Chapter I

Introduction

Project Context

Asset system is vital to today's business. It is a process to manage all the assets across the business. An asset has a significant role and significant value in supporting operational business. For enterprises operating in the twenty-first century, numerous outcomes have been positively impacted by well-maintained assets. A rising number of public and commercial utilities are using computerized management systems. Information systems have become essential to an organization to support business operations.

Technology in these modern days has a significant impact on our country. It makes our work faster and easier in terms of Computerized Assets System and document recordings, and it keep data safe and secure. Computerized Assets systems are used to manage, monitor, and audit transactions, similar to how asset transactions are handled.

BARGO is still using manual ways of recording data of the assets, which need to be secured because there is a chance that the record needs to be found. Implementing the Computerized Assets System provides a quicker and more systematic way to keep track of all the assets for BARGO. The computerized Assets System focuses on tracking and monitoring the assets. All the assets that BARGO has, such as student's I.D., school uniform, P.E. uniform, yearbook and including the services offered by the school, and others. Furthermore, the quantity of each of the assets be managed by this system. The Computerized Assets System for BARGO is responsible for an effective and efficient

approach for students and staff. This study aims to develop a system that easily track and monitor the availability of the purchase asset/s. This system can lessen the workload. As a result, it benefits not only the employee but the administration as a whole.

Purpose and Description of the Project

The purpose of this system is to help the BARGO make their work faster and easier. Due to its condition of using the manual-based process, the researchers happened to develop a Computerized Assets System to provide the needs of the BARGO in storing, monitoring, tracking, and maintaining its records. It be in charge of keeping the data and prevent redundancy of work, and take less time and effort to make a list in searching specific data for some important purposes. This system also allows for maintaining and managing assets information more efficiently and make it possible to maintain accurate, updated records and be accessible to the staff. It is actualized by designing a Computerized Assets System that is user-friendly and interactive. When this system is implemented, the difficulties encountered with the manual method of keeping information be eliminated.

Objectives of the Project

The General objective of this system is mainly focused on reducing the workload, reducing human errors and processing time of the transactions in the BARGO, and generating a dashboard to help aid the queries of all the assets specifically:

1. To systematize the entry of assets in BARGO for an efficient and accurate way of inventory.

- 2. To monitor the availability of products and items to prevent understocking, overstocking, and running out of stock.
- 3. To maintain a systematic inventory record and eliminate duplication in ordering stocks.

Scope and Limitations of the Project

The study aims to provide easy and convenient tracking, monitoring, and sorting of the assets. The study be implemented in the offices like the IGP in SLSU when possible. The study's target audience is the asset handler in charge of the office. The study be conducted based on the description of the study and the method of data gathering by using the created system as the data gathering tool.

Thus, the study does not include the office's cashiering services. The study limits only the accurate tracking, monitoring, and sorting of the assets. This study is suitable only for the asset handler in charge of a particular office. The data gathered in this study only base on the impact of the targeted user of the system. The proposed system be used in the BARGO. The admin of the BARGO has the privilege to access the whole system. If the admin uses the system, he/she can access all the files already saved. The system is a web-based application. The proposed system is utilized by authorized users only.

Chapter II

REVIEW OF RELATED LITERATURE

This chapter provides information in the review of related literature and studies on tracking and monitoring assets.

Review Literature / Theoretical Background

Noor Hartini Shamsudin UMP (2012) School Asset Management System. Asset items are divided into two categories, inventory and model assets. At school, stationeries is used very commonly by people in an office. SAMS is a system from manual to computerized system. It is developed for the school staff to take any asset item, such as stationeries they need, and manage items at the school. Current practice uses manual forms of log books to keep records of stationeries taken by the staff. This method burdens staff who want to take stationeries from the school counter. SAMS was the solution to this problem. This system can help staff in the SK USJ20 manage the procedure of taking stationeries because one of the objectives of this Project is to computerize the manual form asset stationery item taken by the staff. Therefore, this system is beneficial and can make asset stationery's management run smoothly.

Computerized Maintenance and Asset Management: Improving Quality Through Systems Integration Meraj Imani, Nicole Radzi (2020) Well-maintained assets can positively influence many critical outcomes for 21st-century organizations. These can include results from the environment, health, safety, and quality (collectively referred to as EHS or EHSQ) and, in some cases, cyber security results. Computerized maintenance

management systems/enterprise asset management (CMMS/EAM) systems are used to manage, monitor, and audit maintenance transactions, similar to how financial transactions are handled. This article examines the literature in the context of practitioner insights to identify integration points for CMMS/EAM and quality management systems (QMS). Understanding integration points can help software development teams advance business goals, including product quality, process quality, safety, and sustainability.

Osman Abdelrahman Ali Abdalaal, MI Shukri (2020). Computerized Maintenance Management System. Given the need for a quick response to today's dynamic market, the maintenance function is considered increasingly important for industrial companies. Managing maintenance involves several activities, such as planning preventive maintenance actions; scheduling activities considering available resources, management of spare parts; analysis of data to reduce the occurrence of failures and improve the performance of the maintenance function. Effective resource management and reliable equipment are essential to optimize plant performance. Both depend on the accurate and timely management of the massive data and the effective use of maintenance resources. A computerized maintenance management system (CMMS), also called a computerized asset management system (CAMS), is software designed to fulfill these needs. This system can support cost-effective means of managing and utilizing massive data generated by maintenance, inventory control, operation, purchasing, and other relevant activities.

Malaysian Government Departments Perspective Aida Hazlin Ismail et al. (2019).

Asset Management Practices. Over the years, the inefficient and ineffective mismanagement of the government's assets has been highlighted in the Auditor General

Report. However, now there is an increase in people's awareness regarding the procedure taken by the government to procure assets. The main issue is increasing levels of misappropriation of assets in a government department. The people are aware because of the involvement of public money in the procurement of assets. The credibility and accountability of the government's civil service are the focus of the people in the line the asset management practices. This study uses the purposive sampling method with the population of employees involved in asset management units. Questionnaires have been distributed to 200 public sector employees working with the Federal Government in Putrajaya. An ordinary linear regression model was used to analyze the data. The findings show that employees' knowledge and internal control significantly influence asset management practices. The results also indicate no significant relationship between organizational culture and information systems toward asset management practices. This study contributes to the financial reporting and public-sector accounting policies on asset management. The study results can also be generalized to the state government, statutory bodies, and local authorities. The study's limitations concern the influence factors of asset management practices among the public sector accounting areas.

Venkata Naga Satya Surendra Chimakurthi (2020). Digital Asset Management in the Communication of Product Promotional Activities. Digital Asset Management (DAM) is utilized in various scenarios and for various technological goals. When it comes to handling electronic content, digital asset management (DAM) is utilized in various scenarios for various technological goals. A conceptual framework for describing promotional processes in the worlds of information technology and promotional communication logistics is presented in this paper. It is explained in the study how a

coherent DAM system helps to advertise agencies to execute more work with fewer employees by providing speed to market, productivity savings, enhanced agency and client revenues, and secure client branding. Reading this article, readers learn how to deal with fundamental challenges such as file-naming criteria, load balancing, and maintaining cultural buy-in inside the organization. Grounded on the findings of the review of related literature, the potential benefits of digital asset management in this context are discussed. An explanatory study is used to scrutinize the anticipated advantages. The description of marketing supply networks yields fresh insights into managing supply chain operations.

