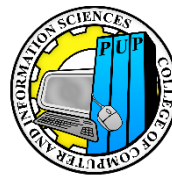




REPUBLIC OF THE PHILIPPINES
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
STA. MESA, MANILA



Web-Based Furniture Shop Management System

A System Study Presented to the Faculty of the College of Computer and
Information Sciences Polytechnic University of the Philippines

In Partial Fulfillment of the Requirements for the Capstone Project

Submitted by:

Amarilla, Cyrene Jane B.

Coronado, Aira Marie B.

Efa, Sean Lester A.

Estores, Elissa Joy P.

Lozano, Mariano III S.

Publico, Mark Joseph B.

BSIT 4-2N
OCTOBER 2017

APPROVAL SHEET

Approved by the committee on Oral Examination with the grade of _____

Examiners:

Prof. Monina D. Baretto

Prof. Maria Esperanza H. Reyes

Accepted in partial requirements for the degree of Bachelor of Science in
Information Technology.

Dr. Gisela May A. Albano

Dean, CCIS

RECOMMENDATION SHEET

The system entitled Furniture Shop Management System has been examined and is recommended for acceptance and approval to the committee for oral examination.

Prof. Alex B. Uy

Faculty-In-Charge

TABLE OF CONTENTS

Abstract	I
CHAPTER 1: PROJECT DEFINITION	
1.1 Introduction	1
1.2 Business Case	2
1.2.1 Background of the Organization	2
1.2.2 Project Overview	3
1.2.3 Project Constraint	3
1.2.4 Project Assumptions	4
1.3. Scope and Limitation	4
1.4. Methods Used in the Study	5
CHAPTER 2: FUNCTIONAL SPECIFICATION REPORT	
2.1 Data Requirements	7
2.1.1 Forms	7
2.1.1.1 List of Forms	7
2.1.1.2 Sample of Forms	8
2.1.2 Reports	11
2.1.2.1 List of Reports	11
2.1.2.2 Sample Reports	12
2.2 Policies and Procedures	
2.2.1 Procedures	13
2.2.1.1 Context Diagram	13
2.2.1.2 Level 1 DFD	14
2.2.2 Policies	
2.2.2.1 Business Requirements	15
2.2.2.2 Business Policies	16

2.3 Problem Analysis	17
2.3.1 Fishbone	17
2.3.2 Problems and Requirements	18
2.3.3 Conclusion	19
2.3.4 Recommendation	19
 CHAPTER 3: PROPOSED SYSTEM DEFINITION	
3.1 Requirements-Features Matrix	21
3.2 Functional Specification	23
3.2.1 System Boundaries	23
3.2.2 System Use Case Diagram	23
3.2.3 Detailed Use Case Diagram	24
3.3.4 Use Case Description	29
3.3 Technical Specification	
3.3.1. Class Diagram	43
3.3.1.1 Data Dictionary of Classes	43
3.3.1.2 Class Diagrams (per Use Case by System)	48
3.3.2. Activity Diagram	54
3.3.3. Database Design	
3.3.3.1 Database Schema	59
3.3.3.2 Data Dictionary (Landscape orientation)	60
3.4 Architectural Design	
3.4.1 Information system architecture	121
3.4.2 Web Architecture	122
3.4.3 Client-Server Architecture	123
3.4.4 Network Architecture	124
 CHAPTER 4: IMPLEMENTATION PLAN	
4.1 Testing Plan	125
4.1.1 Test Design Process	125
4.1.2 Test Execution Process	125

4.2. Requirements Plan	126
4.2.1 Hardware Requirements	126
4.2.1.1 Server	
4.2.1.2 Workstation	
4.2.2 Software Requirements	126
4.2.2.1 Operating Systems	
4.2.2.2 DBMS	
4.2.2.3 Pre-requisite Software	
4.2.3 Peopleware (End Users, Systems Administration, Etc)	127
4.3 Quality Plan	127
4.4 Security Plan	127
4.5 System Maintenance and Support Plan	128
4.5.1 Preventive Measure Plan	
4.5.2 Corrective Measure Plan	
4.5.3. Backup and Recovery Plan	129

CHAPTER 5: RECOMMENDATION **130**

APPENDICES

Data Gathering Instruments

Client Forms & Reports

List of Tables

List of Figures

Resume

ABSTRACT

The Furniture Shop Management System is a web-based application created based on a furniture shop that offers high quality furniture that goes from simple and classic to one very luxurious design. The shop offers furniture generously made of narra and of high quality fabrics imported from other countries. The shop creates furniture for display and for walk-in customers to see and purchase. They accept orders with designs picked from their brochures or customized designs specified or brought by the customer.

The Furniture Shop Management System helps the admin manage orders, monitor materials inventory and track furniture production. At the same time it will help them promote their products and reach customers on a farther vicinity. In this light, the furniture shop's customers can create an account for website access so they can easily order furniture, track the production progress of their order as well as the delivery. The project has three (3) subsystems namely; Order Management, Billing and Collections and Production Tracking System.

CHAPTER 1

PROJECT DEFINITION

1.1 INTRODUCTION

The Furniture Shop now stands on its 36th year with two stores found in Bacoar and Silang, Cavite. The shop offers high quality furniture that goes from simple and classic to one very luxurious design.

The business is owned and managed by a family, but mostly by the parents who still list and writes the orders made per day and the receipts and bill per transaction. It's difficult processing the transaction due to unorganized stack of charts and voluminous brochures. The shop also uses the forms improperly which leads to difficult retrieval of order records.

The proponents aim to provide a Web-Based Management system entitled, Furniture Shop Management System. This system will help the family in making faster transactions.

It will help them in storing and retrieving information, enhancing the security of their records. The customers will also find it more convenient to choose a furniture by sending their desired design with the customization feature. With this system, the furniture shop that is running for 36 years now, will keep up with the rapidly changing society and developing technology.

1.2 BUSINESS CASE

1.2.1 BACKGROUND OF THE ORGANIZATION

The Furniture Shop makes high quality furniture made of narra wood with designs that goes from simple and classic to a very luxurious one. They offer furniture generously made of narra and of high quality fabrics imported from other countries. The shop creates furniture for display and for walk-in customers to see and purchase. They accept orders with designs picked from their brochures or customized designs specified or brought by the customer.

The 36 year old running business now has two stores; both stores are managed by the family members themselves. Josephine Bonayon Baraquiel, one of the owners, proposed the idea of making furniture shop to her husband because she herself is a daughter of a furniture maker. Josephine used to help her parents way back when she was in their care, her parents influenced her in every way and together with her husband they build the Furniture shop together.

This business is the reason they got to where they are now, from a small shop at vicinity in Albay, Bicol to owning two stores located nearby the capital city of the country. The Furniture Shop is also the reason how they manage to send their six children to decent universities and now their children are working at great companies and is helping them from time to time.

The Furniture shop's number one priority in furniture making is ensuring that the furniture they make is of high quality and can be considered world class. They also wanted to join the bandwagon of online shops in the country to be part of this rapidly changing society.

1.2.2 PROJECT OVERVIEW

The project aims to help the said Furniture Shop in making their transactions faster, easier and help them keep pace with the rapidly changing society by providing them a web-based system. This web-based system will have a website and an admin interface. The admin interface is where the manager can update their featured furniture, add and remove furniture and manage orders made personally or through the website. The website will display all furniture the shop can offer. The customer can easily order furniture just by browsing through the website and the manager will find it easy to manage orders and produce the customers' bills and receipts.

It will also help the customers choose design on their perspective by sending their own design in our customization feature. With the system the manager can easily store and retrieve information, thus minimizing the time for looking upon the client's record every time they deliver.

1.2.3 PROJECT CONSTRAINTS

The constraints considered by the proponents are the following:

- Time frame given for the project is 10 months, limited amount of time to build the system.
- The scope of the project covers maintainance and transaction processes of the business.
- The proponents are currently students with limited source of income. It is certain that they cannot invest financially.

1.2.4 PROJECT ASSUMPTIONS

- **The Project will be finished on time.**

The fully-functional system project will be finished on time with no errors and bugs.

- **The project team will be able to acquire all the information and documents needed.**

The client will be able to provide all necessary documents and information for the Project Team to comply with the requirements of the project and be able to provide them a running system that functions accurately.

- **User Acceptance**

The client will be satisfied with the final outcome of the project. The project will lighten the works of the users, their transaction will be faster and provide a better service to their customers.

1.3. SCOPE AND LIMITATION

The business processes of the furniture shop that will be featured in the system includes managing of orders, creation of bills, issuance of receipts, collecting payment, tracking of production and monitoring materials.

The project also includes point of sales and delivery tracking. The system will have a customization feature which allows the customers to send their own design of the furniture. Maintenance of the fields needed for the transactions will be covered. The project also produces queries and reports.

The system will not cover the purchasing of materials in monitoring the inventory of raw materials.

1.4. METHODS USED IN THE STUDY

1.4.1 DATA GATHERING TECHNIQUES

- **Observation**

The proponents observed the business environment and how they do things thus making it easier for us to know their problems.

- **Personal Interview**

The proponents conducted an interview to gather data needed for this project. This serves as the way to obtain useful information to the people who know the business very well.

- **Document Analysis**

The forms we gathered will be analyzed to understand the business and know what data are needed for the transactions.

1.4.2 Software Process Model

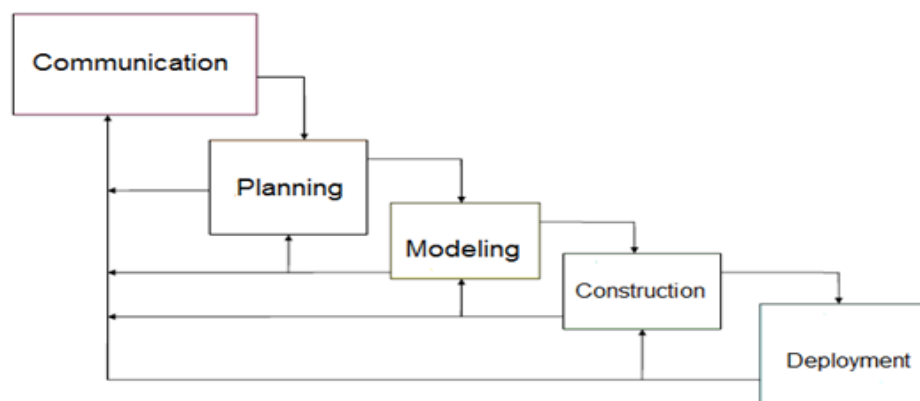


Figure 1. Waterfall Model with Feedback

The proponents used the Waterfall Model with Feedback as a model used in visualizing the step by step process the group is going to take to finish the project on the scheduled time. The Waterfall Model with Feedback is a simple and easy to use model because of it's rigidity. Each phases has a specific deliverable and a review process therefore after making progress on the project we can go back to the client and ask if what we produce is accurate according to their business rules and processes.

CHAPTER 2

FUNCTIONAL SPECIFICATION REPORT

2.1 DATA REQUIREMENTS

2.1.1 FORMS

2.1.1.1 LIST OF FORMS

Form #	Form Name	Description	User
F1	Sales Invoice	This contains the customer information, order information, order specification and payment information. This serves as the contract and the bill.	Manager, Customer
F2	Job Order	This contains the details of the ordered furniture the manufacturer should follow.	Manager, Manufacturer
F3	Delivery Receipt	It contains delivery information, order information and payment information. This is given to the delivery man and later on passed to the customer as final receipt.	Manager, Customer, Delivery Man,
F4	Official Receipt	This contains the payment details of the customer. This is given to the customer every payment made.	Manager, Customer

Table 1. List of Forms

2.1.1.2 SAMPLE OF FORMS

SALES INVOICE		
Sold to: Rosario Hernandez		DATE: December 12, 2016
Address: Bacoar, Cavite		CONTACT NO.: 09163737052
QUANTITY	PARTICULAR ITEM	AMOUNT
1 SALA SET	MANILENIA	TOTAL AMOUNT
	FABRIC GOLD RANI	170,000
	COLOR 19C	- <u>100,100</u>
	1 PC. LOVE SEAT	BALANCE
	1 PC. CENTER TABLE	70,000
	2 PCS SIDE TABLE	
	1 SET DINING SET	
PREPARED BY: <u>JOSEPHINE BARAQUEL</u>		
SIGNATURE OVER PRINTED NAME		

Figure 2. Sample Sales Invoice Format

JOB ORDER
SI #123 ROSARIO HERNANDEZ
1 SET SALA SET – MANILENIA
FABIC: GOLD RANI
COLOR: 19C
1 PC. LOVE SEAT
1 PC CENTER TABLE 22 X 42'
2 PCS SIDE TABLE 18 X 22"
1 SET DINING SET W/ 8 CHAIRS

Figure 3. Sample Job Order Format

NAME		ADDRESS		CITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
Mrs G - Georgeville		10 W. Main St - Winston Viet Subd		Pocahontas		Made To Order		
1	Set	Pala Set mantels		1 set			70.00	
		1 love seat		1 center table	22"x42"		100.00	
		2 per code table		18"x32"				
1	Set	Living Set w/tee		8 chair			70.00	
2	per	Hi- chain						
Total Amount								
Prepared By:								

2.1.2.2 SAMPLE REPORTS

Furniture Name	Date Sold	Quantity	Unit Cost	Total
Rocking Chair Regular	12/8/2016	2	15,000	30000.00
Manillenia Divan	12/25/2016	1	5,000	5000.00
Manillenia (Sala Set)	12/25/2016	1	100,000	100000.00
Cleopatra (Sala Set)	12/31/2016	1	150,000	150000.00
			Grand Total:	285,000

