at unwarranted, heightened risk is a requirement for effective risk management and to mitigate risks that will affect the project deployment in the long term.

The risks that the project team may face during the sprint may occur at any given events however the project team have prepared different risk management strategies to avoid

events that may affect the procurement for the client and the team and ensure contact with the supplier to maintain 100% functions of all procurement services that is important to the project:

1. Standard Procurement Processes so that everyone on the project team is aware of the procedures they must adhere to guarantee that all data is accurate, whole, and up to date.

2. Ensure communications between the project team, suppliers, and the client always will avoid unnecessary decisions being made. Progress reports are mandatory to ensure the project teams track the deliverables that need to be met by said dates.

3. Specific Roles are assigned to every one of the project team to avoid confusions on task and improve the development and productivity of the product. This will also help since each team member may be able to recognize and resolve issues like delays or a lack of resources with the assistance of this accountability.

4. Document changes made during each time will make tracking of changes easier and come up with better solutions each time deliverables at specific time are of satisfactory. Reviews of procurement risks will contain areas that may offer improvement within the service or the final product.

5. Automated procurement processes indicate a faster procurement process and an absence of the requirement for approvals. The team members can focus on their main duties rather than spending time on rewriting errors and pursuing signatures.

COST DETERMINATION

Project Team will determine its cost of services from outside vendors with full information to contract and regular monitoring of costs that affects the budget to maintain the project budget the costs for the said services will undergo as planned to response to the request for proposals. The stakeholder as well as the project manager will collaborate with one another together with the project team to carefully proceed with the costs with regular record or monitoring and follows the budget estimates created for each event that may take place during the sprint. Therefore, this cost estimation plan will be the project team’s means of progress to the budget that is being used in the service that is associated with outside vendors and be used within the creation of the project.

PROCUREMENT CONSTRAINTS

This part is given to ensure the project's key to success, these constraints and hazards must be handled. The project team should keep an eye out for the constraints indicated below to ensure that the process is as error-free and error-free as feasible.

- **Cost Constraint –** The project should follow a series of budgets that is set for the project teams sprint during the creation process. This will illustrate the team's choices that are available and can be used for the final deliverable within said budget.

- **Resource Constraint –** For the Bregghan Point of Sales system it has a specific technical requirements or specification needed to be met to utilize functionality of the product for example the Barcode Scanner and the receipt printer in which are necessaries for the execution of the project without having said resources the team might find it difficult to deliver product to client.

- **Time Constraints –** As with delivering the precise updates during the project sprints, time is also a big constraint for the team as each member with given roles follows a specific timestamp to finish a certain task given. If the given task is not finished on time the team may find it to struggle as the things needed to do may stack and lead to confusion room for errors.
- **Quality Constraints** –The Project Team ensures that every feature that is within the scope of the project are to be executed within the given time and deliver full quality to the user. These focus on the specific characteristics of the product and make sure that the outcome of the project matches that of the expectations from the developers and the user.

CONTRACT APPROVAL PROCESS

- **Initiation** – Request for procurement should be made by the project manager to initiate the approval process of the procurement of the project.

- **Approva**l – The request for the procurement plan will be handled accordingly to the stakeholders. All documents are neither approved nor disallowed.

- **Management and Development** – Following contract to external vendors will be processed. Purchases made will go through the project team, stakeholders, as well as the client and will be made as legal documentation. This is the creation of

the contract with legal effect, laying forth the terms and conditions of business, as well as the specifications or criteria.

- **Execution** - This will be the procurement plans critical stage in contract management. By this point, the terms of the contract have been negotiated. the stakeholders and the procurement officer have ensured that everything is understood, and all necessary resources have approved the written agreement.

DECISION CRITERIA

1. **Flexibility –** Supplier must adhere to the flexibility of the items for the project team during procurement should there be any slight changes regarding the needs of the group for the final product. The output must fit on the projects structure and abide within the project specifications.

2. **Cost Saving –** Project Team aurora prioritize or the reduction of costs or rather saving especially on procurement while maximizing quality that is received therefore supplier pricing should be reasonable enough for the decision of the project team and should also base on alternative pricelists from other sources.

3. **Ease of Modification and Scalability –** Decision making within the project team should also consider ease of modification of the service bought by the implemented supplier or vendor this is to fully utilize the use of the service and assure that modification of it should there be, any will not be an error to be fixed by the project team it should also be scalable to fit any changes.

4. **Time to Implement –** The supplier should be able to comply within the given time of the stakeholders to avoid any pressure on the project team during project creation. This would also improve the team's productiveness as well as proficiency.