Syahrunizam Buyamin et al. (2012). Improvement of Asset Management by E-Inventory Asset Management System. Searching and recording assets in a laboratory is a critical task. This would occur because data storage would interfere with the search process, causing the searching to be slower, without a record of stock issuance, loss of badger, and involuntary cutting off the supply of assets. Consequently, the E-Inventory Asset Management System was built to manage data storage, updating, and facilitating the search for assets. This system can also be applied with the Bar Code Reader. Research on the effectiveness of the E-Inventory Asset Management System was implemented, and the data were analyzed by comparing the time consumption between the application of the manual system and the E-Inventory Asset Management System. In addition, the safety factor on the recording of the loan and the need to make the order before running out of stock can also be controlled by using E-Inventory Asset Management System. From this study, the computerization of asset management systems could facilitate searching in terms of asset management, data storage, security, and stock re-ordering.

Related Studies

Amanze, Bethran Chibuike (2015). Computer-Based Asset Management System for Commercial Banks. A computer Based Asset Management System is a web-based system. It allows commercial banks to keep track of their assets. The most advantages of this system are the effective management of assets by keeping records of the asset and retrieving information.

Benard Kipkorir Kosgeit et al. (2017). Effects of Computerization on Management of Financial Assets of County Governments in Kenya. As information technologies grow progressively, manual financial asset management systems have become gradually inadequate for decision needs. Consequently, county Governments view computerization of financial assets management as a tool for ensuring effective and efficient information flow of financial data. Although ICT adoption among county governments has recently increased, studies on the effect of computerization on financial assets management have yet to be undertaken. The study aimed to determine the effects of computerization on financial asset management. Data was collected using a questionnaire and semi-structured interview guides. The research found that computerization has a general effect on the efficiency of financial assets management and, in particular, efficiency aspects such as the precise definition of roles and responsibilities, faster processing of information, and improvement in following rules, policies, and regulations.

Chapter III

Technical Background

Technicality of the Project

Since the SLSU Business and Resource Generation Office (BARGO) is still doing the manual listing of all the documents or information in each of the assets. This project is a web-based platform that is intended for the Business and Resource Generation Office (BARGO) so that all the essential asset information are saved in a database. We used PHP for the front end of this system. Here, we Designed the graphic user interface of the system and MySQL for the back end where all the processes and data saving take place.

Details of the Technologies to be used

The developed project used web-based platform that only the authorized person can access the system. All data are stored in the database. We used MySQL database to save all assets of BARGO. This website run in windows 7, 8 and 10 in a minimum of 4 (RAM) Random Access Memory as long as they have already installed a software web browser like Google Chrome.

Table 1. Technologies to be used in the system

Technologies	Description
Hardware	Any unit of the computer with the following specs:

	Processor: Intel core i3 and
	above
	Memory: 4GB RAM and above
	Storage: 1 T.B. and above
	• Epson Workforce 205
	(IIOV)Printer
Software	Operations System:
	• Windows 10
	Developing Software:
	• Php
Database	MySQL

How the project works?

Figure 1 shows that only the admin can access the whole system. Only can ask client's information like name, year and section, course, size of the specific item, item name, and other essential details for completion with full observance of the admin's privacy rights before to proceed to the next step. The next step is a duly filled out BARGO form in the form of receipt to be released and given to the client. The client was able to pay all of his/her orders to the cashier's office since the BARGO has not included the cashiering services and also to go by the school's rules. After the client has been able to pay, a receipt from the cashier has been issued, and is used for the issuance of an entry permit or release of items that the client paid.

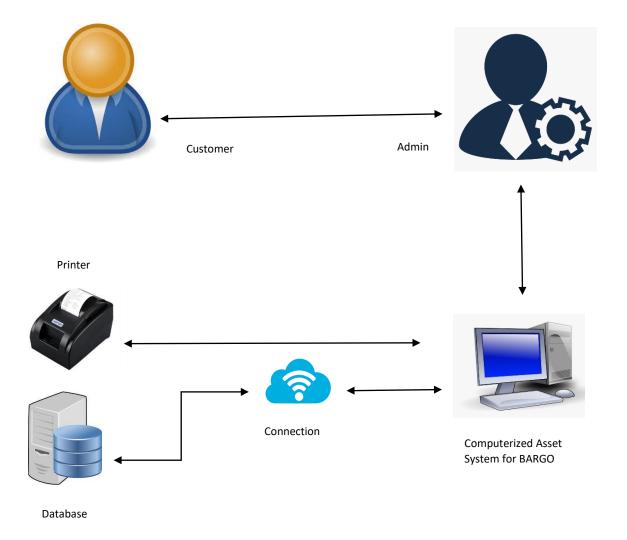


Figure 1. ARCHITECTURAL DESIGN

Figure 1 illustrates the process and storage of the data. From the customer, it goes through the admin because only the admin can access the system or any authorized personnel of the business. Then the data are processed through the computerized system. Then, the data are processed and stored in the database through the internet. Then the data are returned to the computerized system, and the device print the order slip form to be given to the customer so that the cashier's office can determine its dues.

CHAPTER 4

Methodology

This chapter covers the Requirement Analysis, Requirement Documentation,
Design of the Software, System Process, Development and Testing, Description of the
System, Implementation Plan, and Implementation Results.

Requirements Analysis

This section presents the Economic Feasibility, Requirements Modelling and the Risk Assessments/Analysis of the project.

System Requirements

This section presents the system requirements and modeling of the Computerized Assets System for BARGO.

Input

- The user must have the correct login credentials to use the system.
- The user inputs transaction information.
- The user inputs student information.

Process

• The system must authenticate the login credential provided.

Output

• The system can print receipt.

• Generate reports

Performance

• The system can keep track to the data and the events inside the system

Security and Control

• The assets must be edited, added, or removed only by the admin of the BARGO.

Data and Process Modelling

Context Diagram

The context diagram shown in Figure 2 presents the basic overview of the whole system or process being analyzed or modeled. The user can log in to the system and do the following operations: View inventory to view the records, Update inventory to record transactions for every stock that enters and exits the warehouse, and Pull-out/delete stocks. Before performing Update Inventory and Pull-out Stocks actions.

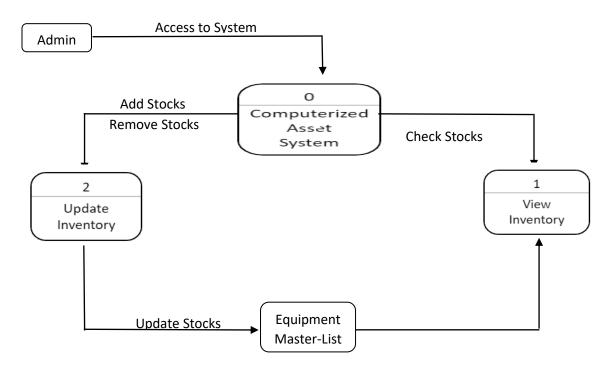


Figure 2. Context Diagram

Data Flow Diagram

The dataflow diagram provides a more detailed breakout of pieces of the Context Diagram into sub-processes. Figures 3 is the Data Flow Diagram.