Figure 6. Sample Sales Report Format

2.2 POLICIES AND PROCEDURES

2.2.1 PROCEDURES

2.2.1.1 CONTEXT DIAGRAM

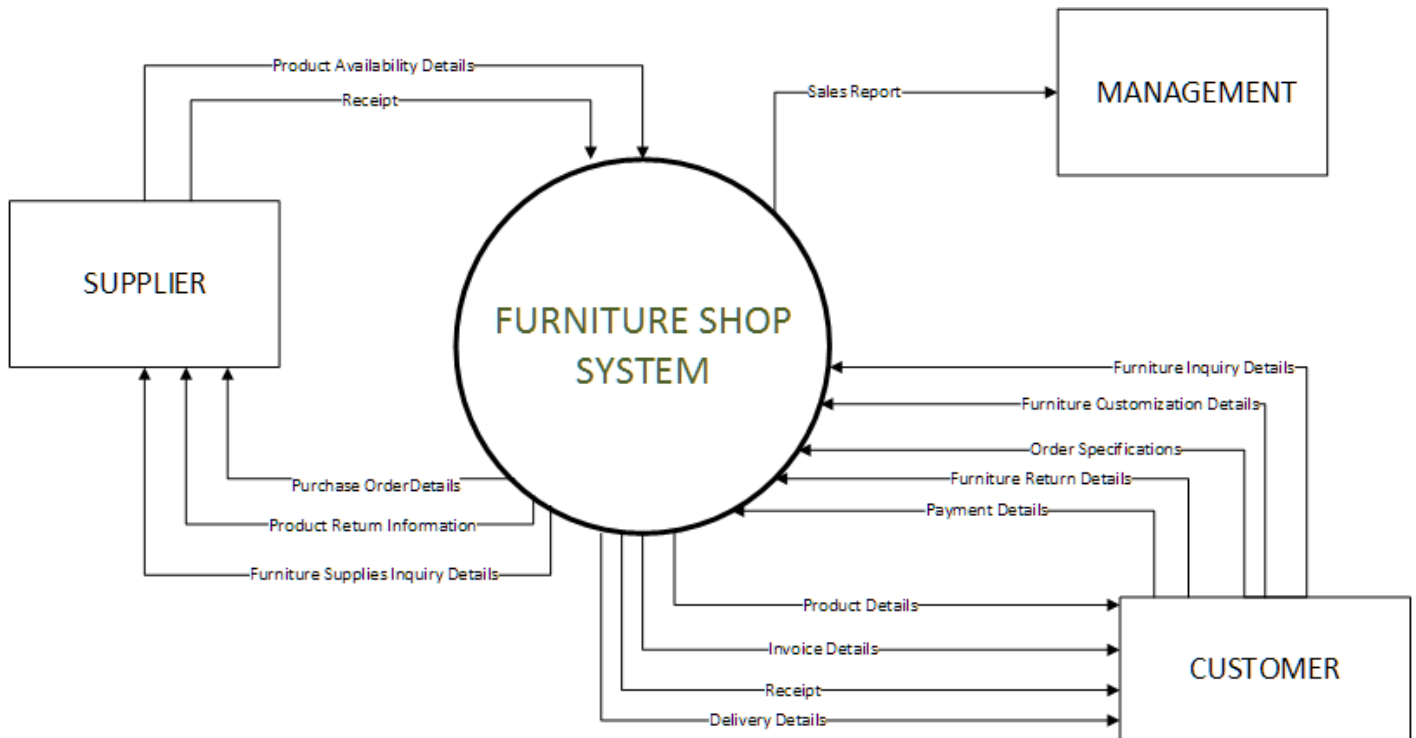


Figure 7. Context Diagram

2.2.1.2 LEVEL 1 DFD

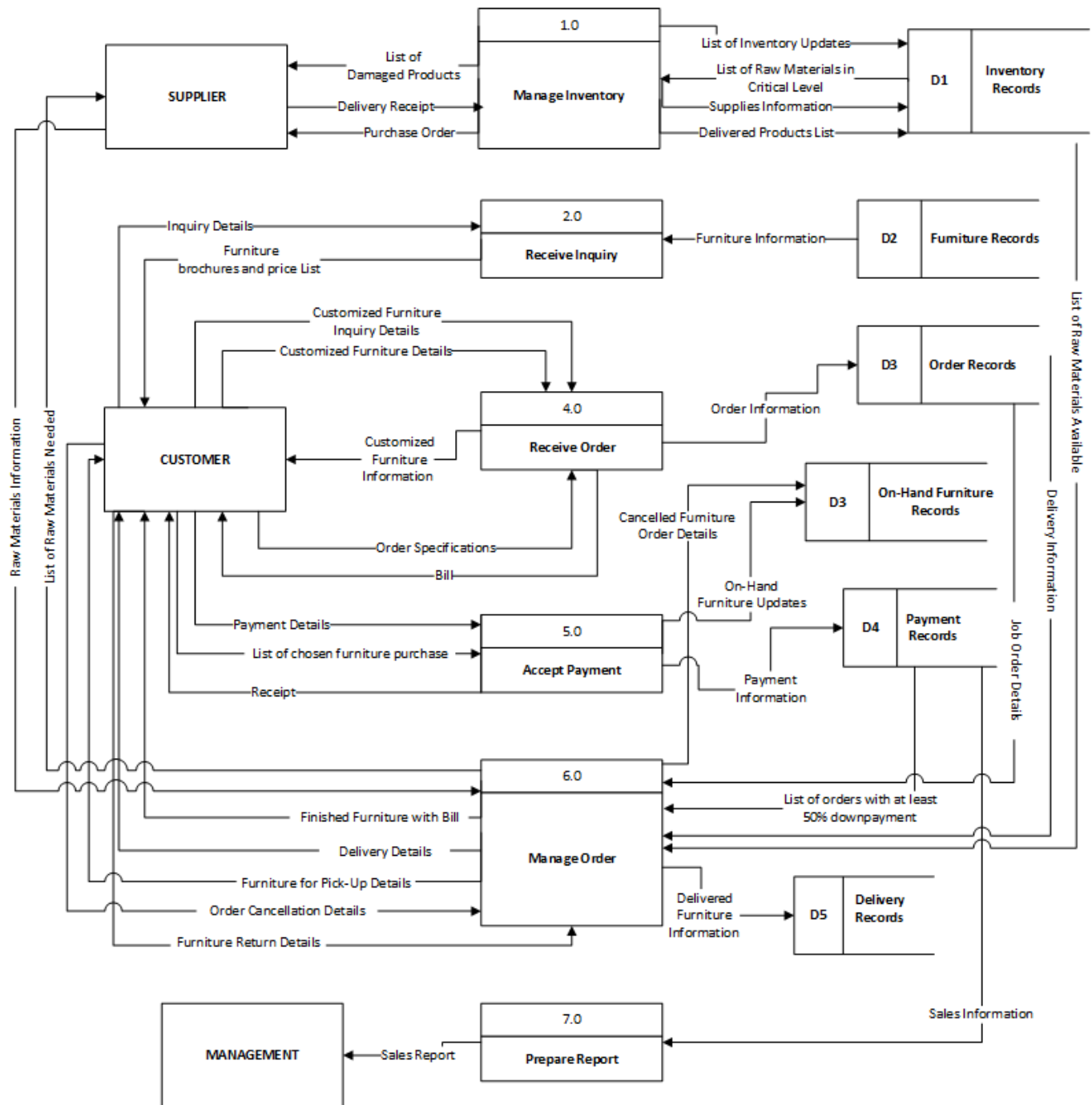


Figure 8. Level 1 Data Flow Diagram

2.2.2 POLICIES

BR NO.	BUSINESS REQUIREMENT
BR001	The production of furniture will begin once the customer paid a down payment of at least 50% of the total amount of the ordered furniture.
BR002	A minimum storage fee of PHP 500 pesos will be added to the total balance if furniture is not claimed or is fully paid on or before the day the contract will end.
BR003	A detailed description and specification is needed for customized furniture.
BR004	Damage on furniture caused by natural disaster and by improper use or maintenance is not covered on the warranty.
BR006	Official receipt must be presented to acquire warranty.
BR007	A minimum fee of PHP 500 is needed to cancel an order that is already undergoing production.

2.2.2.1 BUSINESS REQUIREMENTS***Table 3 Business Requirement***

BP NO.	BUSINESS POLICIES
BP01	The customer must pay at least 50% of the total price of the furniture ordered for the production of furniture to begin.
BP02	On-hand furniture must be fully paid upon acquisition.
BP03	Furniture must be claimed, paid or delivered on or before the end of the contract.
BP04	A customer must pay a cancellation fee if he/she cancels his order that is already undergoing production. Cancellation fee varies.
BP05	If ordered furniture is not claimed and fully paid within 1 month (30 days) and 1 week (7 days) after the contract's expiration the management has the right to resell the furniture.
BP06	The price of a customized furniture will be decided by the management
BP07	The furniture will be replaced or repaired if found broken upon delivery.
BP08	Six months warranty is given to all furniture.

2.2.2.2 BUSINESS POLICIES***Table 4 Business Policies***

2.3 PROBLEM ANALYSIS

2.3.1 FISHBONE

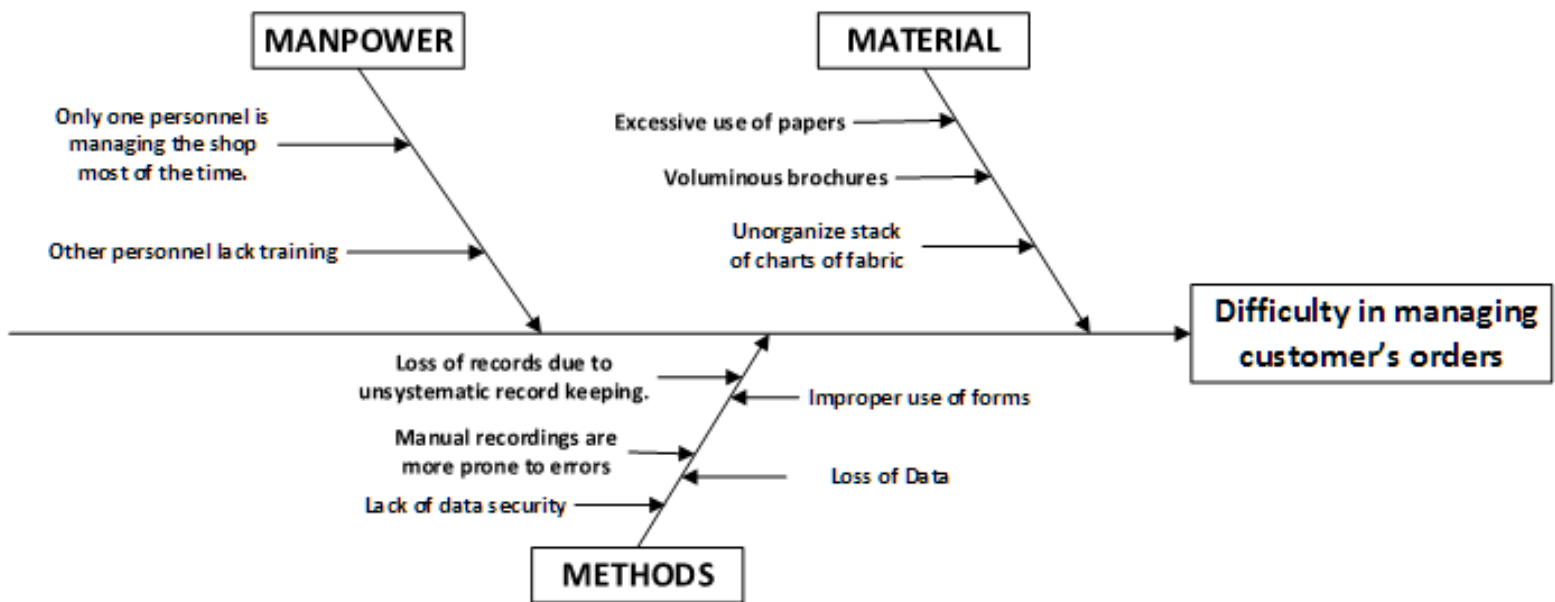


Figure 9. Fishbone Diagram of the Furniture Shop

2.3.2 PROBLEMS AND REQUIREMENTS

Ref. Page	No.	Problem	Requirements
16	1	Only one personnel is managing the shop most of the time.	Capability to efficiently manage orders with the resources available.
16	2	Loss of records due to unsystematic record keeping.	Secure records in a database to manage records systematically.
16	3	Lack of data security.	Ability to keep the gathered data secure and control the user access.
16	4	Excessive use of papers.	Capability to minimize,if not eliminate the use of paper.
16	5	Voluminous brochures.	Provides categorized products for display.
16	6	Improper use of forms.	Capability to identify the form/s to be used in the given transactions.
16	7	Loss of data.	Ability to keep data for every transactions made.

Table 5 Problems and Requirements

2.3.3 CONCLUSIONS

The Furniture Shop offers high quality furniture made of narra wood. They aim to provide high quality furniture that goes from simple and classic to one very luxurious design, not just to citizens of Cavite but as much as possible, to the whole country.

As of now, the said Furniture shop uses the manual process of recording data, the manager will write the customer information, order information, billing information, and they allow the client to customize their own designs of furniture. A lot of data is being stored so the shop uses excessive papers, papers that are being stored on the file cabinets around their small office. They also use their forms improperly providing confusing records that leads to difficulty in managing customer's orders.

2.3.3 RECOMMENDATIONS

In order to help the business resolve the problems stated above, the proponents recommend the Furniture Shop to have a Web-Based system that will help them manage order and the information that is going in and out of the shop, at the same time will help them promote their products and reach customers on a farther vicinity. The Furniture Shop Management System will have the following sub-systems:

The Furniture Ordering Management System, this sub-system will help the manager in managing the orders. The customer will be able to order furniture easily. Additionally, this sub-system also has a customization feature where the customer can customize furniture to their own liking. In this sub-system, all on-

hand furniture and furniture available for pre-order will be displayed per category for the customer to easily choose. Once, the customer is done ordering he can just check-out and proceed to billing. The customer information will be needed for verification.

The Billing and Collection System, this sub-system will compute the total amount of furniture in the customer's orders. After checking-out the customer will receive an email from the furniture shop containing his bill and where and how the customer can pay. If the ordered furniture is on-hand and the customer has paid for it the furniture will be delivered. If it's pre-order, the production of the ordered furniture will begin once the customer has paid 50% of the total amount. However, the order will be considered null and void if the customer fails to pay within seven days. This sub-system will help in producing receipt easily, lessening the time needed for writing.

The Production Tracking System, this sub-system will track the production of an order. After the transaction is settled, the manager will issue job order form for the manufacturers, this job order form contains the specifications and descriptions of the furniture to be made. This sub-system will enable the manager to view and update production progress information, which includes status of the production, the handler who will make the furniture, and the production progress percentage of the furniture.

CHAPTER 3

PROPOSED SYSTEM DEFINITION

3.1 REQUIREMENTS-FEATURES MATRIX

Features/ Requirements	REQ1. <i>Capability to efficiently manage orders with the resource available.</i>	REQ2. <i>Secure records in a database to manage systematically..</i>	REQ3. <i>Ability to keep the gathered data and control the user access.</i>	REQ4. <i>Capability to minimize, if not eliminate the use of paper.</i>	REQ5. <i>Provides categorize d products for display.</i>	REQ6. <i>Capability to identify the form/s to be used in the given transactions</i>	REQ7. <i>Ability to keep data for every transactions made.</i>
FEAT1. <i>Web-based ordering transaction.</i>	✓	✓	✓	✓	✓	✓	✓
FEAT2. <i>Tracking of production.</i>	✓	✓	✓	✓		✓	✓
FEAT3. <i>Tracking of delivery.</i>	✓	✓	✓	✓		✓	✓
FEAT4. <i>Inventory of Raw Materials.</i>	✓	✓	✓	✓			✓

FEAT5. <i>Customization of designs.</i>	✓	✓		✓	✓	✓	✓
FEAT6. <i>Ability to produce reports.</i>		✓	✓	✓			✓

Table 6. Feature-Requirements Matrix

3.2 FUNCTIONAL SPECIFICATION

3.2.1 SYSTEM BOUNDARIES

3.2.2 SYSTEM USE CASE DIAGRAM

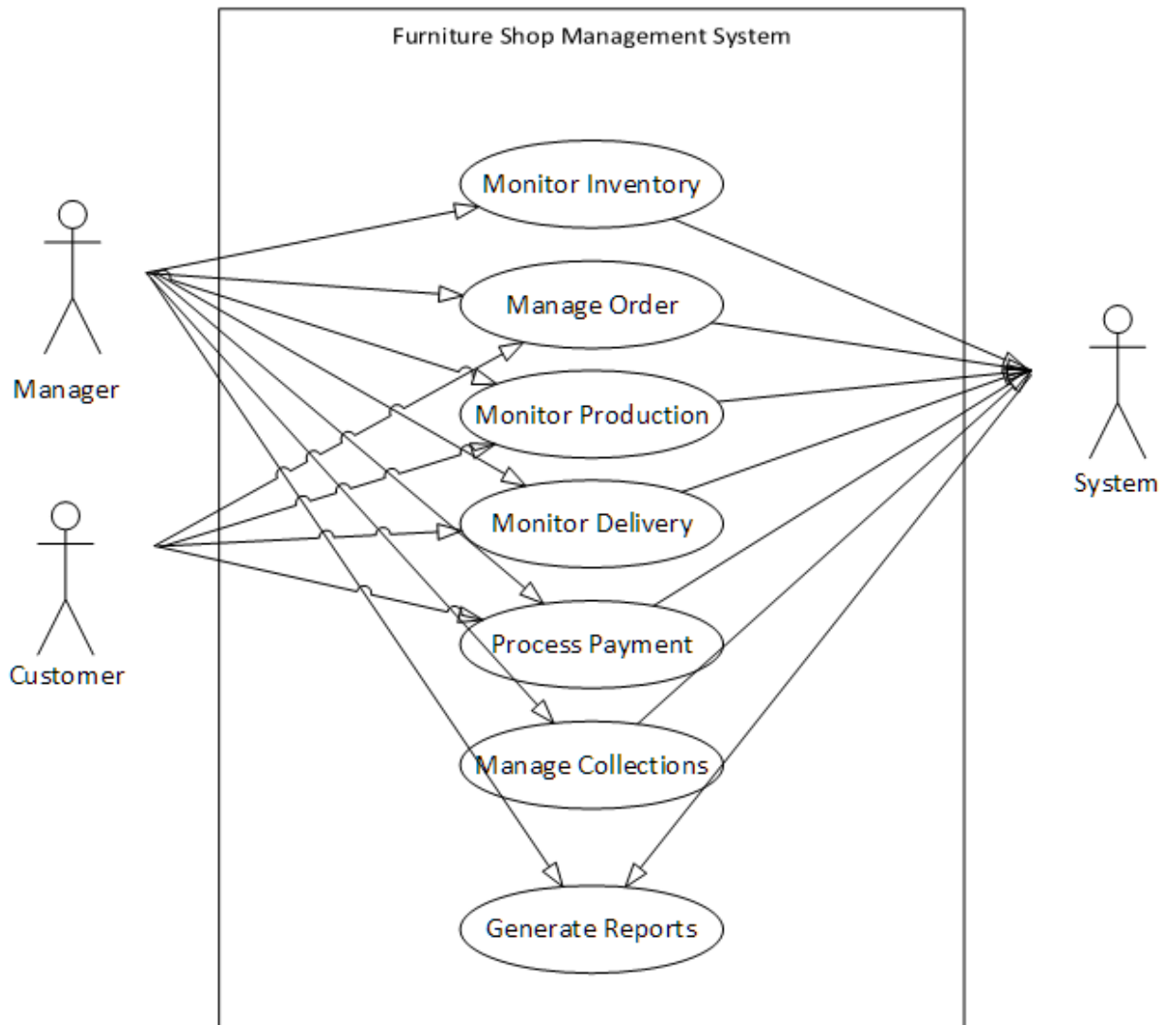
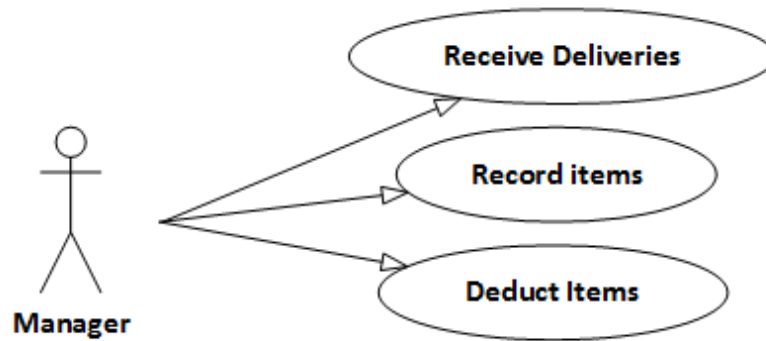