5. **Risk Levels –** Upon making a decision for the project risk management will also play an important part in implementing effectiveness in the service. The team members should set a risk percentage to monitor the progress of contracts with the supplier to be reviewed by the stakeholder and client as well.

5.11 Implementation Management Plan

Executive Summary

The purpose of this section of the project implementation is to provide a summary of the benefits and features of the Bregghan Point of Sales (POS) system. The system is a software and hardware solution that enables businesses to streamline their sales process, manage inventory, and enhance customer experience. This section also highlights the key advantages and functionalities of a modern POS system and outlines its potential impact on business operations and profitability. With this, the project team which includes a project manager, quality assurance tester, and the developers will ensure that the project will have a successful transition with the collaboration of the project sponsor.

With the development between collaborations of the business owner and the project team the Bregghan Point of Sales system was able to gain its scope and objectives that would be beneficial to Ms. Devilyn Ligligen's running family business which includes:

- Decreases the number of steps that the user can do in the whole transaction for faster checkouts.
- Fully digitize the records of stocks and the sales of the bregghan mini grocery store.
- Will produce a weekly, monthly, and yearly annual report to the user showing the number of items sold in a specific date.
- Decreases human data entry, lowers errors, and saves time, allowing businesses to focus on core tasks and increase production.
- Notifies the User on the dashboard for specific products that are low or critical on stocks.

When all objectives are met by the project developers and the stakeholders, Bregghan Point of Sales System will be deployed for use of the Admin and the Cashier inside the mini grocery store system devices. When Bregghan takes effect, the following purpose and benefits will provide a significant amount of impact to the store's sales and tracking which will ease the operation and boost bregghan mini grocery stores sales. Therefore, by the end of this executive summary the project team will ensure that the client will have full control of the Point of Sales system and will have technical support from the project developers whenever a problem arises in the long term.

Transition Approach

Having a transition approach will give the project team an outline on the overall strategy with regards to the transition process of implementing the Bregghan Point of Sale System. Furthermore, it will describe how the project team will handle changes and manage new systems or processes. Moreover, it ensures that everyone related to the project can adapt to the said changes. Lastly, with this transition approach, the project stakeholders would be informed about the necessary actions needed to take to have a smooth and manageable transition to the new system.

- **Assess the current system:** analyze or evaluate the current system by identifying its strengths and weaknesses or given limitations. Furthermore, understanding the current system can help in which areas need improvement.

- **Requirements Elicitation:** this pertains to the gathering of the necessary deliverables or requirements for the development of the new system. Engagement with the stakeholders which includes the project team is also required to ensure that all the requirements such as the functional and non-functional and the performance of the system are met.

- **Selection of Technology:** the selection of technology would be beneficial for a new system as the project team can identify which suits best for the project, which is based on the requirements elicitation or requirements gathering.

- **Design Planning:** with the consideration of the functionalities, technologies, and requirements needed, the project team needs to develop a design which is necessary for the overall structure and components.

- **Execute the Development** the development of the project is based on the design planning. Furthermore, the development should follow the best practices when it comes to coding standards to ensure quality.

- **Testing and Validation:** testing the point-of-sale system would be vital for the project team to identify all the bugs and issues that might arise. Unit testing and system testing is beneficial as well as having a user acceptance testing to make sure that the functionalities are working.

- **Documentation and Training:** develop technical guides, user manuals, and other necessary documentation to ensure that the team is familiarized with the new system.

- **Deployment:** deploy the new system with the consideration of ensuring its security, performance optimizations, and production environment.

- **Monitor and Evaluate:** continuous monitoring of the new system can help the team in evaluating its effectiveness to the transition from manual computation of items and stocks tracking. It will also help the project team in identifying the areas for improvement so that they can make necessary adjustments.

With the following transition approach, the project team can successfully implement the Bregghan Point of Sale system while also ensuring an efficient migration from the old system and the new system.

Transition Team Organization

ROLES	RESPONSIBILITIES
• Project Manager	In charge of using project roles and implementing any delegation within predetermined reporting structures. Project, stage, and exception plans should be created and maintained as needed. managing project risks, which includes creating backup plans. Develops and enhances the methods utilized by the team to meet milestones. achieve goals and provide results to the client.
• Front End Developer	In charge of creating new user-facing features, determining on the project's structure and design before it is implemented, creating reusable code, reducing the amount of time it takes for pages to load, and using a variety of languages to create the different screens for both admin and the cashier system.