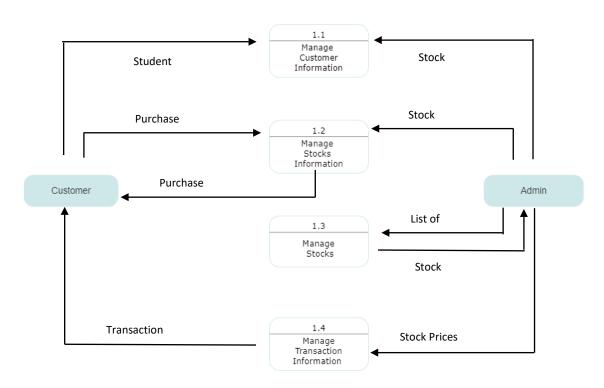


Figure 3. Data Flow Diagram

System Flowchart

Flowcharts are used in analyzing, designing, documenting, or managing a process or program in various fields. Its presentation illustrates a solution model to a given problem. Shown in Figure 4 are the system flowcharts for the user.

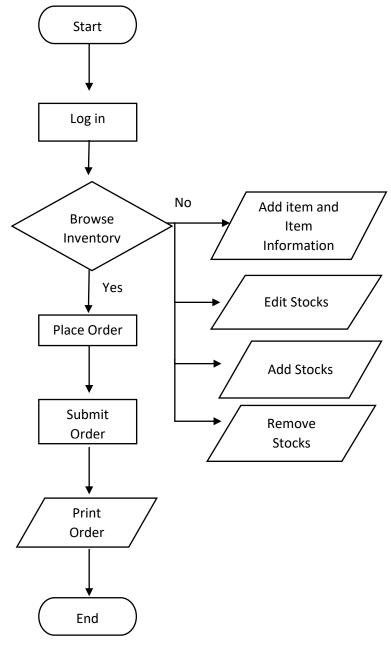


Figure 4. System Flow Chart

Object Modelling

Use Case

Figure 5 Use Case Models for the proposed system. These are representations of user's interaction with the system that shows the relationship between the user and the different use case in which the user is involved.

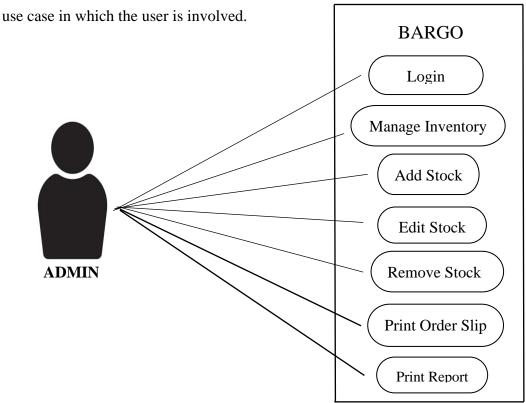


Figure 5. System's Use Case

Risk Assessments/Analysis

Table 2 identifies and analyzes all of the potential risks and issues that are detrimental to implementing the Computerized Assets System for BARGO. The steps to prevent or minimize the occurrence of the identified risks are also presented.

Table 2. Risk Assessment

Risks Description	Effect	Risk Grading (Low, Medium, High)	Recovery Measure
Malware Infection	Malfunction of system Data Loss	High	Install anti-virus software
No internet connection	Inaccessible application/website	Low	Subscribe to another ISP

Design of the Software

This section discusses the design and implementation of the data structures and algorithms used in the software. It presents the data design that produced the detailed data model of the database, such as the Database schema in Figure and the data dictionary in Figures.

Figure 6 . Database Schema of the Developed System

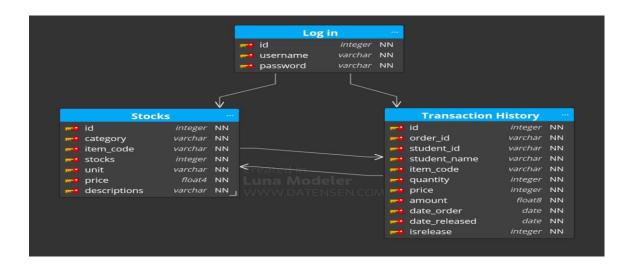


Table 3: Data Dictionary – User table

Column	Туре	Description
Id	int(11) Auto Increment	Unique ID of the current table
Username	varchar(255)	Registered username of the user
Password	varchar(255)	Registered password of the user

Table 4: Data Dictionary – Items table

Column	Туре	Description
Id	int(11) Auto Increment	Unique ID of the current table
Category	varchar(255)	The category of the registered item
Item_code	varchar(100)	The item code of the registered item

Stock	Int(11)	The number of current stocks
Units	varchar(100)	The unit count per item
price	decimal(10,2)	The prices per unit item
description	varchar(255)	Stated description of each item

Design of the System

The developed system is a web-based system that runs on web platforms using different browsers. Figures 8 to 11 are the screenshots taken from the developed system.

Interface Design

Login Interface – Figure 7 provides the form used to enter login credentials. This authenticates the users of the system.

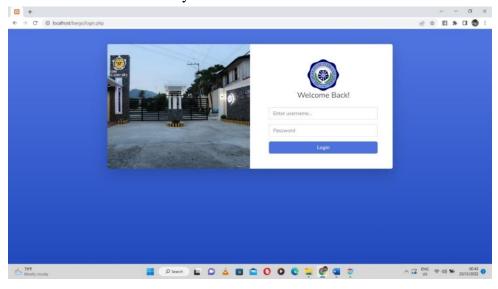


Figure 7. Login Interface

Dashboard Interface. Figure 8 display the interface dashboard of the system.

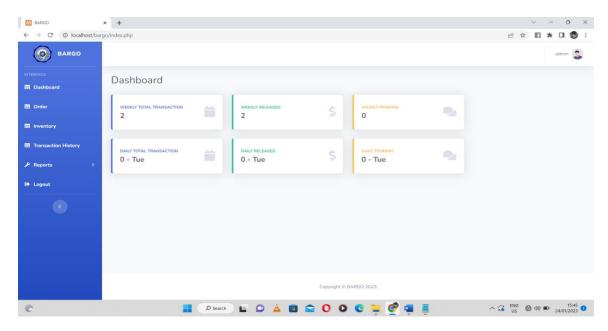


Figure 8. Dashboard Interface.

Order Section Interface. Figure 9 where you place the order of the client.

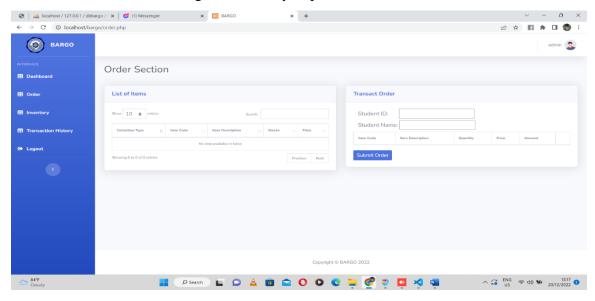


Figure 9. Order Section Interface.

Inventory Interface. Figure 10 display the inventory of the stocks. You can also print out the inventory report in this section.

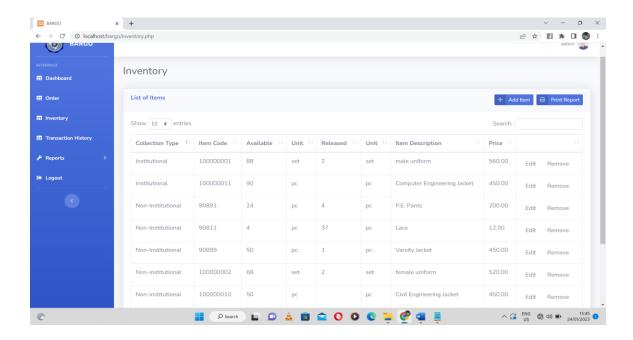


Figure 10. Inventory Interface.