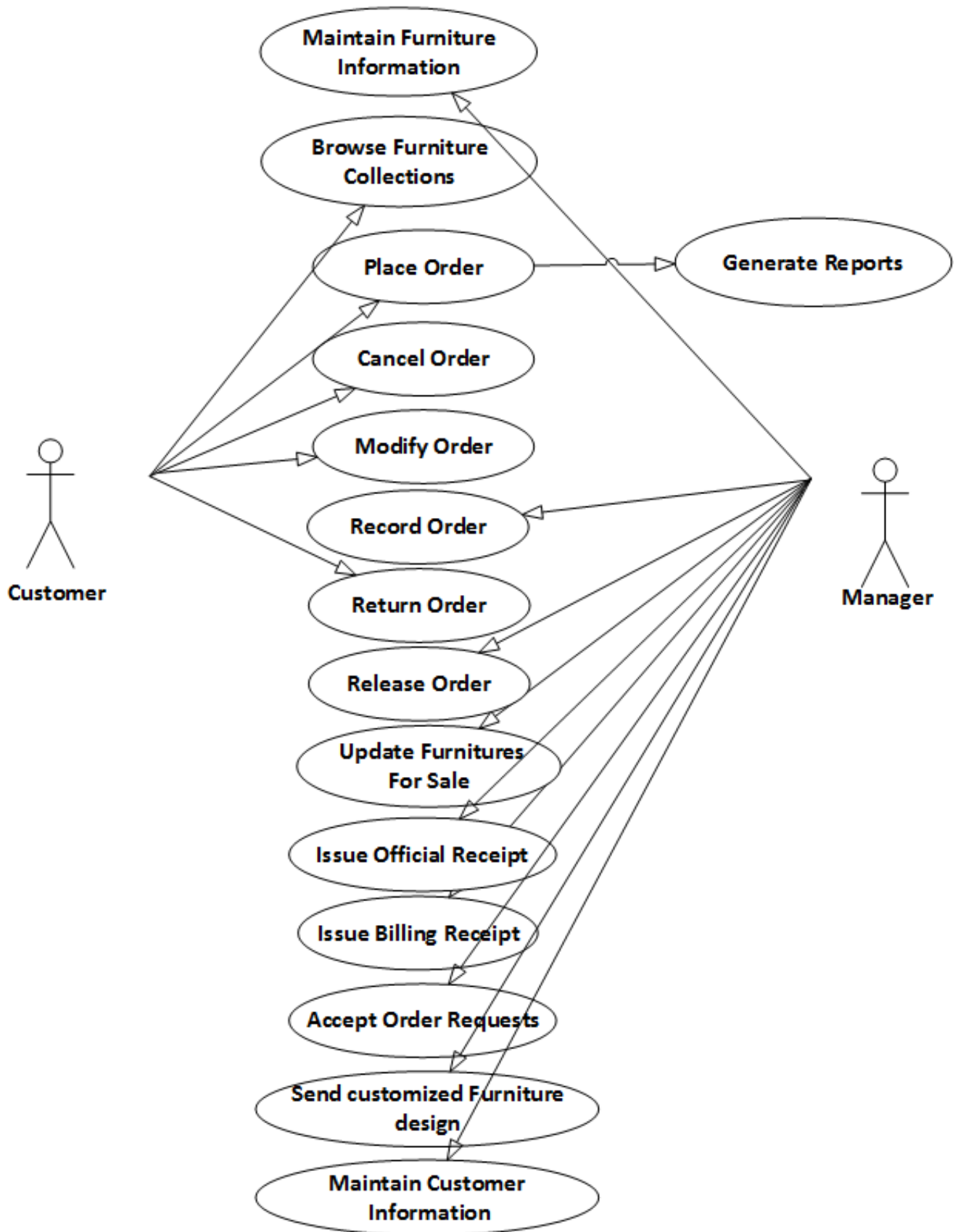
Figure 10. Top level Use case

3.2.3 DETAILED PER USE CASE

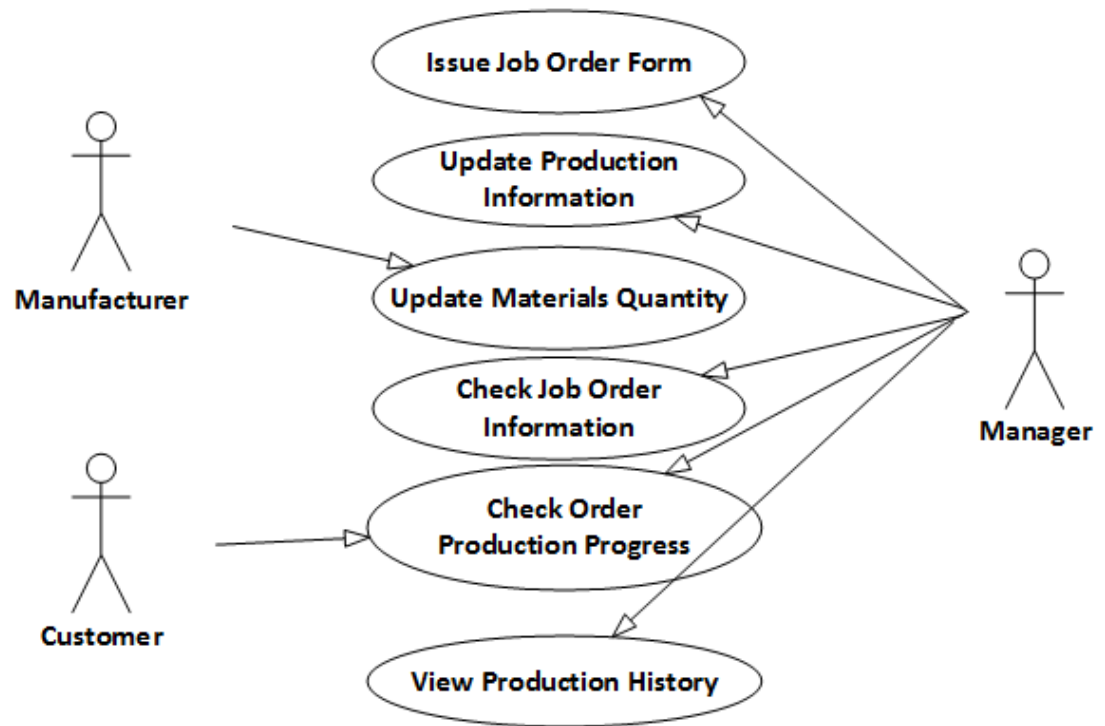
Monitor Inventory



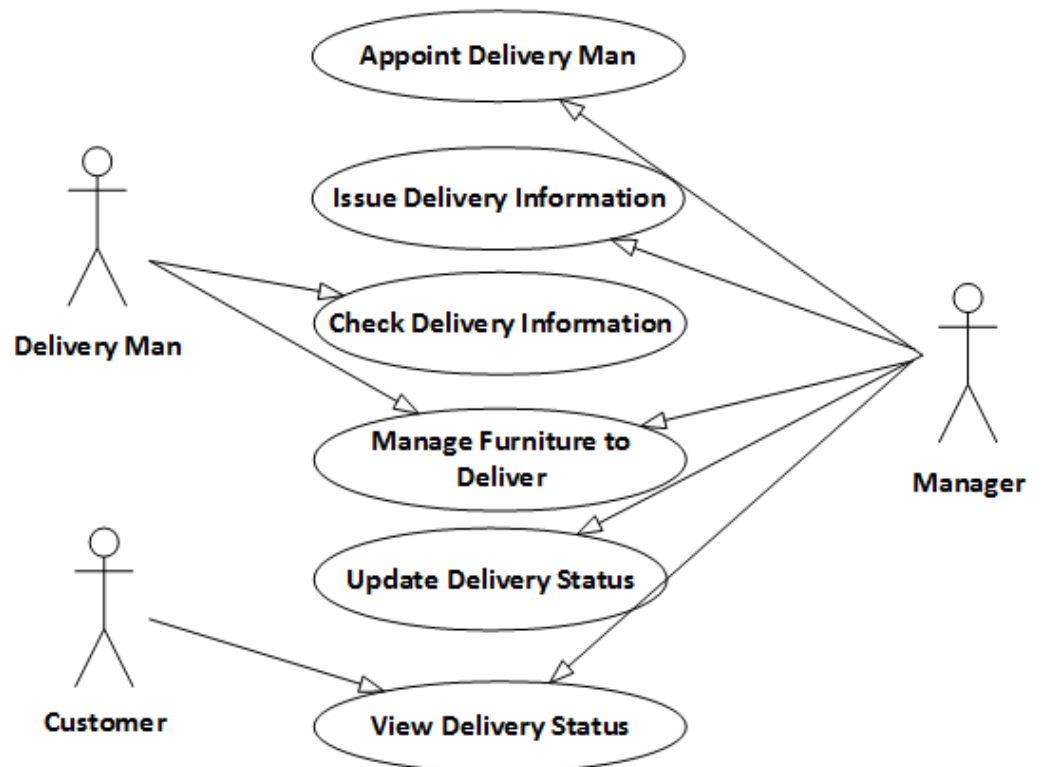
Manage Order



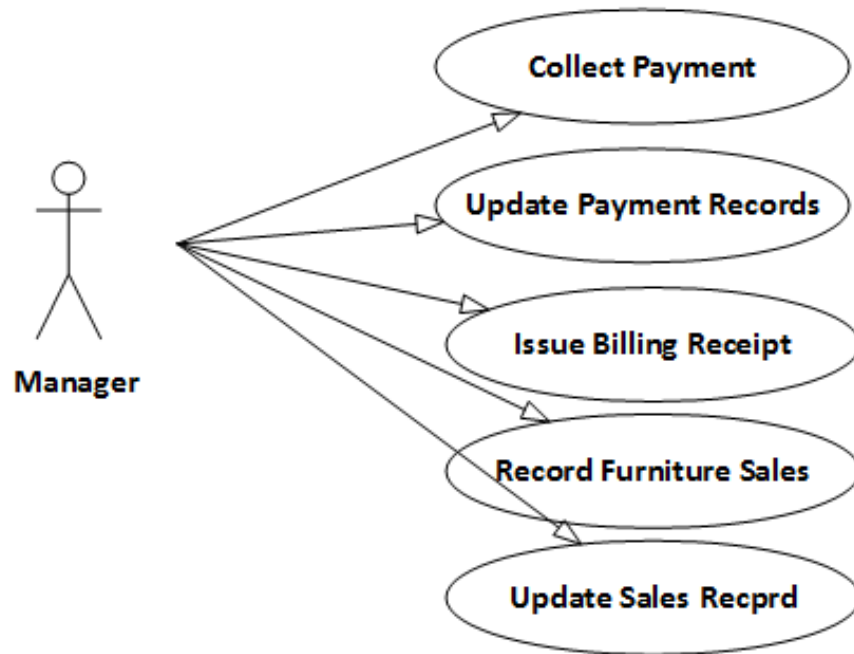
Monitor Production



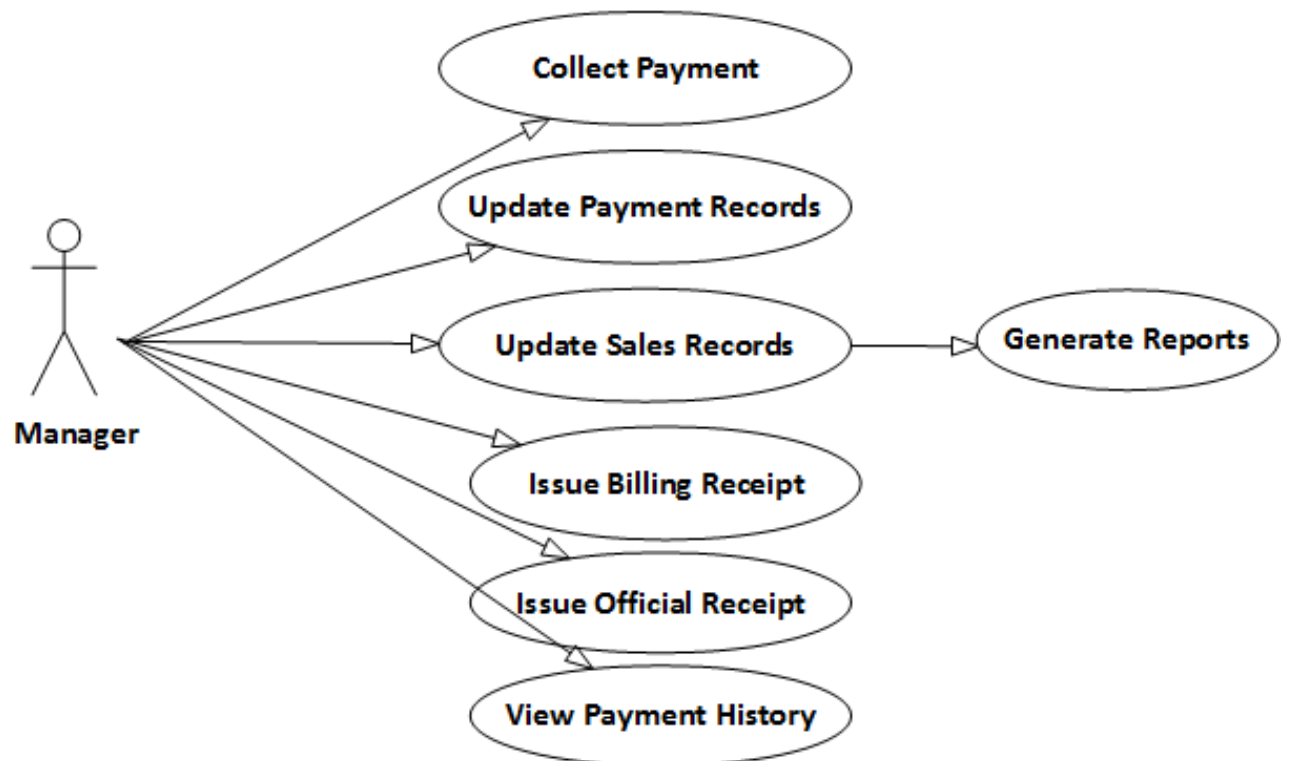
Monitor Delivery



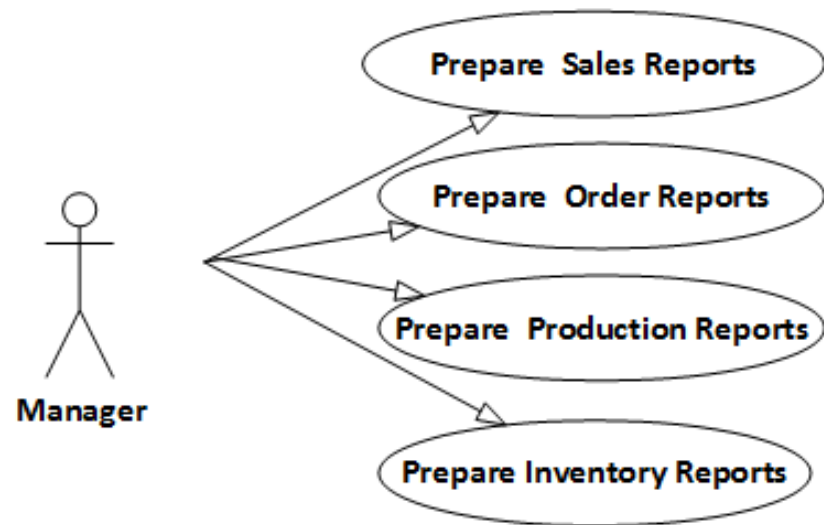
Process Payment



Manage Collections



Generate Reports



3.3.4 USE CASE DESCRIPTION

Use case: **Monitor Inventory**

Actor/s: Manager

Purpose: This use case enables the management to record the raw materials they have used for their production.