• Back End Developer	Responsible for creating and maintaining the server-side of the Point of Sales System and software. primarily focus on the structure and works in conjunction with the front-end developer, enabling the output to interact with databases, handle requests from users, process data, and perform other essential tasks.
• Project Stakeholders	Assists the project team achieve its strategic goals by bringing their expertise and viewpoint to a project. Additionally, they can offer the resources and supplies needed. The success of the project's implementation depends on the input from the stakeholders.
• Quality Assurance Tester	In charge of the project progress and ensures that before implementation the final output result will be satisfactory before being deployed.
• Business Owner/Client	Examine the deliverables that the team provides by the deadlines.

Table XXX Transition Team Organization

Workforce Transition

The workforce transition refers to the managing of the changes when it comes to the roles and responsibilities of the workforce during the lifecycle of the project. With this, it ensures that the project has the right people and has the necessary skills to meet the project's objectives.

By doing this, the organization can have a successful transition while maximizing the effectiveness of the workforce in the implementation of the project. Furthermore, this section of the paper states the key activities involved in employee engagement, identifying the skill requirements needed, and integrating new team members.

- **Workforce Assessment:** identify the skills and expertise of the current workforce and determine the areas needed for additional resources or skills.

- **Expertise Identification:** determine the expertise required for the development of the Bregghan Point of Sale System. The responsibilities needed are the front-end,

and back-end developers, Quality Assurance Tester, etc. These are important roles that need to be identified to ensure a smooth project development.

- **Workforce Training:** identify if the members of the current workforce can be trained to meet the requirements and objectives of the new system. This will include workshops to enhance the skills and knowledge of a current member.

- **Recruitment and Hiring:** this refer to the identification of skill gaps that cannot be fulfilled which requires an initiation to hire new employees or contractors with the necessary skills. With this, it is required to develop a job description and conduct interviews to select a candidate fit for the job.

- **Knowledge Transfer:** promote knowledge transfer from existing workforce to the new team members which includes mentoring and collaboration to ensure an efficient and effective transfer of project-specific information.

- **Team Collaboration:** promoting team collaboration offers a healthy work environment and it encourages open communication and constructive feedback which leverages the strengths of the individuals.

- **Performance Evaluation:** assess and evaluate the progress of the individuals or the team to identify the areas of improvement and to determine the effectiveness of the transition process.

- **Ongoing Support:** providing ongoing support can help the workforce during the transition process as it addresses any challenges or issues that may arise. Furthermore, it will be of help to the individuals to perform their roles efficiently and effectively.

- **Continuity of Training:** with this, workshops and other skill improvement-related activities will be necessary to ensure that all the individual's skills working on the project will be up to date.

Following the workforce transition plan can help the overall project manage its transition of workforce in an effective manner. Furthermore, it will ensure that all the necessary skills required for the development are met for a successful implementation.

Workforce Execution During Transition

This section of the paper will focus on the workforce execution during the transition period for the project. To have a seamless transition and empowerment of employees with their skills, there are some key factors needed which includes the user training, system testing, formal acceptance, documentations of lessons learned, update other project requirements, archiving files/documents, and project closeout meeting.

- **User Training:** the user training will involve handing training materials or training sessions with the users to ensure that they have the knowledge and skills to operate the new system.

- **System Testing:** the project team must ensure that all the functionalities and the components of the system are working and ready for usage. To ensure this, final testing and accuracy of data migration must be implemented.

- **Documentation of Lessons Learned:** it will document all the project insights, the success of the team and their weaknesses. Furthermore, this will also be useful for future projects and the application of best practices.

- **Update other Project Requirements:** the team needs to update any relevant documents related to the project's completion. This may contain archiving documents or modifying contracts and agreements with updated information.

- **Formal Acceptance:** attaining the formal acceptance from the project is an indication that the transfer was completed. The project team must ensure that all the necessary documents and deliverables are accomplished along with client satisfaction.

- **Archiving Files/Documents:** this means that during this phase, all the project related files like the contracts, project plan, and agreements must be archived.

- **Project Closeout Meeting:** meet with the project stakeholders to discuss the project's overall performance, identify those areas of success, and address concerns or issues.

Subcontracts

Since the Bregghan Mini Grocery Store has no existing contracts or subcontract agreements connected to this project, there is no requirement for any transition or transfer of contracts.

Property Transition

Incumbent Owned Equipment

The property transition plan for the incumbent owned equipment of the Bregghan Point of Sale System must be evaluated to ensure a smooth transition and avoid any misunderstandings.