Add Item Interface. Figure 11 where you can add item to the inventory.

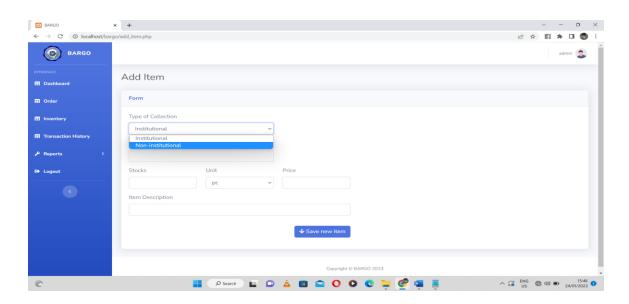


Figure 11. Add Item Interface.

Edit Item Interface. Figure 12 where you can edit item information in the inventory.

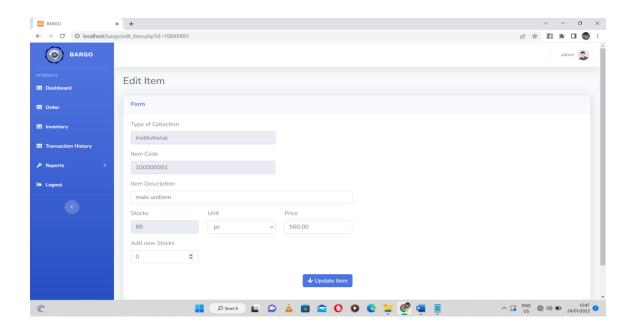


Figure 12. Edit Item Interface.

Print Interface. Figure 13 prints receipt of the purchase items.

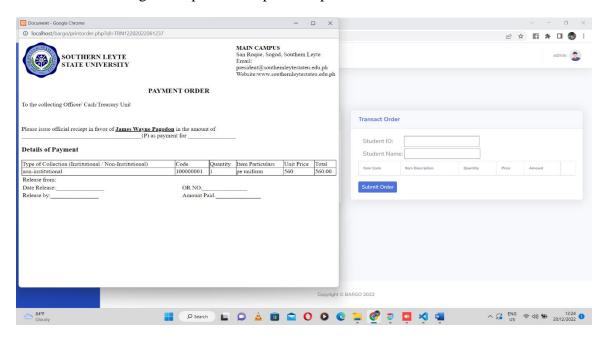


Figure 13. Print Interface.

Transaction History Interface. Figure 14 where you can see the recent transactions in the system.

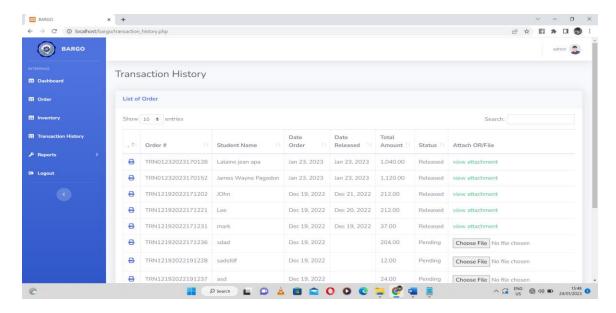


Figure 14. Transaction History Interface

Reports Interface. Figure 15 displays the reports of the events in the system. You can also print out the reports in this section.

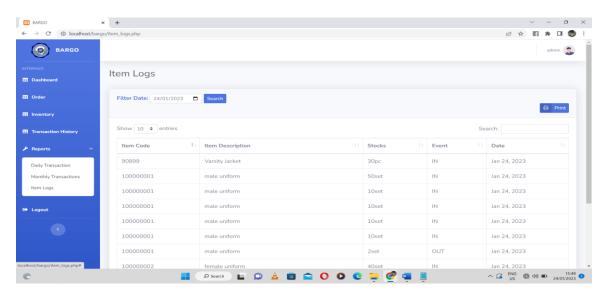
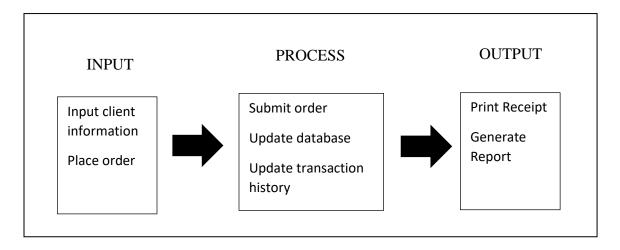


Figure 15. Reports Interface

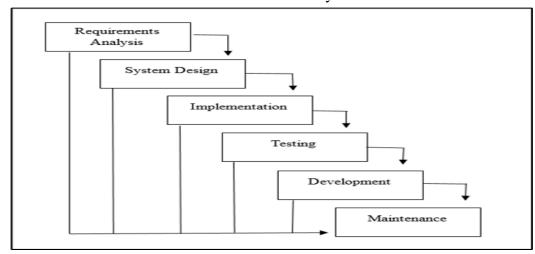
System Process



Development and Testing

Software Development

The system development process is anchored to the System Development Life Cycle (SDLC) waterfall model, as shown in Figure 12. The first phase is analysis, where the developer carefully studies the nature of the proposed system. An interview and an onsite visit were conducted to ensure that the actual scenario has been incorporated into the proposed system. Consultation with the target client was also done to make the system more realistic and address their needs more effectively.



Hardware Specification

Table 4 presents the minimum hardware specifications for developing the Computerized Assets System for BARGO.

Hardware	Description/Specification
Laptop	ASUS VivoBook
	Intel(R) Core(TM) i7-8565U
	4 GB RAM
	Windows 11

Software Specification

Shown in Table 5 are the software specifications for the development of a Computerized Assets System for BARGO.

Software

VS Code/Sublime Text is a source code editor with features that include but are not limited to debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded GIT.

XAMPP is an open-source, cross-platform web server that we used for the MySQL database.

Testing

After development, testing of the developed Computerized Assets System for BARGO was done. Unit testing was conducted to ensure that the system functions as designed. Compatibility testing was conducted to ensure that the system functions as designed. Compatibility testing was also done to ensure that the web-based system could run using different browsers, such as Google Chrome... on a Windows-based computer. The system was not tested to run on other operating systems.

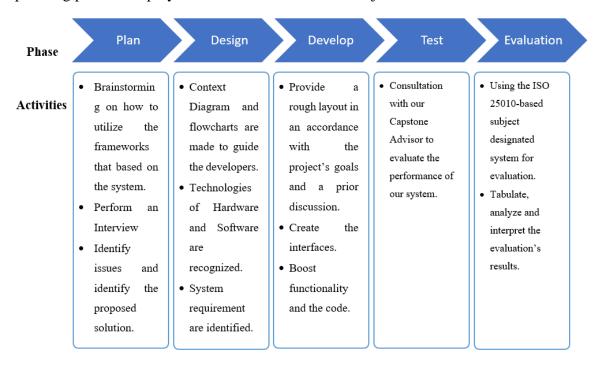
System testing was also conducted with the target clients as the evaluators. The members of the Panel Evaluation Committee also evaluated the Project. Feedback during testing was utilized to help enhance the developed system. The instrument used in the evaluation was adapted from ISO 25010 to assess the system's functionality, efficiency, usability, maintenance, reliability, portability, security, and compatibility.

Description of the System

The developed system creates a user-friendly interface. The front end of the system utilizes PHP and other frameworks for web programming. The developed system is web-responsive and data-driven, powered by MySQL for database functionality.