Brief Description: Monitoring of the inventory of raw materials used in the business.

Pre-condition: Must be an authenticated user.

Post-condition: An item must be deducted or restocked.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Receive Deliveries	
1. Admin accesses Raw Materials Management.	2. Displays all materials' status and materials' information.
3. Click Receive Deliveries Button	4. Displays Delivery Information from the suppliers.
	5. Enables admin to accept a delivery from the supplier. Adding the raw materials to the raw materials storage.
Record Items	
1. Click Restock button	2. Enables user to update the quantity of a certain item.
Deduct Items	
1. Click Deduct button	2. Allows user to deduct the quantity of a certain item.

Use case: Manage Orders

Actor/s: Manager/Customer

Purpose: Allows the management and the customer to keep the transacted orders made in the business.

Brief Description: This use case is capable of processing the main function of the business.

Pre-condition: Must be an authenticated user.

Post-condition: An order must be saved.

BASIC FLOW:	
ACTION EVENT	SYSTEM RESPONSE
Maintain Furniture Information	
1. Admin accesses products.	2. Displays furniture details.
3. Click update button.	4. Enables admin to edit furniture information.
5. Click Save button	6. Save information to database.
7. Click View button	8. Allows user to see the information of a certain furniture.
9. Click Deactivate button	10. Deactivates the existence of a furniture.
Browse Furniture Collections	
1. Admin accesses Order Management	2. Displays the products being sold.
3. Click view button.	4. Displays all the information about a particular product.
Place Order	

1. Admin or Customer accesses products.	2. Displays the products being sold.
3. Click cart button.	4. Add the selected product to cart.
5. Click proceed to checkout button.	6. Enables user to put information such as the delivery information, payment information, customer information, and remarks about the order information.
7. Click Save & Print	8. Saves the order to Orders.
Cancel Order	
1. Admin or Customer accesses orders.	2. Displays all the user's orders.
3. Click Update button.	4. Enables the user to modify his orders.
5. Click cancel order button.	6. Enables the user to cite out the reason for cancelling.
7. Click cancel order button	8. Deletes the order from Orders.
Modify Order	
1. Admin or Customer accesses orders.	2. Displays all the user's orders.
3. Click Update button.	4. Enables the user to modify his orders.
5. Click Save button	6. Saves the new order information.
Record Order	
1. Admin accesses orders.	2. Displays all the user's orders.
3. Click accept button.	4. Accepts an order.
Return Order	
1. Admin click Return orders from	2. Display list of return orders and

transaction.	its status.
3. Click Update button	4. Enables user to update the status of the returned product.
Release Order	
1. Admin accesses Releasing of orders in transaction.	2. List of orders to be delivered must be displayed.
3. Click New button	4. Enables user to modify an order to be released.
5. Click Delivery Receipt	6. Must output a receipt to be printed.
Update Furniture Sales	
1. Admin accesses orders.	2. Displays all the furnitures for sale.
3. Click Update button.	4. Enables the admin to modify furniture information.
5. Click Save button	6. Saves the updated furniture information.
Issue Billing Receipt	
1. Admin access Orders	2. List of orders withing bills must be displayed.
3. Click Bill button	4. Billing receipt must be produced
Issue Official Receipt	
1. Admin access Ordering in transactions	2. Enables user to order from brochures displayed.
3. Click save button	4. Saves information to the database.
5. Click Print button	6. Official receipt must be produced.
Accept Order Requests	

1. Click Order Request from Orders	2. Displays list of order requests from the website.
3. Click Accept button	4. Accepts the order requests and transfer to Orders.
Send Customized Furniture Design	
1. Admin access Dashboard.	
2. Click Customization Request	3. List of customer request must be displayed.
4. Click Accept	5. Accepts the request made by the customer.
Maintain Customer Information	
1. Admin access Customer information tab.	6. Displays list of customers' information that can be modified.

Use case: Monitor Production

Actor/s: Manager/Customer

Purpose: Enables the management and the customer to track the production made per order.

Brief Description: Monitoring of the production per furniture ordered.

Pre-condition: Must be an authenticated user.

Post-condition: A production must be updated per phase finished.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Issue Job Order Form	

1. Click 'Update' on any production phase displayed.	2. Enables the user to update Production Information of furniture depending on what phase the production has gone to.
	3. Display's list of materials needed.
4. Click 'Print Job Order'	5. Job Order Form must be issued
Update Production Information	
1. Admin accesses Production Tracking in Transactions.	2. Orders that are undergoing or pending for production is displayed.
3. Click View Details	4. Display the ordered furniture and it's production details.
5. Click 'Start' on any production phase displayed.	6. Display the materials needed and the form for saving the information of when the production started and who handles that phase of production
7. Click 'Update' on any production phase displayed.	8. Enables the user to update Production Information of furniture depending on what phase

	the production has gone to.
Update Materials Quantity	
1. Click an on-going production	2. Displays information about the production.
	3. Enables user to deduct or add a material quantity per phase.
Check job order information	
1. Click an order production finished.	2. Job order must be produced.
Check production Progress	
1. Click Production Tracking	2. Displays list of production and its information.
View Production History	
1. Click any order production icon.	2. Displays progress for each phase.
3. Click production history button.	4. Displays Production History.

Use case: **Monitor Delivery**

Actor/s: Manager/Customer

Purpose: Enables the management and the customer to track the delivery made per order.

Brief Description: Monitoring of the delivery for every order made.

Pre-condition: Order must be finished and paid.

Post-condition: Delivery information must be updated.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Appoint Delivery Man	
1. Click 'Update' on any production phase displayed.	2. Enables the user to update Production Information of furniture depending on what phase the production has gone to.
	3. Display's list of materials needed.
4. Click 'Print Job Order'	5. Job Order Form must be issued
Issue Delivery Information	
1. Admin click the 'Releasing of Order' under Order Management	2. Displays Delivery information per order.
Check Delivery Information	
1. User clicks 'Releasing of Orders' under Order Management	2. Displays Order's information and status.
Manage Furniture to Deliver	
1. Click New button	2. Displays form about the order and delivery details to be fill up by the user.

3. Choose order number or name to whom the delivery will address.	4. Displays orders to be delivered.
	5. Release information to be fill up by the user must display.
Update Delivery Status	
1. Click an order to be updated.	2. Shows form that must be fill up by the user to be able to update a delivery status.
3. Click the check box for finish delivery.	4. Date to be modified must appear.
5. Click Save button	6. Delivery status must change depending on the updated information inputted.
View Delivery Status	
1. User clicks 'Releasing of Orders' under Order Management	2. Displays Order's information and delivery status.

Use case: **Process Payment**

Actor/s: Manager

Purpose: Record every process made per payment transacted in the business.

Brief Description: Keeps the information needed for every payment made by the customer to the Furniture shop.

Pre-condition: An order must be made.

Post-condition: Official Receipt and Billing is produced.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Collect Payment	
1. Admin inputted the payment details from the customer.	2. Computes change for the remaining balance.
3. User clicks Save button	4. Official Receipt must be produced.
	5. Official Receipt should be printed.
Issue Billing Receipt	
1. Click Bill button from the Collections transaction.	2. Billing receipt is produced.

Use case: **Manage Collections**

Actor/s: Manager

Purpose: To keep track of the billing payments made by the customers.

Brief Description: Manage payments made from billing transactions per every product sold.

Pre-condition: Successful order record must be existing.

Post-condition: Official and Billing receipt is produced.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Collect Payment	
1. Admin inputted the payment details from the customer.	2. Computes change for the remaining balance.
3. User clicks Save button	4. Official Receipt must be produced.
	5. Official Receipt should be printed.
Issue Billing Receipt	
3. Click Bill button from the Collections transaction.	4. Billing receipt is produced.
Issue Official Receipt	
1. Click Payment button	
2. Fill up Payment form and input the amount paid.	
3. Click Save button	4. Official receipt must be produced and ready to be printed.
View Payment History	
1. Click 'Payment' button.	2. Displays payment transaction to be fill up.
3. Click 'View Payment History' button	4. Customer's past records of payments is displayed.

Use case: **Generate Reports**

Actor/s: Manager

Purpose: To keep track of the records gathered from the transactions made by the business.

Brief Description: Official documents that gives summarized information about a particular transaction.

Pre-condition: There must be a daily/monthly/annually data from the records.

Post-condition: Reports for a particular transaction is produced.

BASIC FLOW	
ACTION EVENT	SYSTEM RESPONSE
Prepare Sales Report	
1. Admin accesses Sales Report in Reports.	2. Displays list of sales depending on the frequency selected.
3. Choose daily in frequency	4. Displays list of sales records within the day.
5. Choose monthly in frequency	6. Display list of sales records within the month.
7. Choose annual in frequency	8. Display list of sales records within the year.
9. Click Print button.	10. Must print sales report of within the chosen frequency.
Prepare Order Report	
1. Admin accesses Order Report in Reports.	2. Displays list of Order records depending on the frequency selected.
3. Choose daily in frequency	4. Displays list of Order records within the day.
5. Choose monthly in frequency	6. Display list of Order records

	within the month.
7. Choose annual in frequency	8. Display list of Order records within the year.
9. Click Print button.	10. Must print Order report of within the chosen frequency.
Prepare Production Report	
1. Admin accesses Production Report in Reports.	2. Displays list of Production records depending on the frequency selected.
3. Choose daily in frequency	4. Displays list of Production records within the day.
5. Choose monthly in frequency	6. Display list of Production records within the month.
7. Choose annual in frequency	8. Display list of Production records within the year.
9. Click Print button.	10. Must print Production report of within the chosen frequency.
Prepare Inventory Report	
1. Admin accesses Inventory Report in Reports.	2. Displays list of Inventory records depending on the frequency selected.
3. Choose daily in frequency	4. Displays list of Inventory records within the day.
5. Choose monthly in frequency	6. Display list of Inventory records within the month.
7. Choose annual in frequency	8. Display list of Inventory records within the year.

9. Click Print button.	10. Must print sales report of within the chosen frequency.
------------------------	-------------------------------------------------------------

3.3 TECHNICAL SPECIFICATION

3.3.1. CLASS DIAGRAM

3.3.1.1 DATA DICTIONARY OF CLASSES

Tables	Description
ATTRIBMEASURE	Contains the measurements needed for an attribute.
ATTRIBUTES	Contains the attributes that a material may have.
BANK ACCOUNTS	Contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.
BRANCHES	Contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.
CHECK DETAILS	Contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.
COMPANY INFORMATION	Table contains the company information. This information is displayed on the website.
CUSTOMER REQ IMAGES	Contains the images of the customization request from the customer.
CUSTOMER	Contains the information of the

	customer.
CUSTOMIZE REQUEST	Contains the information of the customer's customization request.
DELIVERY	Contains the delivery information of the order to be delivered.
DELIVERY DETAILS	Contains the information of the delivery.
DELIVERY RATES	Contains delivery rates information.
DESIGN PHASE	Contains the phases that a certain furniture design must undergo
DOWNPAYMENT	
EMPLOYEE JOB	Contains the jobs of the employee
EMPLOYEE	Contains the employee information
FABRIC PATTERN	Contains the patterns or designs of a fabric. It is used to define the fabrics properly.
FABRIC TEXTURE	Contains the texture. It is used to define the fabric type properly.
FABRIC TYPE	Contains the fabric types. It is used to define the fabrics properly.
FABRICS	Contains the fabrics. It is used to define the products
FRAME DESIGN	Contains the frame design. It is used to define the frameworks.
FRAME MATERIAL	Contains the frame design. It is used to define the frameworks.
FRAMEWORKS	Contains the frameworks. It is used to define the products.
FURNITURE CATEGORY	Contains the category of the products
FURNITURE DESIGN	Contains the possible design of the

	product
FURNITURE YPE	Contains the furniture type
INVOICE DETAILS	Table contains the invoice information of the customer's order
JOBS	Contains the jobs in the company
LOGS	Contains the actions or changes that a certain user did in the system
MATERIALS ACTIONS	Contains the actions done in the raw materials management
MATERIALS DELIVERIES	Contains the deliveries of materials received from the supplier.
MATERIALS DELIVERYDETAILS	Contains the details of the deliveries.
MATERIALS INVENTORY	Contains the quantity of materials.
MATERIALS TYPE	Contains the types of material. It is use to define a material.
MATERIALS VAR	Contains the variants of a material.
MATERIALS	Contains the materials used in making furniture.
MODE OF PAYMENT	Contains the mode of payments.
ONHAND	Contains the record of the on hand products.
ORDER ACTIONS	Contains the action that the user made on the orders.
ORDER CUSTOMIZATION	Contains the action customizations or special request the customer has made on every ordered furniture
ORDER REQUEST	Contains the details of every order
ORDER RETURN	Contains the record of orders that have been returned
ORDER RETURN DETAILS	Contains the details of the return

	record
ORDERS	Contains the orders made by the customers
PACKAGE INCLUSIONS	Contains the products included in every packages.
PACKAGE	Contains the packages available in the shop.
PAYMENT DETAILS	Contains the payments made by the customer
PENALTY	Contains the penalties of the shop
PHASES	Contains the phases a furniture must undergo under the production
PRODUCT IMAGES	Contains the other images of the product
PROD INFO	Contains the production information of a product according to phase
PRODUCT MATERIALS	Contains the materials needed in every production phase of the product
PRODUCTS ON PROMO	Contains the materials needed in every production phase of the product
PRODUCT	Contains the furniture that the shop can make.
PRODUCTION	Contains the production information of every ordered furniture
PRODUCTION PHASE	Contains the information of production per phases of production.
PROMO CONDITION	Contains the condition of a promo
PROMO PROMOTION	Contains the promotion or the incentive of a promo.
PROMO	This table contains the promos.

SUPPLIER	This table contains the suppliers
UNIT CATEGORY	Contains the category in which the unit of measurement falls.
UNIT OF MEASUREMENT	Contains the unit of measurements
UNIT OF MEASUREMENT CATEGORY	Contains the categories of unit of measurements
USER	Contains the information of the users of the system.
VARIANT DETAILS	Contains the details of the variants