The following listed are the considerations for the aspect of transition:

Property Assessment

- Evaluate the condition and compatibility of the incumbent owned equipment.
- Identify areas wherein additional equipment may be needed to ensure a high-quality performance.
- Conduct a thorough assessment wherein the Bregghan POS system will be deployed.

Equipment Upgrades or Replacements:

- Determine the components that need procurement.
- Identify if there is any equipment that needs upgrading or replacement.

Configuration and Installation:

- Ensure proper integration of the Point-of-Sale System on the incumbent owned equipment.
- Ensure proper integration of the software to the hardware.
- Test and verify the functionalities and capabilities of the equipment.

Test and Validation:

- Test the performance of the equipment thoroughly in the areas of security, performance, and reliability for smooth and efficient transition.
- Mitigate any issues during the testing phase for the team members to make any adjustments.

Knowledge Transfer

For the project to be implemented and run successfully, effective information transfer is essential. Users are given the knowledge and abilities needed to operate the system effectively, reduce errors, and provide a satisfying user experience. Below are skills or measures neeeded to be taken account into the group of users regarding its usage, functions, and features to be considered:

- **T**he project team will provide all necessary instructions once the Bregghan POS system is deployed within the Mini grocery store.

- The Bregghan Mini Grocery Store Cashier personnel will be recommended the most on configuring the POS System which will include both the hardware, and software configuration of the product, for example the barcode scanner and the recept printer to be used.

- Users or those working on the project must receive training on how to use the POS software efficiently. This includes gaining knowledge of how to conduct sales transactions, handle refunds and exchanges, manage inventory, provide reports, and carry out other associated duties.

- Resolving common and minor issues should be training to the users of the system to avoid further errors during the operation time of the POS System such as connectivity issues, programming errors or hardware problems.

- This section makes sure that the system's project developers have the knowledge they need to upgrade the system, install software patches, and execute standard maintenance duties. This assists in ensuring that the system is current and operating at its best.

Handover and Acceptance

This section will discuss about the final phase of implementation for the project Bregghan Point of Sale System. In this phase, all the requirements such as the deliverables and the documentation must be finished. Furthermore, when the handover and acceptance is initiated, the project team must schedule a meeting with the project sponsor and the stakeholders for a discussion about the confirmation of all the requirements.

The final transition plan and all the deliverables must be presented to the project sponsor and the project stakeholders since they will be the ones that will review the information and the requirements. Moreover, a discussion among the participants of the meeting must address if there are any issues or concerns that might be visible to the project.

The following activities should also be present during the project handover and acceptance:

- **User Acceptance Testing:** all the stakeholders must participate in the user acceptance testing as it will serve as a validation with regards to the functionalities of the system.

- **Sign-off and Acceptance:** if all the stakeholders are satisfied with the functionalities and performance of the new system, a formal sign-off would be necessary and both parties must sign the formal acceptance document which concludes a successful project handover.

- **Administrative Rights Transfer:** the privileges and access to the system will be given to the designated personnel and ensure that they have the full control over the Bregghan Point of Sale System.

- **Ongoing support and maintenance:** the project team will continue to support after the implementation as this will help the users address some issues and concerns that might arise while using the system implemented.

The handover and acceptance are an important part of the Bregghan Mini Grocery Store project as it assures that all the stakeholders are knowledgeable and can effectively manage the system. Lastly, it shows a formal acceptance of the system which marks success in meeting the overall objectives.

6. Sponsor Acceptance

This Document will formally acknowledge all the requirements and deliverables for the Bregghan Point of Sale System Project.

Approved by the Project Sponsor:

_____ Date: June 8, 2023

Ms. Devilyn Ligligen

Business Owner

Appendices

Appendix A: Cost Change Request Form

Project Name:	Change Name:	Number:
Requested By:	Contact:	Date:
Description of Change:		
Reason for Change:		
Priority [Check One]: 1. High 2. Medium 3. Low		
Impact on Deliverables:		
Impact of Not Responding to Change (and Reason Why):		
Approval of Request:		

Change Impact
Tasks/Scope Affected:
Cost Evaluation:
Risk Evaluation:
Quality Evaluation:
Additional Resources:
Duration:
Additional Effort:
Impact on Deadline:
Alternative and Recommendations:
Comments:

Appendix B: Change Request Form

Project Name:		
Prepared by:		
Date:		
Person(s) Requesting Change:		
Change Number:		
Detailed Description of Cost Change Requested:		
Reason for Cost Change Requested:		
Overall Effect on Project Cost:		
• Projected Cost Overrun of approximately:		
• Estimated Cost Reduction of approximately:		
Effect on Schedule:		
• Planned Project Completion Date:		
• New Project Completion Date:		
Effect on Scope:		
Additional Remarks:		
Approval	Project Manager	Date
Approval	(Other)	Date

Appendix C: Request for Proposal

RFP:	Proposal Due Date:	Company Name:
Project Overview:		
Project Goals:		
Scope of Work:		
Current Roadblocks and Barriers to Success:		
Evaluation Metrics and Criteria:		
Submission Requirements:		
Project Due Date:	Budget Amount:	
Contact:	Email:	Phone number:

Appendix D: Work Package

WBS:	1.1.1
Work Package:	Business Case
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma

Description:	The following is included in this section: • Outlines the project objectives and project performance. This work package focuses on why the project should be pursued.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. • Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: (List down risks in accomplishing this Work Package)	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: (List down ways to address each risk listed above)	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	PHP 177,376.00
Reference Docs:	AURORA_Business-Case.docx

WBS:
Work Package:
Package Owner:
Owner Organization:
Participants:

Description:
Completion State:
Assumptions:
Risks: **(List down risks in accomplishing this Work Package)**
Risk Mitigation: **(List down ways to address each risk listed above)**
Budget:
Reference Docs:

WBS:	1.1.3
Work Package:	Project Charter
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Define the purpose, objectives, and scope of the project.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline.

	• Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope. •
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 11,640.00
Reference Docs:	AURORA_ProjCharter.docx

WBS:	1.1.4
Work Package:	Identify Stakeholders
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	The following is included in this section: • Identify who all stakeholders of the project as they have an impact and interest on the project

Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 11,640.00
Reference Docs:	AURORA_Stakeholder Management Plan.docx

WBS:	1.1.5
Work Package:	Final Review
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma

Description:	Final review before proceeding to the next phase. This involves assessment of all the documentation to ensure completeness.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 11,640.00
Reference Docs:	-

WBS:	1.2.1
Work Package:	Project Description
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso

	Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	An overview of the purpose and objectives of the project
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 7,033.00
Reference Docs:	-

WBS:	1.2.2
Work Package:	Cost Management Plan

Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	An outline how the project's costs will be estimated.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 7,033.00
Reference Docs:	Aurora_Cost Management Plan.docx

WBS:	1.2.3
Work Package:	Schedule Management Plan
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	An outline of the project's timeline on how it will be monitored, developed, and controlled.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 7,033.00
Reference Docs:	AURORA_Schedule-Management-Plan.docx

WBS:	1.2.4
Work Package:	Scope Management Plan
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	An outline how the scope of the project will be defined.
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 7,033

Reference Docs:	AURORA_Scope Management Plan.docx

WBS:	1.3.1
Work Package:	Project Risk Analysis
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Identifying and analyzing risks that may impact the project.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and

	understanding of project goals and objectives.
Budget:	Php 8,258.00
Reference Docs:	AURORA_RiskManagementPlan.docx

WBS:	1.3.2
Work Package:	Cost Benefit Analysis
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	
Completion State:	If Aurora completed the document without any revisions
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation:	• By effectively communicating and implementing the agile methodology, the

(List down ways to address each risk listed above)	team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 8,258
Reference Docs:	AURORA_Business-Case.docx

WBS:	1.4.1.1
Work Package:	Admin Log-in
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of log-in for the admin system.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being

	added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 13,940.00
Reference Docs:	-

WBS:	1.4.1.2
Work Package:	Admin Home Page
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of home page for the admin system.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.

Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 18,620.00
Reference Docs:	

WBS:	1.4.1.3
Work Package:	Inventory
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of inventory page for the admin system.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information.

	Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 22,580.00
Reference Docs:	-

WBS:	1.4.1.4
Work Package:	Transactions
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of transactions page for the admin system.

Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 22,580.00
Reference Docs:	-

WBS:	1.4.1.5
Work Package:	Analytics Report
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma

Description:	Creation of analytics report for the admin system.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 13,940.00
Reference Docs:	-

WBS:	1.4.2.1
Work Package:	Cashier Log-In
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay

	Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of log-in for the cashier
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 28,803.00
Reference Docs:	-

WBS:	1.4.2.2
Work Package:	Home Screen
Package Owner:	Aurora
Owner Organization:	Bregghan

Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of home screen for the cashier
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 14,185.00
Reference Docs:	-

WBS:	1.4.2.3
Work Package:	Checkout Screen

Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Creation of checkout screen for the cashier
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 14,185.00
Reference Docs:	-

WBS:	1.4.2.4
Work Package:	Generate Receipt
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Generation of receipt that includes transaction details
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 9,865.00
Reference Docs:	-

WBS:	1.5.1
Work Package:	Requirement Analysis
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Analysis of steps to pursue the project
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 23,977.00

Reference Docs:	

WBS:	1.5.2
Work Package:	Test Planning
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Test plan that outlines testing strategy, objective, scope, and resources required for testing.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and

	understanding of project goals and objectives.
Budget:	Php 18,289.00
Reference Docs:	-

WBS:	1.5.3
Work Package:	Test Design
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Designing test cases that maximize the chances of detecting defects.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.

Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 18,289.00
Reference Docs:	-

WBS:	1.5.4
Work Package:	Test Execution
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Testing of project requirements.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks:	• Project team may not be able to finish the tasks on time.

(List down risks in accomplishing this Work Package)	• There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 18,289.00
Reference Docs:	

WBS:	1.5.5
Work Package:	Test Evaluation
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Analyzing of test results to determine if the project meets the requirements.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information.

	Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 18,289.00
Reference Docs:	-

WBS:	1.5.6
Work Package:	System Integration Testing
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Examines how integrated components interact and interface with one another.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline.

	• Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 18,289.00
Reference Docs:	-

WBS:	1.5.7
Work Package:	User Acceptance Testing
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Checking if project meets the user acceptance

Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 12,601.00
Reference Docs:	-

WBS:	1.5.8
Work Package:	System Testing
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma

Description:	Quality assurance testing of the system
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 29,665.00
Reference Docs:	-

WBS:	1.6.1
Work Package:	Deployment Planning
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay

	Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Determination of steps needed before deployment.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 11,011.00
Reference Docs:	-

WBS:	1.6.2
Work Package:	Installation
Package Owner:	Aurora
Owner Organization:	Bregghan

Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Setting up of the system for the client.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 7,139
Reference Docs:	-

WBS:	1.6.3
Work Package:	Data Migration
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Encoding of data into the system.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 22,627.00
Reference Docs:	-

WBS:	1.6.4
Work Package:	User Training
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Administration and cashiers' system-use training
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 22,627.00

Reference Docs:	-

WBS:	1.6.5
Work Package:	Monitor Progress
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Tracking of project's progress
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and

	understanding of project goals and objectives.
Budget:	Php 26,499
Reference Docs:	-

WBS:	1.6.6
Work Package:	Post Implementation Review
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Evaluation of the project's implementation.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation:	• By effectively communicating and implementing the agile methodology, the

(List down ways to address each risk listed above)	team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 22,627.00
Reference Docs:	-

WBS:	1.7.1
Work Package:	Finalize Project Deliverables
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Finalization of project deliverables.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being

	added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 12,664.00
Reference Docs:	-

WBS:	1.7.2
Work Package:	Confirm Project Completion
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Confirmation of project completion
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.

Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 16,516
Reference Docs:	-

WBS:	1.7.3
Work Package:	Review All Contracts
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Checking of all contracts.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline. • Stakeholders are cooperative and actively participate in the identification process by providing the required information.

	Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 16,516
Reference Docs:	-

WBS:	1.7.4
Work Package:	Review Documentation
Package Owner:	Aurora
Owner Organization:	Bregghan
Participants:	Project Manager: Benedict Elloso Front-end: Donne Tarinay Back-end: Carlos Ligligen QA Tester: Andrei Palma
Description:	Evaluation of all the documentations of the project.
Completion State:	If Aurora completed the document without any revisions.
Assumptions:	• The project team will be able to complete the work by the deadline.

	• Stakeholders are cooperative and actively participate in the identification process by providing the required information. Clear definition and understanding of stakeholders' roles and responsibilities within the project.
Risks: **(List down risks in accomplishing this Work Package)**	• Project team may not be able to finish the tasks on time. • There is a risk of project requirements, features, or deliverables expanding or being added without proper control beyond the initially agreed-upon scope.
Risk Mitigation: **(List down ways to address each risk listed above)**	• By effectively communicating and implementing the agile methodology, the team will successfully complete tasks within the allotted time. • Conduct regular scope reviews with project stakeholders to ensure alignment and understanding of project goals and objectives.
Budget:	Php 16,516
Reference Docs:	-