Implementation Plan

The Figure 16 presents the implementation plan of the Project. This covers the planning phase to deployment and evaluation of the Project.



Implementation Result

Table 6 is the result of the evaluation using the ISO 25010. Frequency, mean, and modal interpretation are used in the treatment of data using the corresponding Likert Scale provided below.

Functionality Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Fully Functional
3.21-4.20	Mostly Functional
2.61-3.20	Functional
1.81-2.60	Slightly Functional
1.0-1.8	Not Functional

Efficiency Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Very Efficient
3.21-4.20	Mostly Efficient
2.61-3.20	Efficient
1.81-2.60	Almost Efficient
1.0-1.8	Not Efficient

Usability Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Very Usable
3.21-4.20	Mostly Usable
2.61-3.20	Usable
1.81-2.60	Almost Usable
1.0-1.8	Not Usable

Maintainability Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Strongly Agree
3.21-4.20	Mostly Agree
2.61-3.20	Agree
1.81-2.60	Slightly Agree
1.0-1.8	Strongly Agree

Reliability Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Very Reliable
3.21-4.20	Mostly Reliable
2.61-3.20	Reliable
1.81-2.60	Almost Reliable
1.0-1.8	Not Reliable

Portability Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Strongly Agree
3.21-4.20	Mostly Agree
2.61-3.20	Agree
1.81-2.60	Slightly Agree
1.0-1.8	Strongly Agree

Security Indicator

Limits of Scale	Qualitativa Decemention
	Qualitative Description
4.21-5.00	Very Secure
3.21-4.20	Mostly Secure
2.61-3.20	Secure
1.81-2.60	Almost Secure
1.0-1.8	Not Secure

Compatibility Indicator

Limits of Scale	Qualitative Description
4.21-5.00	Very Compatible
3.21-4.20	Mostly Compatible
2.61-3.20	Compatible
1.81-2.60	Almost Compatible
1.0-1.8	Not Compatible

 Table 6. User Evaluation of Computerized Assets System for BARGO.

Criteria	4	3	2	1	Mean	UNIT	Interpretation
Functionality					3.8125	0.57	Mostly Functional
The system performs the tasks required.	3	5	4	4	4		
The result is as expected.	3	5	4	4	4		
The system interacts with another system.	3	3	5	4	3.75		
The system prevents unauthorized access.	2	4	4	4	3.5		
Reliability					3.9375	0.59	Mostly Reliable
Most of the faults in the system have been eliminated over time.	2	5	4	4	3.75		
The system is capable of handling errors.	3	5	5	4	4.25		
The system notifies the user about wrong data entry.	3	5	4	4	4		

The software resumes							
working and restores	3	3	5	4	3.75		
lost data after a failure.							
Usability					4.1875	0.63	Mostly Usable
The user comprehends							
how to use the system	2	5	4	5	4		
easily.							
The user learns to use	_		_		_		
the system easily.	3	5	3	5	4		
The user utilizes the							
system without much	3	5	4	5	4.25		
effort.							
The system's interface	4	5	4	5	4.5		
looks good.	4	5	4	5	4.5		
Efficiency					4	0.44	Mostly Efficient
The system responds	_		_	_	_		
quickly to the user.	3	5	4	4	4		
The system's							
execution time is	2	5	4	4	3.75		
appropriate.							
The software utilizes	2	_	_	_	4.25		
resources efficiently.	3	5	5	4	4.25		

Maintainability					3.9167	0.43	Mostly Agree
The system faults can be easily diagnosed.	3	5	3	4	3.75		
The system continues functioning when changes are made.	3	5	4	4	4		
The software can be tested easily.	3	5	4	4	4		
Portability					4.3333	0.48	Strongly Agree
The system can be moved to other environments.	4	5	5	5	4.75		
The software can be installed easily. (for administrator)	4	5	4	4	4.25		
The software can replace easily other software. (for administrator)	3	5	4	4	4		
Security					4.0625	0.61	Mostly Secure
The software ensures confidentiality of data	3	5	4	4	4		

The software prevents unauthorized access and modification to computer programs and/or data	3	5	5	5	4.5		
The software requires authentication of users	4	5	4	4	4.25		
A system log is maintained.	2	5	4	3	3.5		
Compatibility					3.75	0.26	Mostly Compatible
The software performs its required functions efficiently while sharing a common environment and resources without negatively impacting any other product/s.	3	5	4	4	4		
The software allows two or more systems, products, or	3	5	3	3	3.5		

OVERALL			3.382	
information.				
exchange and use the				
components to				

The evaluation shows the calculated result of a systematic determination of the Development of a Document Management System uses the ISO 9126 Software Quality Characteristics. The ISO 9126-1 software quality model identifies 8 main quality characteristics, namely: Functionality, Reliability, Usability, Efficiency, Maintainability, Portability, Security and Compatibility. Each Characteristics have sub characteristics that define the main category as the evaluation of the system software or web-based. Most of the scores given and critique from the six panelists are five (5), four (4), three (3), and two(2). The evaluation result shows the mean for criteria on 4.3 for portability ranked as the highest, followed by 4.1 for usability, 4.06 for security, 4.0 for efficiency, 3.9 for maintainability and reliability, 3.8 for functionality, and lastly criteria for compatibility of the system ranks as the lowest mean of 3.7. And the overall weighted mean for the criteria of evaluation result was 3.38.

CHAPTER V

RECOMMENDATIONS

As the Business and Resource Generating Office (BARGO) develops its asset system, there are various upcoming considerations for a better information system that can be used as recommendations include:

- carrying out the post-implementation phase of he system life cycle methodology.
- Redesign the information system utilizing new features to create a system
 that is superior than the asset management and transaction processing
 systems used in this project's design.
- 3. For the future capstone researcher, they should try to improve the system and become an official system for the school, and is connected to the cashier's office for smoother transactions and data security.