Table 7. List of Classes

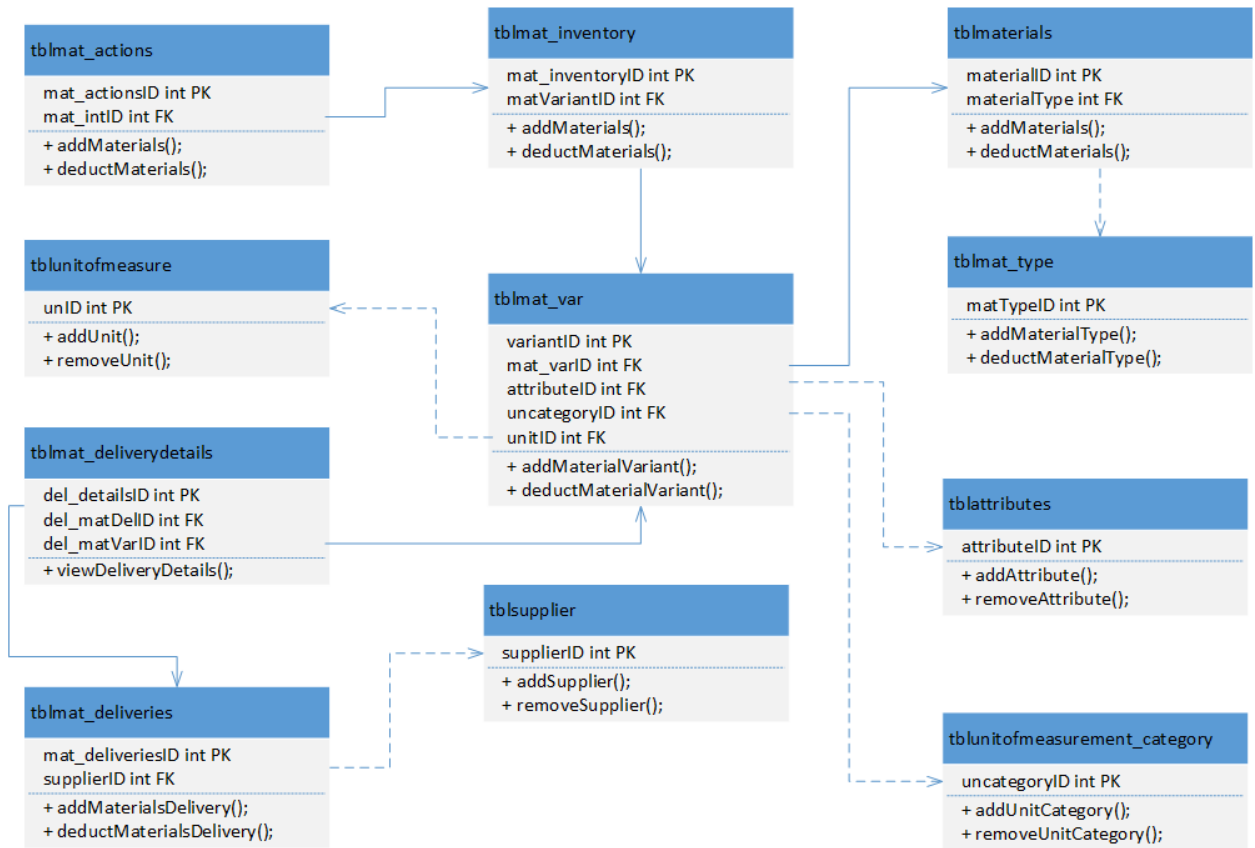


Figure 11.1 Monitor Inventory Class Diagram

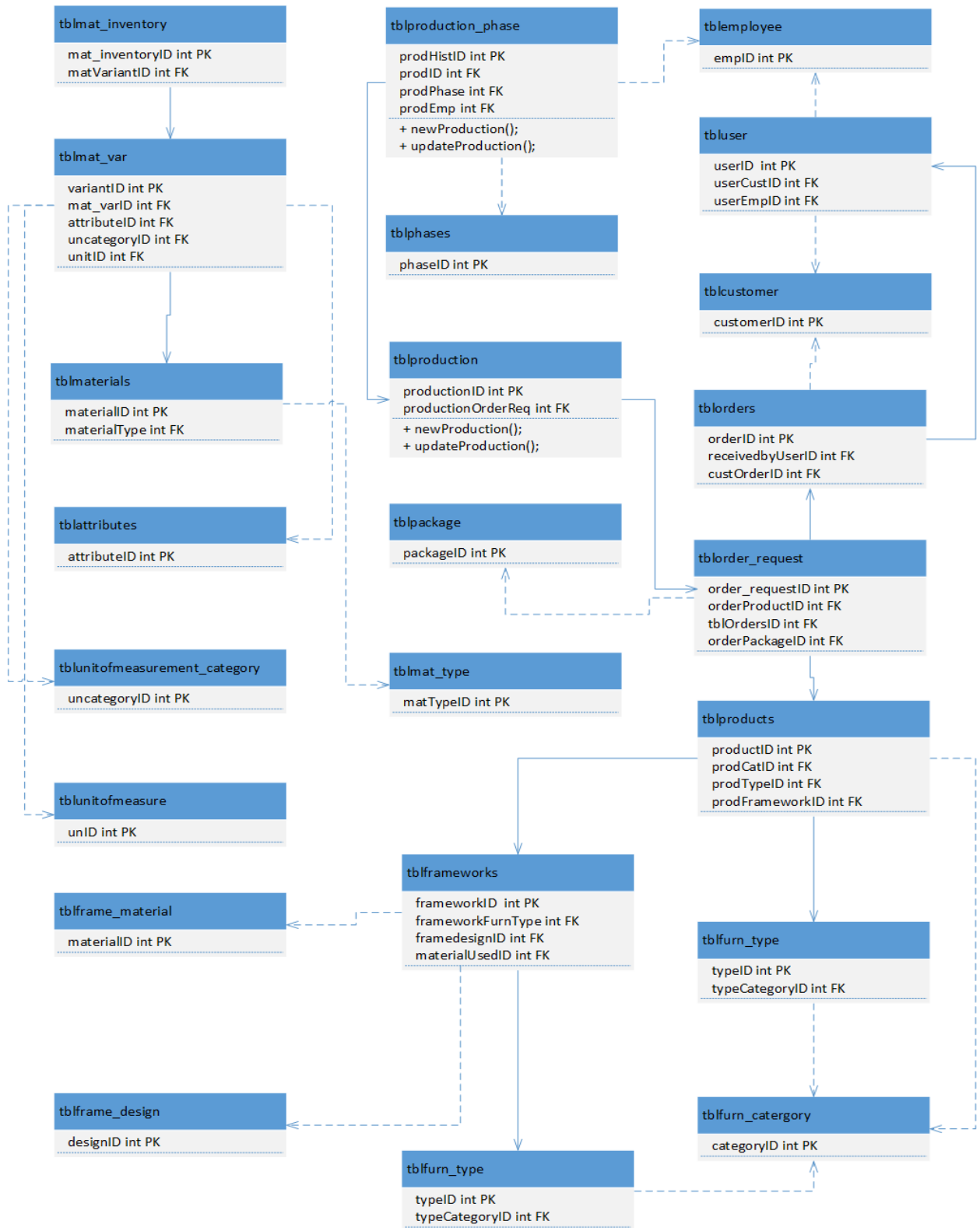


Figure 11.2 Monitor Production Class Diagram

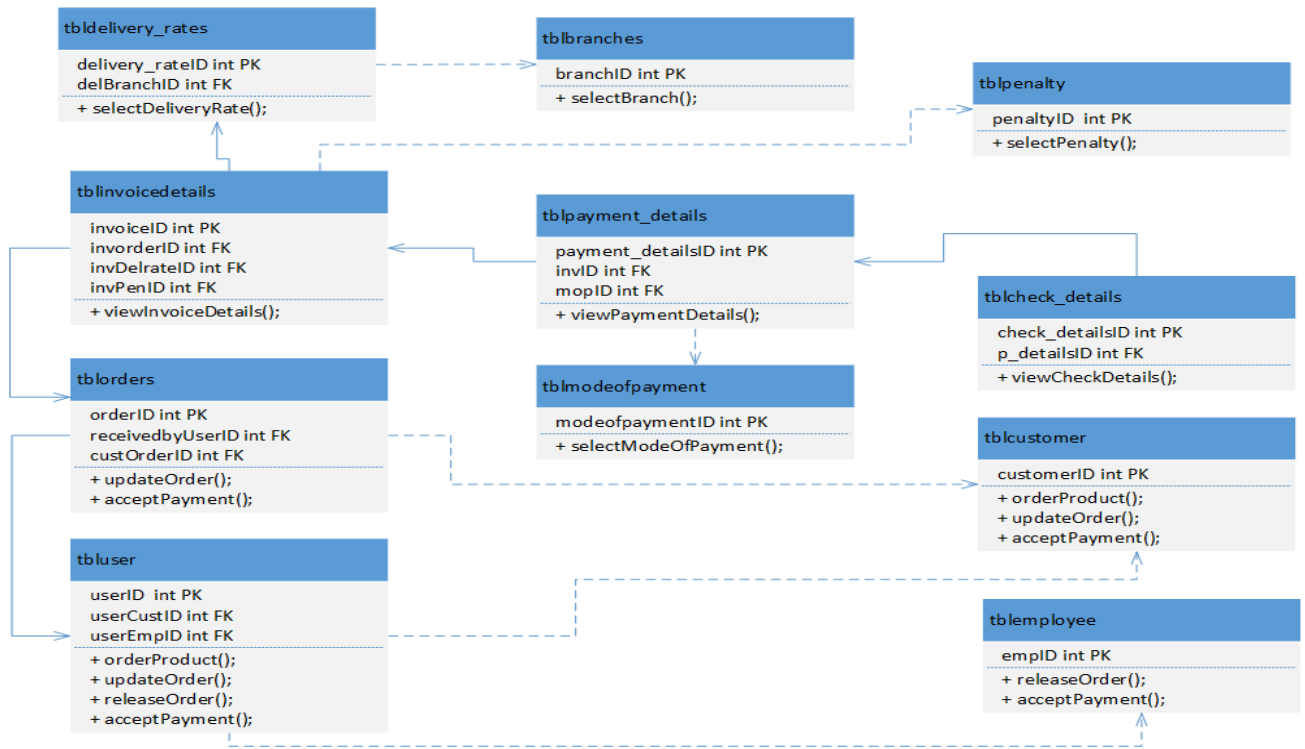


Figure 11.3 Process Payment Class Diagram

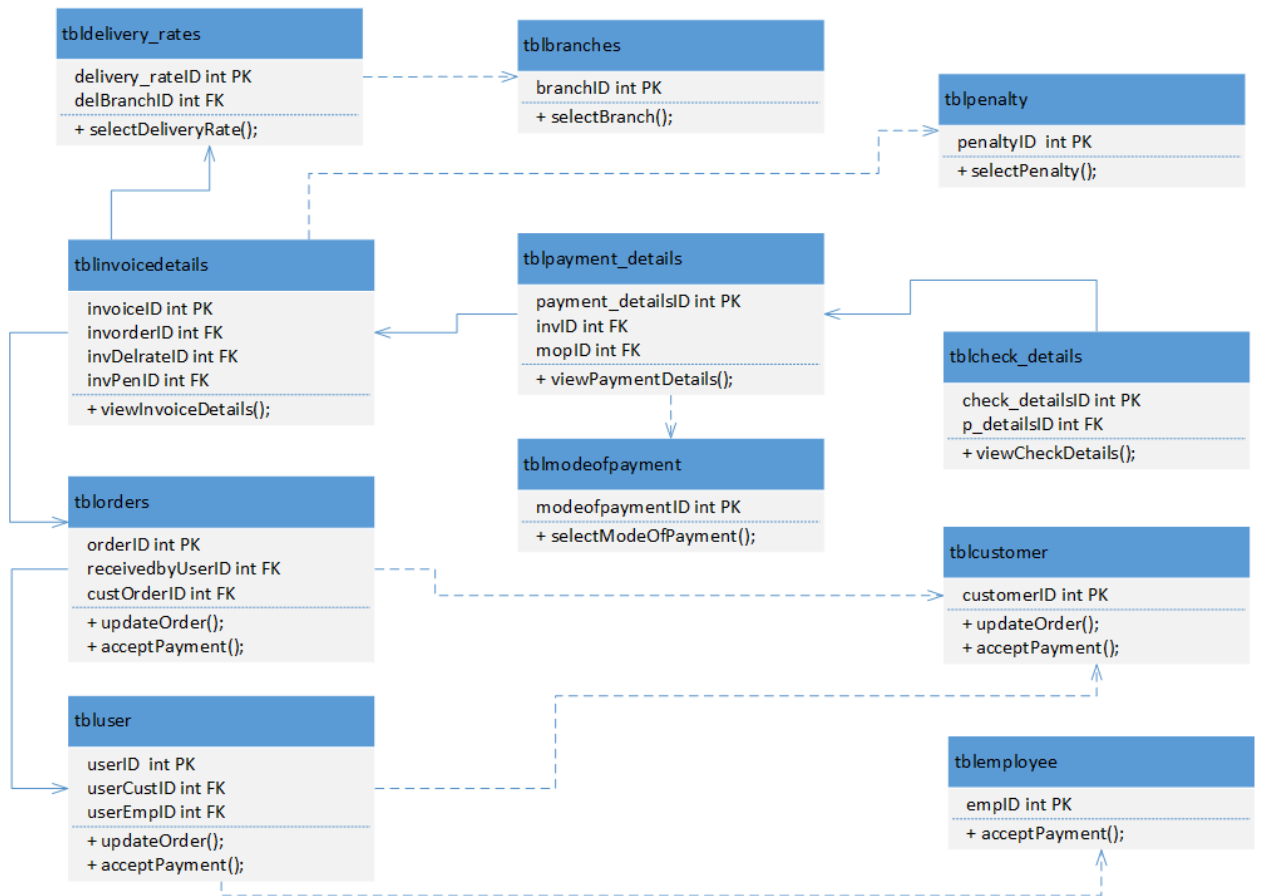