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Appendix A

Relevant Source Code

Database Connection

```
<?php
  $db = mysqli_connect('localhost', 'root', ", 'dbbargo');
?>
Add/Save
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-</pre>
fit=no">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>BARGO</title>
  <!-- Custom fonts for this template -->
  link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
  link
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,6
00i,700,700i,800,800i,900,900i"
    rel="stylesheet">
  <!-- Custom styles for this template -->
  <link href="css/sb-admin-2.min.css" rel="stylesheet">
  <!-- Custom styles for this page -->
  k href="vendor/datatables/dataTables.bootstrap4.min.css" rel="stylesheet">
</head>
<body id="page-top">
  <!-- Page Wrapper -->
  <div id="wrapper">
    <?php include("sidebar.php"); ?>
    <!-- Content Wrapper -->
     <div id="content-wrapper" class="d-flex flex-column">
```

```
<!-- Main Content -->
       <div id="content">
         <?php include("topnavbar.php");?>
         <!-- Begin Page Content -->
         <div class="container-fluid">
           <!-- Page Heading -->
           <h1 class="h3 mb-2 text-gray-800 mb-4">Add Item</h1>
           <!-- DataTales Example -->
           <div class="card shadow mb-4">
              <div class="card-header py-3">
                <h6 class="m-0 font-weight-bold text-primary">Form
                </h6>
              </div>
              <div class="card-body">
                 <form id="addItemform">
                   <div class="form-group row">
                     <div class="col-sm-4">
                       <label for="">Type of Collection</label>
                       <select type="text" class="form-control"</pre>
name="collection_name" required>
                       <option value="institutional">institutional
                       <option value="non-institutional">non-institutional
                     </select>
                     </div>
                  </div>
                  <div class="form-group row">
                     <div class="col-sm-4">
                       <label for="">Item Code</label>
                 <input type="text" class="form-control" name="item_code" required>
                     </div>
                  </div>
                  <div class="form-group row">
                     <div class="col-sm-2">
                       <label for="">Stocks</label>
            <input type="number" class="form-control" name="stocks" required>
                     </div>
                     <div class="col-sm-2">
                       <label for="">Unit</label>
                       <select class="form-control" name="units" id="units" required>
```

```
<option value="pc">pc</option>
                   <option value="set">set</option>
                </select>
              </div>
              <div class="col-sm-2">
                <label for="">Price</label>
        <input type="number" class="form-control" name="price" required>
              </div>
            </div>
            <div class="form-group row">
              <div class="col-sm-6">
                <label for="">Item Description</label>
         <input type="text" class="form-control" name="descriptions" required>
              </div>
            </div>
            <div class="form-group row msgnotif">
           <div class="form-group row ">
              <div class="col-sm-6">
              <button type="submit" class="btn btn-primary float-right">
                   <i class="fas fa-arrow-down"></i>
                <span class="text">Save new item</span>
            </button>
              </div>
           </div>
         </form>
       </div>
    </div>
  </div>
  <!--/.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<footer class="sticky-footer bg-white">
  <div class="container my-auto">
    <div class="copyright text-center my-auto">
       <span>Copyright &copy; BARGO <?=date("Y");?></span>
    </div>
  </div>
```

```
</footer>
      <!-- End of Footer -->
    </div>
    <!-- End of Content Wrapper -->
  </div>
  <!-- End of Page Wrapper -->
  <!-- Scroll to Top Button-->
  <a class="scroll-to-top rounded" href="#page-top">
    <i class="fas fa-angle-up"></i>
  </a>
  <script>
    $("#addItemform").on("submit",function(){
      event.preventDefault();
      var formData = new FormData($(this)[0]);
      url = 'process/additem.php';
      fetch(url, {
         method: 'post',
         headers: {
         'X-Requested-With': 'XMLHttpRequest',
         },
         body: formData,
       })
       .then(response => response.json())
      .then(data => {
         console.log(data.message);
         if (data.message == "success") {
           $('.msgnotif').html('New item has been
added!');
           $("#addItemform")[0].reset();
         } else {
           $('.msgnotif').html(''+data.message+'');
         }
       })
      .catch(function(error) {
       });
    })
  </script>
  <!-- Bootstrap core JavaScript-->
```

```
<script src="vendor/jquery/jquery.min.js"></script>
  <script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
  <!-- Core plugin JavaScript-->
  <script src="vendor/jquery-easing/jquery.easing.min.js"></script>
  <!-- Custom scripts for all pages-->
  <script src="js/sb-admin-2.min.js"></script>
  <!-- Page level plugins -->
  <script src="vendor/datatables/jquery.dataTables.min.js"></script>
  <script src="vendor/datatables/dataTables.bootstrap4.min.js"></script>
  <!-- Page level custom scripts -->
  <script src="js/demo/datatables-demo.js"></script>
</body>
</html>
Edit / Update
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-</pre>
fit=no">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>BARGO</title>
  <!-- Custom fonts for this template -->
  k href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
  link
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,6
00i,700,700i,800,800i,900,900i"
     rel="stylesheet">
  <!-- Custom styles for this template -->
```

```
<link href="css/sb-admin-2.min.css" rel="stylesheet">
  <!-- Custom styles for this page -->
  k href="vendor/datatables/dataTables.bootstrap4.min.css" rel="stylesheet">
</head>
<body id="page-top">
  <!-- Page Wrapper -->
  <div id="wrapper">
    <?php include("sidebar.php"); ?>
    <!-- Content Wrapper -->
    <div id="content-wrapper" class="d-flex flex-column">
       <!-- Main Content -->
       <div id="content">
         <?php include("topnavbar.php");?>
         <!-- Begin Page Content -->
         <div class="container-fluid">
           <!-- Page Heading -->
           <h1 class="h3 mb-2 text-gray-800 mb-4">Edit Item</h1>
           <!-- DataTales Example -->
           <div class="card shadow mb-4">
              <div class="card-header py-3">
                <h6 class="m-0 font-weight-bold text-primary">Form
                </h6>
              </div>
              <div class="card-body">
                <?php
                $id = $ GET['id'];
                   $getitem = mysqli_query($db,"select * from items where item_code
= '$id'");
                   $data = mysqli_fetch_array($getitem );
                ?>
                 <form id="addItemform">
                   <div class="form-group row">
                     <div class="col-sm-4">
                        <label for="">Type of Collection</label>
              <input type="text" class="form-control" name="collection_name"</pre>
value="<?=$data['category']?>" disabled>
                     </div>
                   </div>
```

```
<div class="form-group row">
                      <div class="col-sm-4">
                        <label for="">Item Code</label>
                  <input type="text" class="form-control" name=""</pre>
value="<?=$data['item_code']?>" disabled>
                        <input type="text" class="form-control" name="item_code"</pre>
value="<?=$data['item_code']?>">
                      </div>
                   </div>
                   <div class="form-group row">
                      <div class="col-sm-2">
                        <label for="">Stocks</label>
                        <input type="number" class="form-control" name="stocks"</pre>
value="<?=$data['stocks']?>" required>
                      </div>
                      <div class="col-sm-2">
                        <label for="">Unit</label>
                        <select class="form-control" name="units" id="units" required>
        <option value="pc" <?= $data['category'] == "pc"? 'selected':"?>>pc</option>
         <option value="set" <?= $data['category'] == "set"? 'selected':"?>>set</option>
                        </select>
                      </div>
                      <div class="col-sm-2">
                        <label for="">Price</label>
        <input type="number" class="form-control" name="price"</pre>
value="<?=$data['price']?>" required>
                      </div>
                   </div>
                   <div class="form-group row">
                      <div class="col-sm-6">
                        <label for="">Item Description</label>
                        <input type="text" class="form-control" name="descriptions"</pre>
value="<?=$data['descriptions']?>" required>
                      </div>
                   </div>
                   <div class="form-group row msgnotif">
                   <div class="form-group row ">
                      <div class="col-sm-6">
```

```
<button type="submit" class="btn btn-primary float-right">
                        <i class="fas fa-arrow-down"></i>
                      <span class="text">Update item</span>
                 </button>
                   </div>
                 </div>
               </form>
            </div>
         </div>
       </div>
       <!--/.container-fluid -->
    </div>
    <!-- End of Main Content -->
    <!-- Footer -->
    <footer class="sticky-footer bg-white">
       <div class="container my-auto">
         <div class="copyright text-center my-auto">
            <span>Copyright &copy; BARGO <?=date("Y");?></span>
         </div>
       </div>
    </footer>
    <!-- End of Footer -->
  </div>
  <!-- End of Content Wrapper -->
</div>
<!-- End of Page Wrapper -->
<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
  <i class="fas fa-angle-up"></i>
</a>
<script>
  $("#addItemform").on("submit",function(){
    event.preventDefault();
    var formData = new FormData($(this)[0]);
    url = 'process/edititem.php';
    fetch(url, {
       method: 'post',
```

```
headers: {
         'X-Requested-With': 'XMLHttpRequest',
         },
         body: formData,
       })
       .then(response => response.json())
       .then(data => {
         console.log(data.message);
         if (data.message == "success") {
           $('.msgnotif').html('Item has been updated!');
           $("#addItemform")[0].reset();
         } else {
           $('.msgnotif').html(''+data.message+'');
         }
       })
       .catch(function(error) {
       });
    })
  </script>
  <!-- Bootstrap core JavaScript-->
  <script src="vendor/jquery/jquery.min.js"></script>
  <script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<!-- Core plugin JavaScript-->
  <script src="vendor/jquery-easing/jquery.easing.min.js"></script>
  <!-- Custom scripts for all pages-->
  <script src="js/sb-admin-2.min.js"></script>
  <!-- Page level plugins -->
  <script src="vendor/datatables/jquery.dataTables.min.js"></script>
  <script src="vendor/datatables/dataTables.bootstrap4.min.js"></script>
  <!-- Page level custom scripts -->
  <script src="js/demo/datatables-demo.js"></script>
</body>
</html>
Delete
<a href="remove_item.php?id='.$value['item_code'].'" class="btn">Remove</a>
```