Figure 11.4 Manage Collections Class Diagram

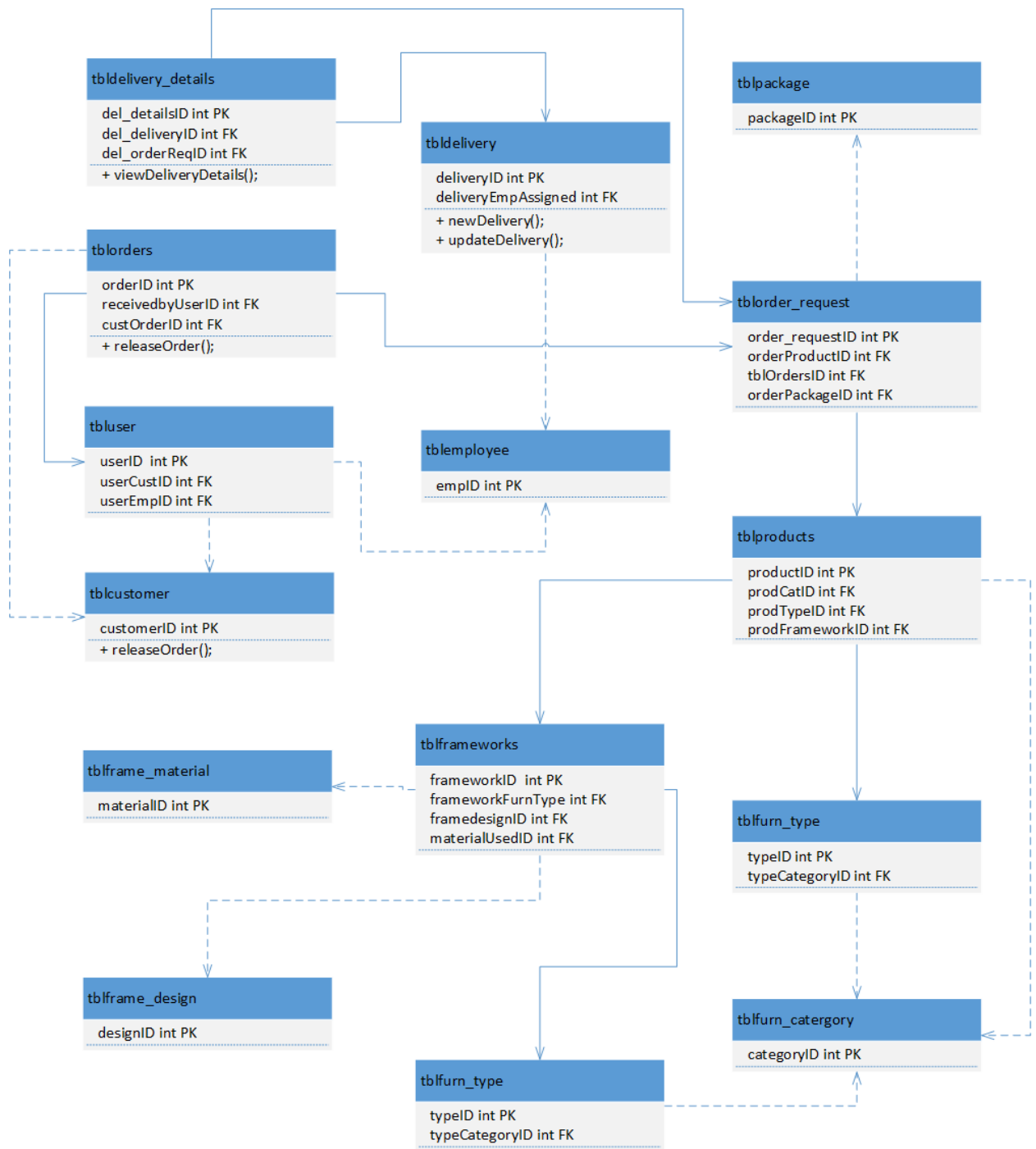
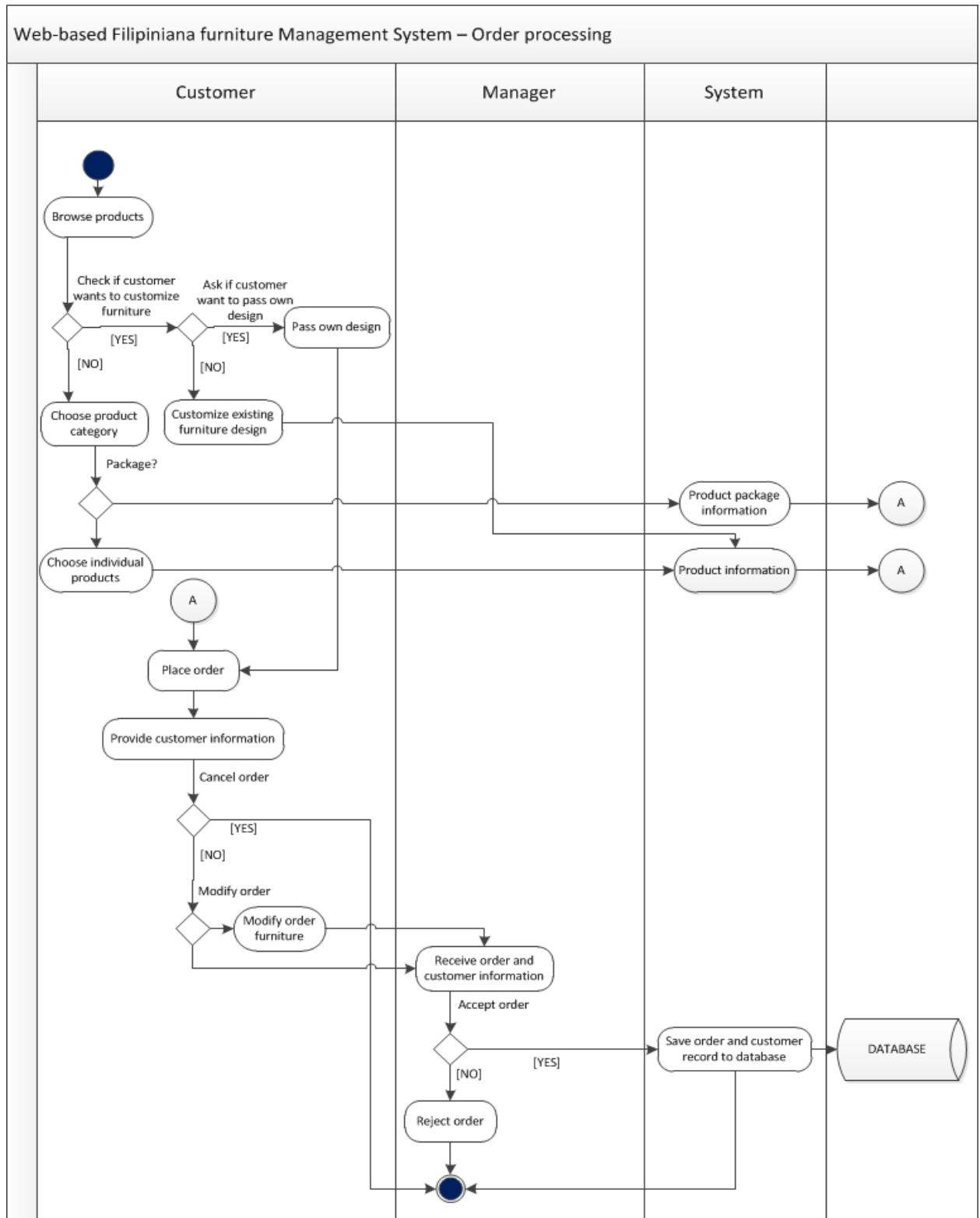
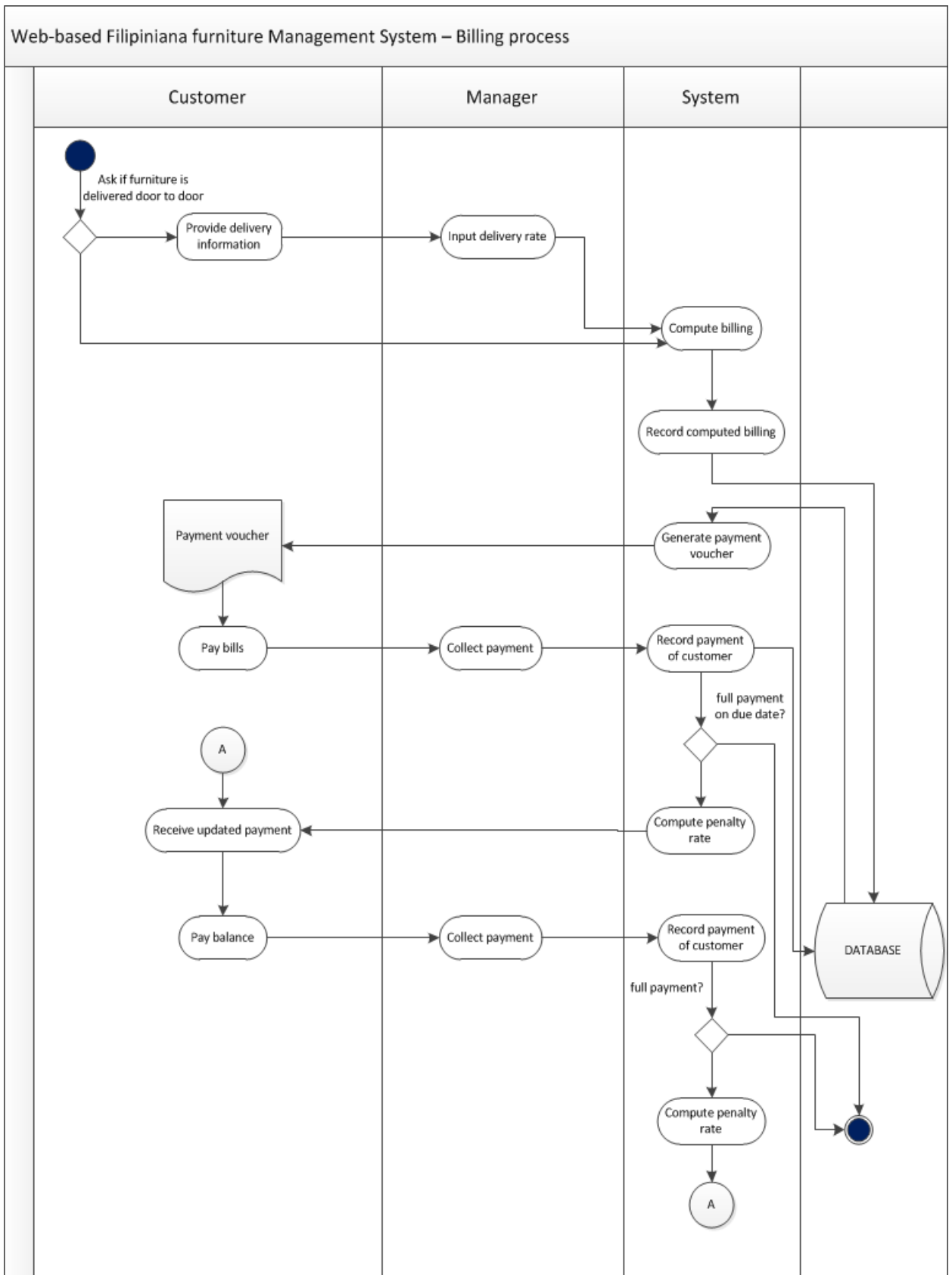
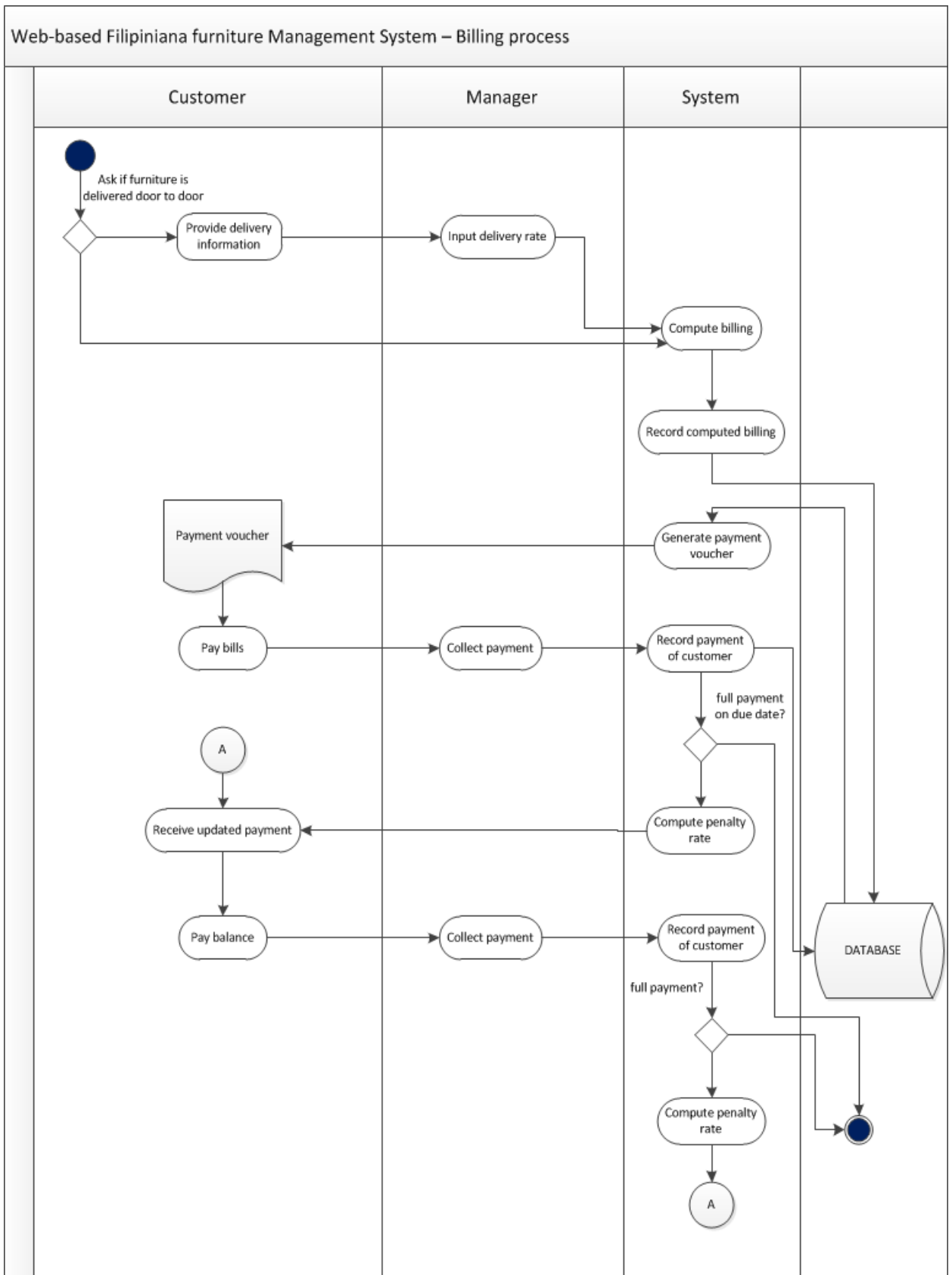


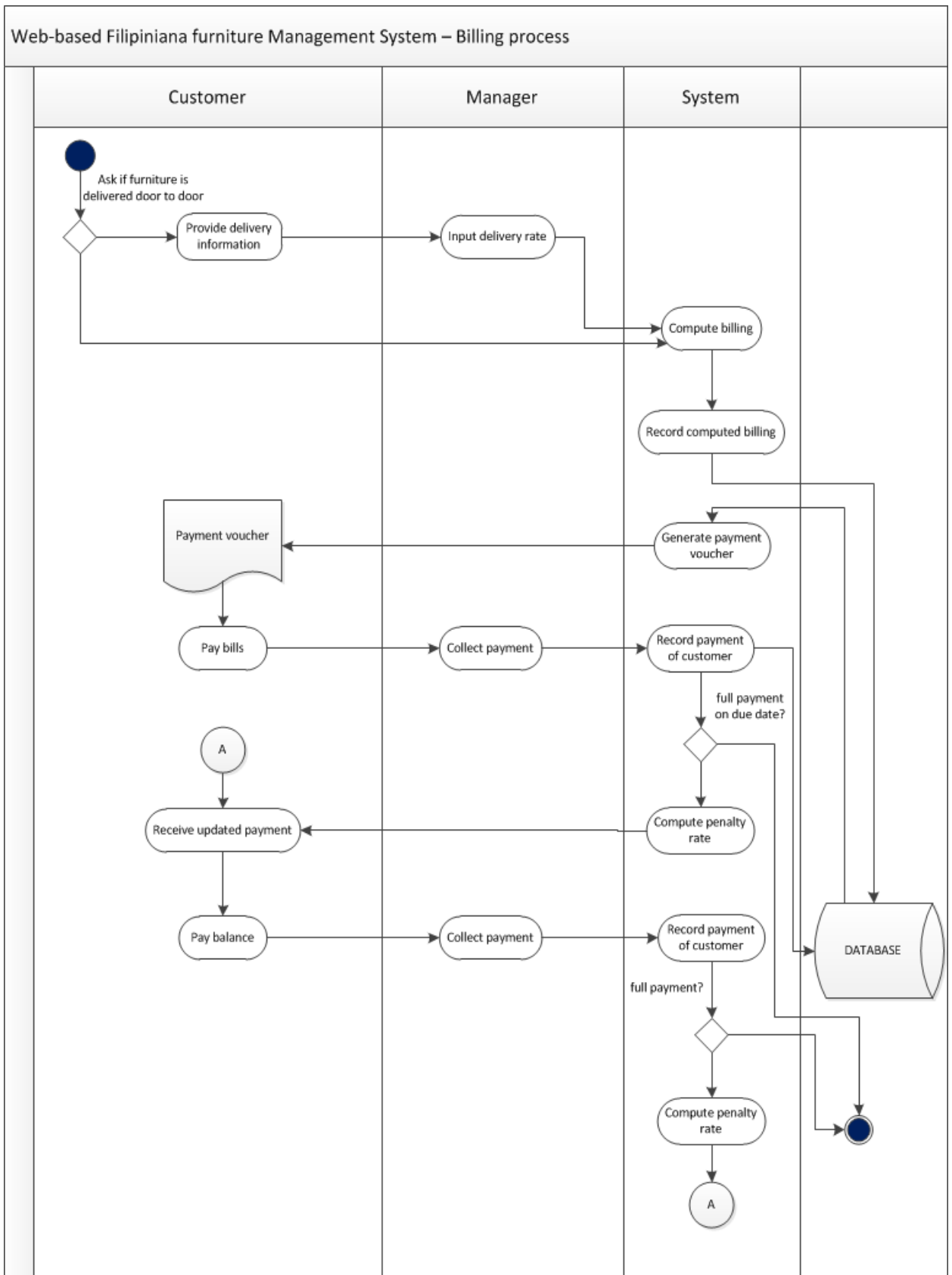
Figure 11.5 Monitor Delivery Class Diagram