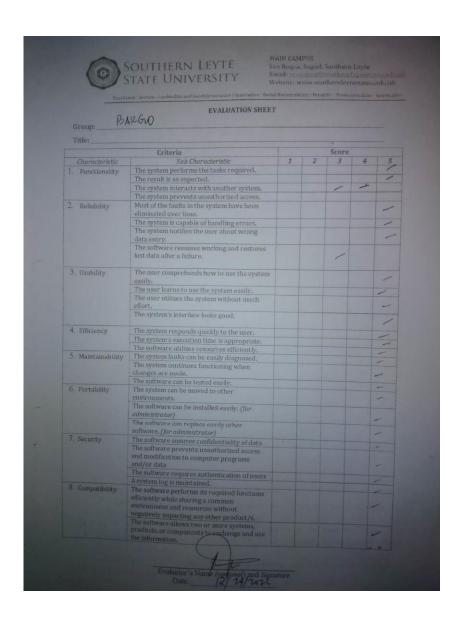
Appendix B

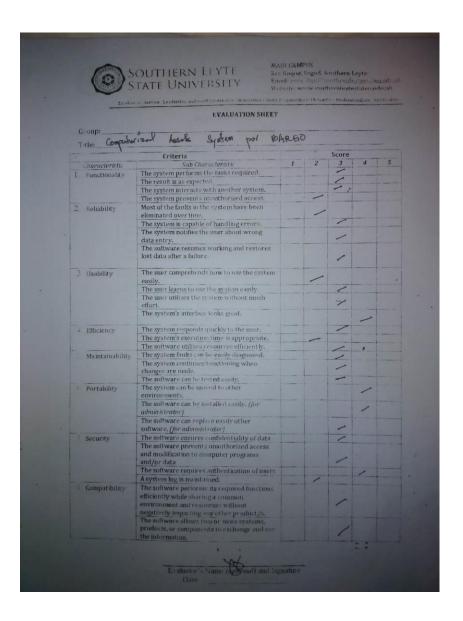
Evaluation Instrument

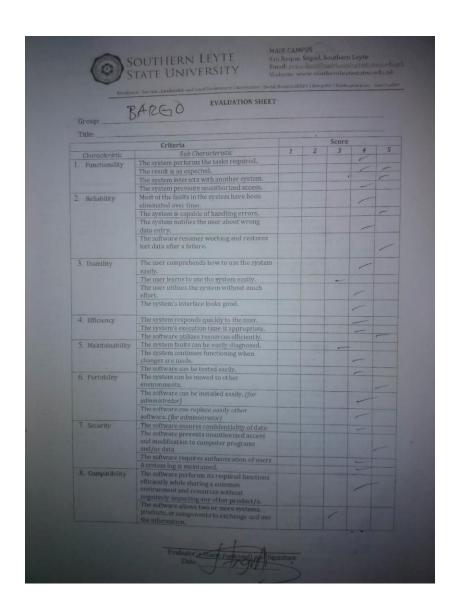
System Evaluation (ISO 25010)

Instructions: Please evaluate the "Development of a Document Management System" using the scale shown below. Check (/) the appropriate score. Thank You.

Email: presiden					od. Southern Leyte Douthernleyrest at exact and southernleytest at exact up to steam Professionalism spaticulity			
	EVALUATION SHEE	T						
Title:								
Criteria			Score					
Characteristic	Sub Characteristic	1	2	3	4	5		
1. Functionality	The system performs the tasks required.				1			
	The result is as expected.				1,			
	The system interacts with another system.				1,			
2 materials	The system prevents unauthorized access. Most of the faults in the system have been				/			
2. Reliability	eliminated over time.				1			
	The system is capable of handling errors.				1			
	The system notifies the user about wrong							
	data entry.				1			
	The software resumes working and restores lost data after a failure.				/			
3. Usability	The user comprehends how to use the system easily.					_		
	The user learns to use the system easily.					1		
	The user utilizes the system without much					1		
	The system's interface looks good.					,		
4. Efficiency	The system responds quickly to the user.				-	1		
	The system's execution time is appropriate.				1			
	The software utilizes resources efficiently.				1			
5. Maintainability	The system faults can be easily diagnosed.				1			
	The system continues functioning when changes are made.				,			
	The software can be tested easily.				-			
6. Portability	The system can be moved to other environments,				-	,		
	The software can be installed easily. (for administrator)				1			
	The software can replace easily other software. (for administrator)				1			
7. Security					/			
	The software prevents unauthorized access and modification to computer programs				-	1		
	and/or data The software requires authentication of users							
					1			
8. Compatibility	The software performs its required functions efficiently while sharing a common environment and recovered with			-				
	products, or components to exchange and use the information.			1				