3.3.2. ACTIVITY DIAGRAM









Production Tracking

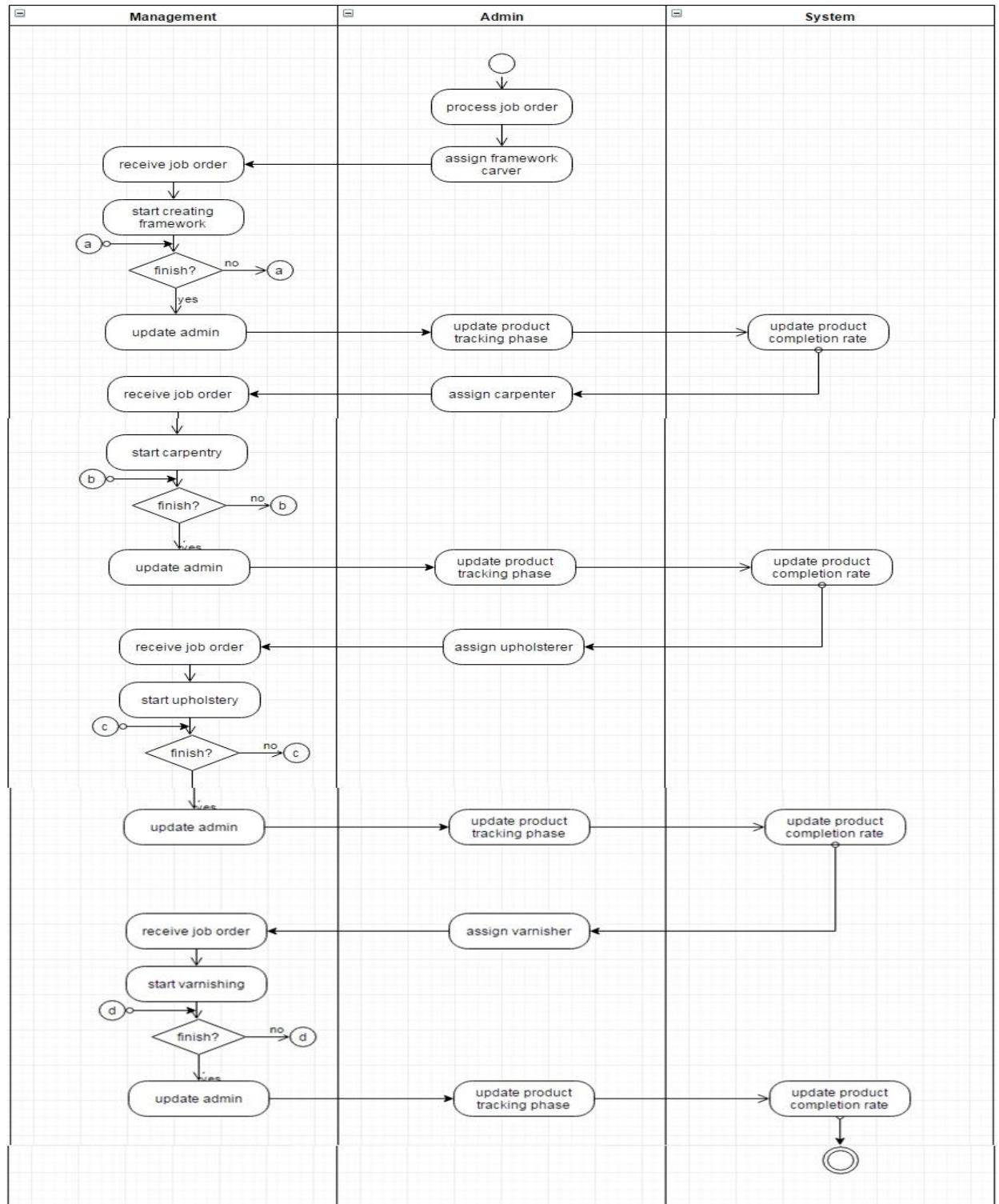
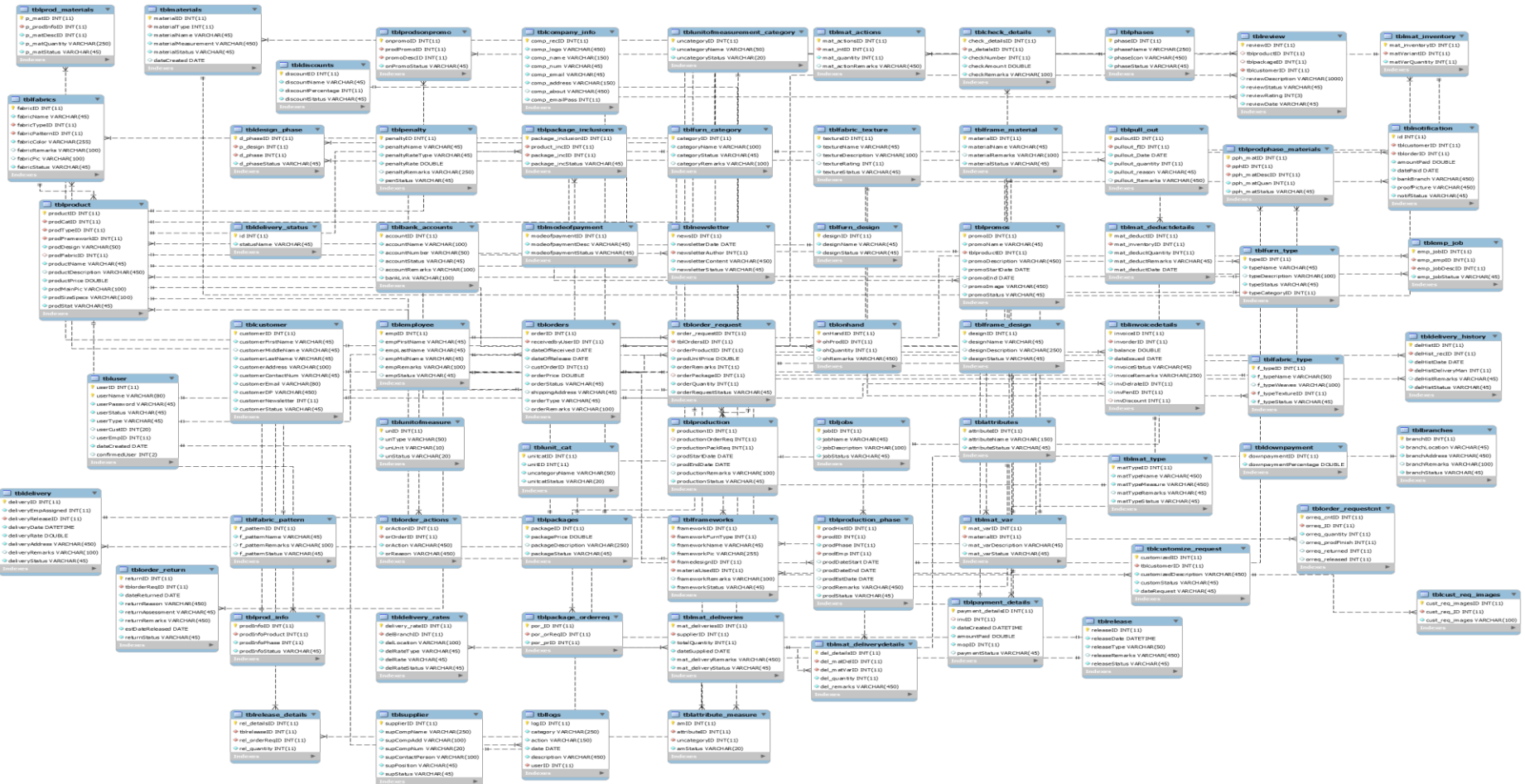


Figure 12. Activity Diagram

3.3.3. DATABASE DESIGN

3.3.3.1 DATABASE SCHEMAinfor



3.3.3.2 DATA DICTIONARY

Table Name: tblattribute_measure

Related Table: tblattributes, tblunitofmeasurement_category

Description: This table contains the measurements needed for an attribute.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	amID	Attribute measure ID	INT (11)	N/A	N/A	1	Yes	1	N/A
FK	attributeID	ID of attribute from tblattributes	INT (11)	N/A	N/A	N/A	Yes	1	ID must exist in tblattributes
FK	uncategoryID	Description of the Project	INT(11)	N/A	N/A	N/A	Yes	1	ID must exist in tblunitofmeasure ment_category
	amStatus	Status of attribute measure record	VARCHAR(2 0)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblattributes

Related Table:

Description: This table contains the attributes that a material may have.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	attributeID	ID's of attributes	INT(11)	N/A	N/A	1	Yes	1	N/A
	attributeName	Name of attributes	VARCHAR(150)	N/A	N/A	N/A	Yes	Color	N/A
	attributeStatus	Status of attributes record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblbank_accounts**Related Table:**

Description: This table contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	accountID	ID's of bank accounts record	INT(11)	N/A	N/A	1	Yes	1	N/A
	accountName	Name of the account holder	VARCHAR(100)	N/A	N/A	N/A	Yes	Aira B. Coronado	N/A

	accountNumber	Number of account	INT(11)	N/A	N/A	N/A	Yes	201402207MN0	N/A
	accountStatus	Status of bank account record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A
	accountRemarks	Remarks on the bank account	VARCHAR(100)	N/A	N/A	N/A	No	A bank account	N/A

Table Name: tblbranches

Related Table:

Description: This table contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	branchID	ID's of the branch record	INT(11)	N/A	N/A	1	Yes	1	N/A
	branchLocation	Location of the branch	VARCHAR(45)	N/A	N/A	N/A	Yes	Bacoar	N/A
	branchAddress	Specific address of the branch	VARCHAR(450)	N/A	N/A	N/A	Yes	#23 Talaba II Aguinaldo Highway Bacoar	N/A

								City	
	branchRemarks	Remarks about the branch	VARCHAR(100)	N/A	N/A	N/A	Yes	The main branch	N/A
	branchStatus	Remarks on the bank account	VARCHAR(45)	N/A	N/A	N/A	No	Active	N/A

Table Name: tblcheck_details

Related Table: tblpayment_details

Description: This table contains the bank account information provided by the management. If the customer chooses to pay via bank the information of the bank account will be coming from here.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	check_detailsID	ID's of the check details record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	p_detailsID	ID of tblpayment_details record	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblpayment_details
	checkNumber	Number of the check	INT(11)	N/A	N/A	N/A	Yes	0000001	N/A
	checkAmount	Remarks about the	DOUBLE	N/A	N/A	N/A	Yes	1000.00	N/A

		branch							
	checkRemarks	Remarks on the bank account	VARCHAR(100)	N/A	N/A	N/A	No	Payment for an order	N/A

Table Name: tblcompany_info

Related Table:

Description: This table contains the company information. This information is displayed on the website.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	comp_recID	ID of the company information record	INT(11)	N/A	N/A	1	Yes	1	N/A
	comp_logo	Filename of the company logo	VARCHAR(450)	N/A	N/A	N/A	Yes	Logo.png	N/A
	comp_name	The name of the company	VARCHAR(150)	N/A	N/A	N/A	Yes	Filipiniana Furniture Shop	N/A
	comp_num	The company's contact information	INT(11)	N/A	N/A	N/A	Yes	765-4321	N/A
	comp_email	The company's email address	VARCHAR(45)	N/A	N/A	N/A	Yes	filfurniture@gmail.com	N/A

	comp_emailPa ss	The company's email password	VARCHAR(4 5)	N/A	N/A	N/A	Yes	Password	N/A
	comp_address	The company's address	VARCHAR(1 50)	N/A	N/A	N/A	Yes	Talaba II, Bacoor City	N/A
	comp_about	The company's about	VARCHAR(4 50)	N/A	N/A	N/A	Yes	A furniture shop.	N/A

Table Name: tblcust_req_images

Related Table:

Description: This table contains the images of the customization request from the customer.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	cust_req_imag esID	ID of the company information record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	cust_req_ID	Filename of the company logo	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblcustomize_req uest
	cust_req_imag es	The name of the company	VARCHAR(1 00)	N/A	N/A	N/A	Yes	Image.jpeg	N/A
	cust_req_imag	The company's	VARCHAR(4	N/A	N/A	N/A	Yes	Active	N/A

	eStat	contact information	5)						
--	-------	---------------------	----	--	--	--	--	--	--

Table Name: tblcustomer

Related Table:

Description: This table contains the information of the customer.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	customerID	ID of the customer record	INT(11)	N/A	N/A	1	Yes	1	N/A
	customerFirstName	Firstname of the customer	VARCHAR(45)	N/A	N/A	N/A	Yes	Rhodora	N/A
	customerMiddleName	Middlename of the customer	VARCHAR(45)	N/A	N/A	N/A	No	Barrameda	N/A
	customerLastName	Lastname of the customer	VARCHAR(45)	N/A	N/A	N/A	Yes	Coronado	N/A
	customerAddress	Address of the customer	VARCHAR(100)	N/A	N/A	N/A	Yes	#123 Brgy. Batasan Hills Quezon City	N/A
	customerContactNum	The customer's contact number	VARCHAR(45)	N/A	N/A	N/A	Yes	09216982449	N/A

customerEmail	The customer's email	VARCHAR(80)	N/A	N/A	N/A	Yes	rhodorabbcc@yahoo.com	N/A
customerStatus	The status of the customer	VARCHAR(45)	N/A	N/A	N/A	Yes		

Table Name: tblcustomize_request

Related Table: tblcustomer, tblframeworks, tblfabrics

Description: This table contains the information of the customer's customization request.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	customizedID	ID of the customization record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	accountdetailsID	ID of the customer who request the customization	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblcustomer
	customizedPic	Filename of the	VARCHAR(45)	N/A	N/A	N/A	No	Cust.jpeg	N/A

		customization image							
	customizedDescription	Description of the customization	VARCHAR(250)	N/A	N/A	N/A	Yes	Coronado	N/A
FK	customFrameID	ID of the chosen framework	INT(11)	N/A	N/A	N/A	No	2	Must exist in the tblframeworks
FK	customFabricID	ID of the chosen fabric	INT(11)	N/A	N/A	N/A	No	4	Must exist in the tblfabrics
	customStatus	Status of the customization	VARCHAR(45)	N/A	N/A	N/A	Yes	Pending	N/A

Table Name: tbldelivery

Related Table: tblemployee

Description: This table contains the delivery information of the order to be delivered

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
-----	------------	-------------	-----------	-----	-----	---------	----------	-------------	------------

PK	deliveryID	ID of the delivery record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	deliveryEmpAssigned	ID of the employee assigned in the delivery	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblemployee
	deliveryDate	Date of delivery	DATETIME	N/A	N/A	N/A	Yes	2017-08-25	N/A
	deliveryRate	Rate of delivery	DOUBLE	N/A	N/A	N/A	Yes	1000.00	N/A
	deliveryAddress	Address of delivery	VARCHAR(450)	N/A	N/A	N/A	Yes	#123 Kagawad Street Batasan Hills Quezon City	N/A
	deliveryRemarks	Remarks on the delivery	VARCHAR(100)	N/A	N/A	N/A	No	A delivery	N/A
	deliveryStatus	Status of the delivery	VARCHAR(45)	N/A	N/A	N/A	Yes	Pending	N/A

Table Name: tbldelivery_details

Related Table: tbldelivery,tblorder_request

Description: This table contains the information of the delivery.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	del_detailsID	ID of the delivery details record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	del_deliveryID	ID of the delivery record	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tbldelivery
FK	del_orderReqID	ID of the order request	INT(11)	N/A	N/A	N/A	Yes	3	Must exist in the tblorder_request
	del_quantity	Quantity of the deliver order request to be delivered	INT(11)	N/A	N/A	N/A	Yes	5	N/A
	del_status	Status of the delivery details table	VARCHAR(45)	N/A	N/A	N/A	Yes	Pending	N/A

Table Name: tbldelivery_rates

Related Table: tblbranches

Description: This table contains delivery rates information.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	delivery_ratel	ID of the delivery	INT(11)	N/A	N/A	1	Yes	1	N/A

	D	details record							
FK	delBranchID	ID of the branch record	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblbranches
	delLocation	Location of the delivery	VARCHAR(100)	N/A	N/A	N/A	Yes	Bacoor	Must exist in the tblorder_request
	delRateType	Rate Type can either be percentage or a fixed amount. Percentage pertaining to the percentage of the total price.	VARCHAR(45)	N/A	N/A	N/A	Yes	Amount	N/A
	delRate	Rate of the delivery	VARCHAR(45)	N/A	N/A	N/A	Yes	1000.00	N/A
	delRateStatus	Status of the delivery rate	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tbldesign_phase

Related Table: tblphases, tblfurn_design

Description: This table contains the phases that a certain furniture design must undergo.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	d_phaseID	ID of the delivery details record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	p_design	ID of the furniture design	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblfurn_design
FK	d_phase	ID of the production phase	INT(11)	N/A	N/A	N/A	Yes	3	Must exist in the tblphases
	d_phaseStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tbldelivery_status

Related Table:

Description: Status of deliveries

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	id	ID of the delivery details	Int(11)	N/A	N/A		Yes	1	N/A
	statusName	Name of the delivery	Varchar(45)	N/A	N/A		Yes	Pending	N/A

		status.							
--	--	----------------	--	--	--	--	--	--	--

Table Name: tbldiscounts

Related Table:

Description: This table contains discount information

Key	Field Name	Description	Data type	min	max	default	required	sample	Validation
pk	discountID	ID of the discounts	Int(11)	n/a	n/a		yes	1	n/a
	discountName	Name of discounts	varchar(45)	n/a	n/a		yes	Friendly Discount	n/a
	discountPercentage	Percentage of the discounts	Int(11)	n/a	n/a		yes	50	n/a
	discountStatus	Status of the discount	Varchar(45)	n/a	n/a		yes	active	n/a

Table Name: tbldownpayment

Related Table:

Description: This table contains the downpayment information

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	downpaymentID	ID of the delivery details record	INT(11)	N/A	N/A	1	Yes	1	N/A
	downpaymentPercentage	The percentage of the required downpayment to be paid	DOUBLE	N/A	N/A	N/A	Yes	.50	N/A

Table Name: tblemp_job

Related Table: tblemployee,tbljobs

Description: An employee can have multiple jobs. This table contains the jobs of the employee.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	emp_jobID	ID of the delivery details record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	emp_empID	ID of the employee	INT(11)	N/A	N/A	N/A	Yes	1	N/A
FK	emp_jobDescID	ID of the job	INT(11)	N/A	N/A	N/A	Yes	1	N/A
	emp_jobStatus	Status of the record	VARCHAR(4)	N/A	N/A	N/A	Yes	Active	N/A

			5)						
--	--	--	----	--	--	--	--	--	--

Table Name: tblemployee

Related Table:

Description: This table contains the employee information

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	empID	ID of the employee	INT(11)	N/A	N/A	1	Yes	1	N/A
	empFirstName	First Name of the employee	VARCHAR(45)	N/A	N/A	N/A	Yes	Rhodora	N/A
	empLastName	Last Name of the employee	VARCHAR(45)	N/A	N/A	N/A	Yes	Cooronado	N/A
	empMidName	Middle Name of the employee	VARCHAR(45)	N/A	N/A	N/A	Yes	Barrameda	N/A
	empRemarks	Remarks	VARCHAR(100)	N/A	N/A	N/A	No	An employee	
	empStatus	Status of the employee	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	