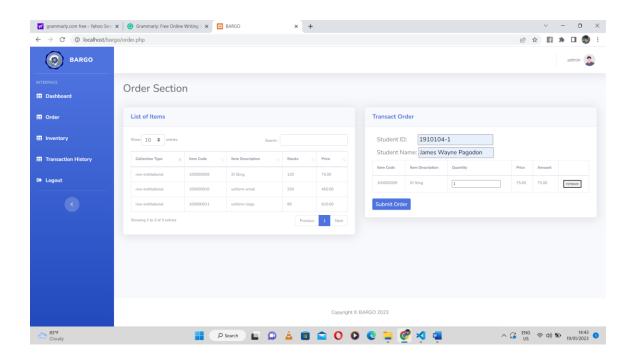




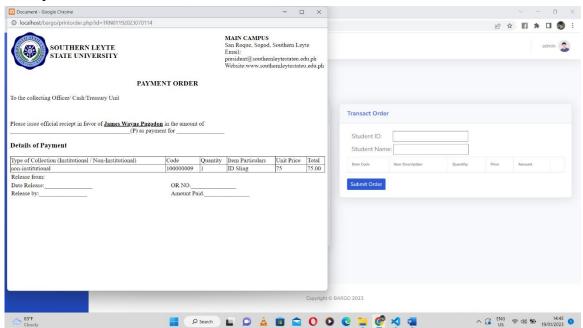
Appendix C

Sample Input/Output/Reports

Input

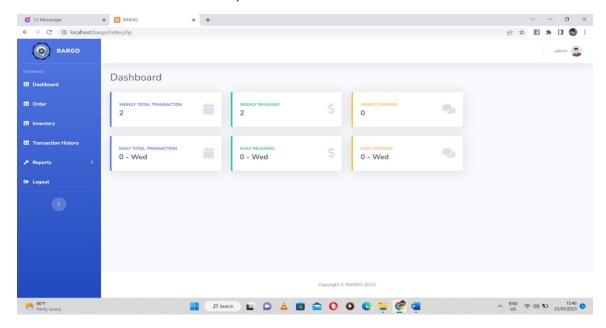


Output

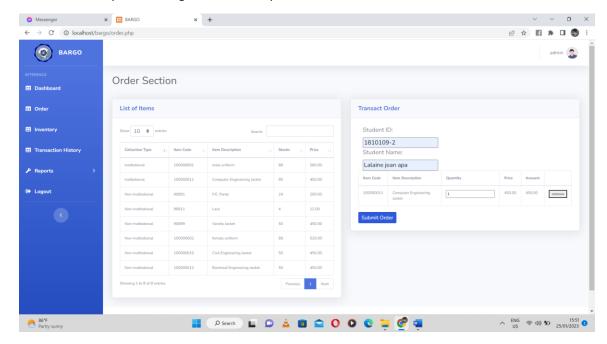


Users Guide

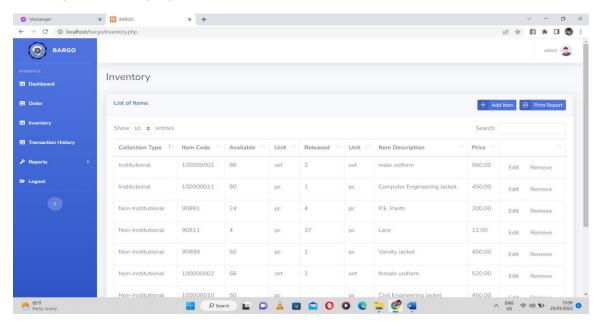
- 1. Admin must enter valid log in information to successfully log in to the system
- 2. Click order in the side bar to place an order.



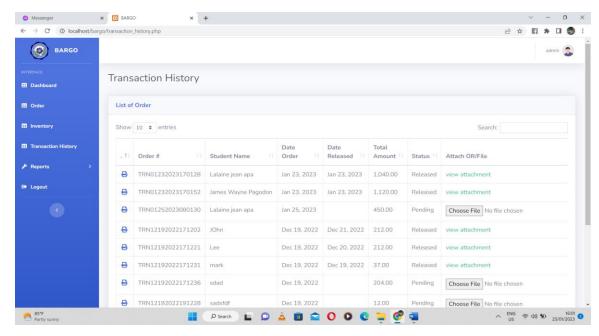
- 3. In order section, you must input the needed information in placing the order and do not leave an empty field,
- 4. After placing the order, click the 'submit order' button to submit the order, and
- 5. An order slip form will generate to be printed.



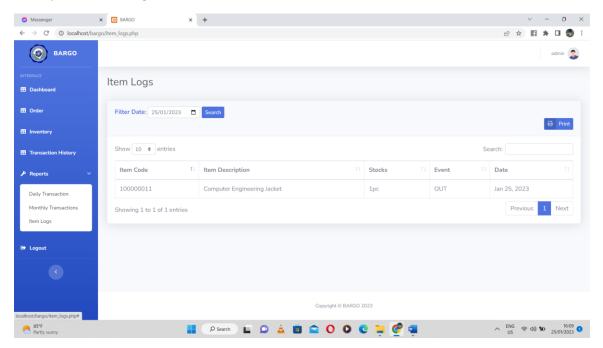
- 6. In the management of the stock, click the inventory in the left side bar to see the inventory information of the stocks,
- 7. In that inventory interface, this is where you can add item, edit item info, remove item, and print inventory report.



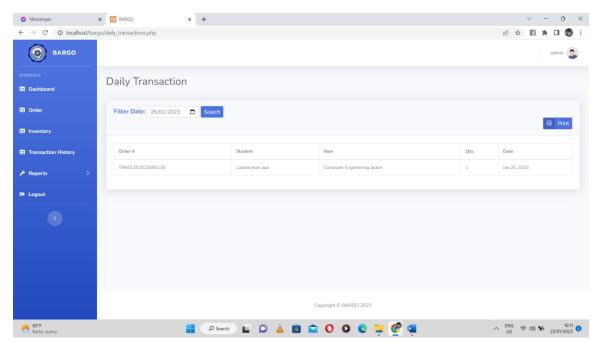
- 8. To view the recent transactions in the system, click the transaction history in the left side bar,
- 9. In the section, you can trace the released orders and pending orders, and for the released orders you can view the photo of the OR attached, you can also re-print the order slip of the orders.



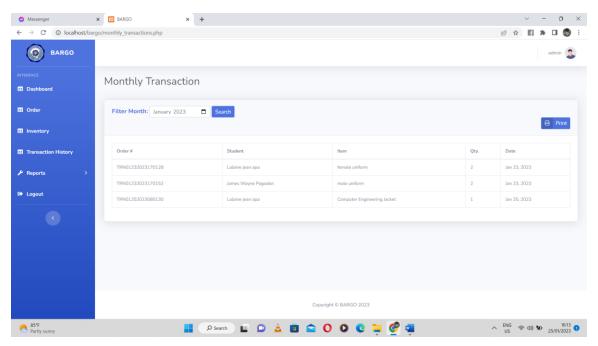
- 10. To view the reports for the transaction in the system, click reports in the left side bar,
- 11. Then, an option will appear, daily transactions, monthly transactions, and item logs,
- 12. In item logs section, you can see the in and out of the items, and also you can print the reports in item logs,



13. In daily transaction section, you can the transactions made within the day, and also you can print out the report for the daily transactions,



14. In monthly transaction section, you can see the transactions made within the month, and also you can print out the report for the monthly transactions.



Appendix D

Documentation



Appendix E

Curriculum Vitae

Personal Data

Name: James Wayne Pagodon

Birthdate: November 7,2000

Birthplace: Bato, Leyte

Age: 22 years old

Address: Brgy. Tugas Bato, Leyte

Civil Status: Single

Nationality: Filipino

Mother's Name: Maria Luisa L. Pagodon

Father's Name: Luciano L. Pagodon Jr.

Elementary: Bato Central School

Secondary: Bato School of Fisheries – Junior High School

National Vocational School – Senior High School

Tertiary:

Southern Leyte State University – Main Campus, Sogod, Southern Leyte

Curriculum Vitae

Personal Data

Name: Lalaine Jean D. Apa

Birthdate: March 20, 2000

Birthplace: Cagtinae, Malimono, Surigao Del Norte

Age: 22 years old

Address: Brgy. Lugsongan, Limasawa So. Leyte

Civil Status: Single

Nationality: Filipino

Mother's Name: Leny D. Apa

Father's Name: Ronie E. Apa

Elementary: Lugsongan Elementary School

Secondary: Limasawa National High School - Junior High School

Limasawa National High School - Senior High School

Tertiary:

Southern Leyte State University- Main Campus, Sogod, Southern Leyte

Curriculum Vitae

Personal Data

Name: Laarni Marie E. Ponla

Birthdate: Sept. 07, 2000

Birthplace: Sogod, Southern Leyte

Age: 22 years old

Address: Brgy. Mayuga, Libago, Southern Leyte

Civil Status: Single

Nationality: Filipino

Mother's Name: Emmylou E. Ponla

Father's Name: Godfrey Z. Ponla

Elementary: Mayuga, Elementary School

Secondary: Saint Thomas Acquinas College – Junior High

Saint Thomas Acquinas College - Senior High

Tertiary:

Southern Leyte State University- Main Campus, Sogod, Southern Leyte