Table Name: tblfabric_pattern

Related Table:

Description: This table contains the patterns or designs of a fabric. It is used to define the fabrics properly.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	f_patternID	ID of the pattern	INT(11)	N/A	N/A	1	Yes	1	N/A
	f_patternName	Name of the pattern	VARCHAR(45)	N/A	N/A	N/A	Yes	Floral	N/A
	f_patternRemarks	Remarks of the pattern	VARCHAR(100)	N/A	N/A	N/A	No	A combination of multiple flowers	N/A
	f_patternStatus	Status of the pattern record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblfabric_texture

Related Table:

Description: This table contains the texture. It is used to define the fabric type properly.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
-----	------------	-------------	-----------	-----	-----	---------	----------	-------------	------------

PK	textureID	ID of the texture	INT(11)	N/A	N/A	1	Yes	1	N/A
	textureName	Name of the texture	VARCHAR(45)	N/A	N/A	N/A	Yes	Very smooth	N/A
	textureDescription	Description of the texture	VARCHAR(100)	N/A	N/A	N/A	No	A very smooth texture	N/A
	textureRating	Rating defines the level of the texture's quality	INT(11)	N/A	N/A	N/A	Yes	5	N/A
	textureStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblfabric_type

Related Table: tblfabric_texture

Description: This table contains the fabric types. It is used to define the fabrics properly.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	f_typeID	ID of the fabric type	INT(11)	N/A	N/A	1	Yes	1	N/A
	f_typeName	Name of the fabric	VARCHAR(50)	N/A	N/A	N/A	Yes	Leather	N/A

		type							
	f_typeWeaves	Description fabric type's weaves.	VARCHAR(100)	N/A	N/A	N/A	No	Compactly weaved	N/A
FK	f_typeTexture ID	ID of the texture of the fabric type	INT(11)	N/A	N/A	N/A	Yes	5	Must exist in the tblfabric_texture.
	f_typeStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblfabrics

Related Table: tblfabric_type, tblfabric_pattern

Description: This table contains the fabrics. It is used to define the products.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	fabricID	ID of the fabric	INT(11)	N/A	N/A	1	Yes	1	N/A
	fabricName	Name of the fabric	VARCHAR(45)	N/A	N/A	N/A	Yes	Gold Rani	N/A
FK	fabricTypeID	ID of the fabric type	INT(11)	N/A	N/A	N/A	Yes	4	Must exist in the tblfabric_type

FK	fabricPatternID	ID of the fabric pattern	INT(11)	N/A	N/A	N/A	Yes	5	Must exist in the tblfabric_pattern
	fabricColor	Color description of the fabric	VARCHAR(255)	N/A	N/A	N/A	Yes	Black and Yellow	N/A
	fabricRemarks	Remarks about the fabric	VARCHAR(100)	N/A	N/A	N/A	No		N/A
	fabricPic	The filename of the fabric's image.	VARCHAR(100)	N/A	N/A	N/A	Yes	201708251047.jpeg	N/A
	fabricStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblframe_design

Related Table:

Description: This table contains the frame design. It is used to define the frameworks.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	designID	ID of the frame design	INT(11)	N/A	N/A	1	Yes	1	N/A
	designName	Frame design name	VARCHAR(45)	N/A	N/A	N/A	Yes	Classic	N/A

	e								
	designDescription	Design description	VARCHAR(250)	N/A	N/A	N/A	No	A classical design	N/A
	designStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblframe_material

Related Table:

Description: This table contains the material used to create the frame. It is used to define the frameworks.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	materialID	ID of the frame material	INT(11)	N/A	N/A	1	Yes	1	N/A
	materialName	Frame material name	VARCHAR(45)	N/A	N/A	N/A	Yes	Narra Wood	N/A
	materialRemarks	Frame material remarks	VARCHAR(100)	N/A	N/A	N/A	No	A material	N/A
	materialStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblframeworks

Related Table: tblframe_design, tblfurn_type, tblframe_material

Description: This table contains the frameworks. It is used to define the products.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	frameworkID	ID of the framework	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	frameworkFurnType	Frame material name	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblfurn_type
	frameworkName	Frame material remarks	VARCHAR(45)	N/A	N/A	N/A	Yes	Jolly	N/A
	frameworkPic	The filename of the framework's image.	VARCHAR(255)	N/A	N/A	N/A	Yes	2016085129.jpeg	N/A
FK	framedesignID	ID of the frame design	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblframe_design
FK	materialUsedID	ID of the material used	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblframe_material

	frameworkRemarks	Remarks	VARCHAR(100)	N/A	N/A	N/A	No	Remark	N/A
	frameworkStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblfurn_category

Related Table:

Description: This table contains the category of the products

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	categoryID	ID of the framework	INT(11)	N/A	N/A	1	Yes	1	N/A
	categoryName	Category name	VARCHAR(100)	N/A	N/A	N/A	Yes	Living Area	N/A
	categoryStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A
	categoryRemarks	Remarks	VARCHAR(100)	N/A	N/A	N/A	No	A category	N/A

Table Name: tblfurn_design

Related Table:

Description: This table contains the possible design of the product. These designs are Pure, Weaved, Upholstered.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	designID	ID of the framework	INT(11)	N/A	N/A	1	Yes	1	N/A
	designName	Category name	VARCHAR(100)	N/A	N/A	N/A	Yes	Pure	N/A
	designStatus	Status of the record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblfurn_type

Related Table: tblfurn_category

Description: This table contains the furniture type. It is based on the furniture category and is used to define the products.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	typeID	ID of the furniture type	INT(11)	N/A	N/A	1	Yes	1	N/A
	typeName	Furniture type name	VARCHAR(45)	N/A	N/A	N/A	Yes	Sofa	N/A
	typeDescription	Furniture type description	VARCHAR(100)	N/A	N/A	N/A	No	Found in the living area	N/A
	typeStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A
FK	typeCategoryID	ID of furniture category	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblfurn_category

Table Name: tblinvoicedetails

Related Table: tblorders

Description: This table contains the invoice information of the customer's order.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
-----	------------	-------------	-----------	-----	-----	---------	----------	-------------	------------

PK	invoiceID	ID of the invoice	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	invorderID	ID of the order	INT(11)	N/A	N/A	N/A	Yes	Sofa	Must exist in the tblorders
	balance	Remaining balance	DOUBLE	N/A	N/A	N/A	Yes	Found in the living area	N/A
	dateIssued	Date the invoice was issued	DATE	N/A	N/A	N/A	Yes	2017-08-25	N/A
	invoiceStatus	Status of invoice	VARCHAR(45)	N/A	N/A	N/A	Yes	Paid	N/A
	invoiceRemarks	A remarks.	VARCHAR(250)	N/A	N/A	N/A	Yes	An invoice	N/A
	invDelrateID	Delivery ID	INT(11)	N/A	N/A	N/A	No	1	N/A
	invPenID	Penalty ID	INT(11)	N/A	N/A	N/A	No	1	N/A

Table Name: tbljobs

Related Table:

Description: This table contains the jobs in the company.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
-----	------------	-------------	-----------	-----	-----	---------	----------	-------------	------------

PK	jobID	ID of the job	INT(11)	N/A	N/A	1	Yes	1	N/A
	jobName	Job name	VARCHAR(45)	N/A	N/A	N/A	Yes	Carpentry	N/A
	jobDescription	Job description	VARCHAR(100)	N/A	N/A	N/A	Yes	Builds the frame	N/A
	jobStatus	Status of the job record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tbllogs

Related Table: tbluser

Description: This table contains the actions or changes that a certain user did in the system

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	logID	ID of the log	INT(11)	N/A	N/A	1	Yes	1	N/A
	category	Category of the action	VARCHAR(250)	N/A	N/A	N/A	Yes	Supplier	N/A
	action	Action description	VARCHAR(150)	N/A	N/A	N/A	Yes	New	N/A
	date	Date the action is done	DATE	N/A	N/A	N/A	Yes	2017-08-25	N/A

	description	Action description	VARCHAR(450)	N/A	N/A	N/A	Yes	Created new supplier	N/A
FK	userID	ID of the user who did the action	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tbluser

Table Name: tblmat_actions

Related Table: tblmat_inventory

Description: This table contains the actions done in the raw materials management

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	mat_actionsID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	mat_intlID	ID of the material inventory	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblmat_inventory
	mat_quantity	Quantity of material added or deducted	INT(11)	N/A	N/A	N/A	Yes	New	N/A
	mat_actionRemarks	Remarks	VARCHAR(450)	N/A	N/A	N/A	Yes	2017-08-25	N/A

Table Name: tblmat_deductdetails

Related Table: tblmat_var

Description: This table contains the materials deducted from the product upon production process.

key	Field name	description	Data type	min	max	default	required	Sample data	validation
pk	mat_deduct	Id of the deducted materials	Int(11)	n/a	n/a	n/a	yes	1	n/a
fk	mat_inventoryID	Id of material inventory records	Int(11)	n/a	n/a	n/a	yes	1	n/a
	mat_deductQuantity	Quantity of deducted materials	Int(11)	n/a	n/a	n/a	yes	50	n/a
	mat_deductRemarks	Information about the deduction	Varchar(45)	n/a	n/a	n/a	no	deducted	n/a

Table Name: tblmat_deliveries

Related Table: tblsupplier

Description: This table contains the deliveries of materials received from the supplier.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	mat_deliveriesID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	supplierID	ID of supplier	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblsupplier
	totalQuantity	Total quantity of delivery	INT(11)	N/A	N/A	N/A	Yes	1	N/A
	mat_deliveryRemarks	Remark on the record	VARCHAR(450)	N/A	N/A	N/A	No	A remark	N/A
	mat_deliveryStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblmat_deliverydetails

Related Table: tblmat_deliveries, tblmat_var

Description: This table contains the details of the deliveries.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	del_detailsID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	del_matDelID	ID of delivery record	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblmat_deliveries
FK	del_matVarID	ID of material variant delivered	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblmat_var
	del_quantity	Quantity delivered	INT(11)	N/A	N/A	N/A	Yes	100	N/A
	del_remarks	Remarks	VARCHAR(450)	N/A	N/A	N/A	No	Active	N/A

Table Name: tblmat_inventory

Related Table: tblmat_var

Description: This table contains the quantity of materials.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
-----	------------	-------------	-----------	-----	-----	---------	----------	-------------	------------

PK	mat_inventory ID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	matVariantID	ID of material variant	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblmat_var
	matVarQuantity	ID of material variant delivered	INT(11)	N/A	N/A	N/A	Yes	100	N/A

Table Name: tblmat_type

Related Table: tblmat_var

Description: This table contains the types of material. It is use to define a material.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	matTypeID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	matTypeName	Name of material type	VARCHAR(450)	N/A	N/A	N/A	Yes	Paint	Must exist in tblmat_var
	matTypeMeasure	Measures of the material type	VARCHAR(450)	N/A	N/A	N/A	Yes	Liters	N/A
	matTypeRemarks	Remarks	VARCHAR(45)	N/A	N/A	N/A	Yes	A remark	N/A
	matTypeStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

	s		5)						
--	---	--	----	--	--	--	--	--	--

Table Name: tblmat_var

Related Table: tblmaterials, tblunitofmeasurement_category, tblunitofmeasure,tblattribute

Description: This table contains the variants of a material.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	variantID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	mat_varID	ID of material	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblmaterials
FK	attributeID	ID of selected attribute	INT(11)	N/A	N/A	N/A	Yes	1	N/A
	mat_varDescription	Description of the variant attribute	VARCHAR(150)	N/A	N/A	N/A	Yes		N/A
FK	uncategoryID	ID of selected unit of measurement category	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblunitofmeasure ment_category
	unitValue	Value if inputted	INT(45)	N/A	N/A	N/A	No	5	N/A

		unit							
FK	unitID	ID of selected unit	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblmaterials
	attribCounter	Counter of attributes	INT(11)	N/A	N/A	N/A	Yes	3	N/A
	mat_varStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblmaterials

Related Table: tblmat_type

Description: This table contains the materials used in making furniture.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	materialID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	materialType	ID of material type	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in tblmat_type
	materialName	Material Name	VARCHAR(45)	N/A	N/A	N/A	Yes	Paint	N/A
	materialMeasurement	Measurement	VARCHAR(450)	N/A	N/A	N/A	Yes		N/A

	materialStatus	Status of recordd	VARCHAR(45)	N/A	N/A	N/A	No	A remark	N/A
--	----------------	-------------------	-------------	-----	-----	-----	----	----------	-----

Table Name: tblmodeofpayment

Related Table: tblmat_type

Description: This table contains the mode of payments.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	modeofpaymentID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	modeofpaymentDesc	Mode of payment description	VARCHAR(45)	N/A	N/A	N/A	Yes	Cash	N/A
	modeofpaymentStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblonhand

Related Table: tblproduct

Description: This table contains the record of the on hand products.

Key	Field	Description	Data Type	Min	Max	Default	Required	Sample	Validation
-----	-------	-------------	-----------	-----	-----	---------	----------	--------	------------

	Name							Data	
PK	onHandID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	ohProdID	ID of the product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblproduct
	ohQuantity	Quantity on hand	INT(11)	N/A	N/A	N/A	Yes	10	N/A
	ohRemarks	Status of record	VARCHAR(450)	N/A	N/A	N/A	Yes	Active	N/A

Table name: tblnewsletter

Related tables: tbluser

Description: this contains the newsletters sent to subscribed customers

key	Field name	description	Data type	min	max	default	required	Sample data	validation
pk	newsletterID	Id of the newsletter	Int(11)	n/a	n/a	n/a	yes	1	n/a
	newsletterDate	date the newsletter is composed	date	n/a	n/a	n/a	yes	2017-10-14	Must not be earlier than today
fk	newletterAuthor	The id of the	Int(11)	n/a	n/a	n/a	yes	3	Must exist in

		user who composed the newsletter							tbluser
	newsletterContent	The content of the newsletter	Varchar(25000)	n/a	n/a	n/a	yes	"this is an announcement..."	n/a

Table Name: tblnotifications

related tables:

description: contains the notifications of customer payment.

Key	Field name	description	Data type	min	max	default	required	sample data	Validation
pk	id	Id of notification	Int(11)	n/a	n/a	n/a	yes	1	n/a
Fk	tblcustomerID	Id of the customer who executed the action.	Int(11)	n/a	n/a	n/a	yes	1	n/a
Fk	tblorderID	Order information of the customer	Int(11)	n/a	n/a	n/a	yes	1	n/a
	amountPaid	The amount paid for the order	double	n/a	n/a	n/a	yes	250.00	n/a
	datePaid	The date when the	date	n/a	n/a	n/a	yes	2017-14-10	n/a

		customer paid							
	bankBranch	The bank branch where the customer paid	Varchar(45)	n/a	n/a	n/a	yes	BNORPHMM	Must be an existing bank branch.
	proofPicture	The photo which provides evidence of payment	Varchar(450)	n/a	n/a	n/a	yes	Proofofpayment.jpg	must be an image.
	notifStatus	Status of the notification	Varchar(45)	n/a	n/a	n/a	Yes	Pending	n/a

Table Name: tblorder_actions

Related Table: tblorders

Description: This table contains the action that the user made on the orders.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	orActionID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	orOrderID	ID of the order	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblorders
	orAction	Quantity on hand	INT(11)	N/A	N/A	N/A	Yes	Reject	N/A

	orReason	Status of record	VARCHAR(450)	N/A	N/A	N/A	Yes	Not enough materials	N/A
--	----------	------------------	--------------	-----	-----	-----	-----	----------------------	-----

Table Name: tblorder_customization

Related Table: tblorder_request, tblfabric, tblframeworks

Description: This table contains the action customizations or special request the customer has made on every ordered furniture

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	orCustID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	orOrderReqID	ID of the order	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblorder_request
FK	orFabricID	ID of fabric	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblfabrics
FK	orFrameworkID	ID of framework	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblframeworks
	orSizeSpecs	Description of specified size	VARCHAR(150)	N/A	N/A	N/A	No	187 cm lenght	N/A
	orDescription	Description of customization	VARCHAR(250)	N/A	N/A	N/A	No	Gold plating on the carvings	N/A

Table Name: tblorder_request

Related Table: tblorders, tblproducts, tblpackages

Description: This table contains the details of every order.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	order_requestID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	orderProductID	ID of the product	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblproducts
	productUnitPrice	Price of the furniture	DOUBLE	N/A	N/A	N/A	Yes	50000	N/A
FK	tblOrdersID	ID of order	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblfabrics
	orderRemarks	Remarks	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblframeworks
FK	orderPackageID	ID of the package	INT(11)	N/A	N/A	N/A	No	1	Must exist in tblpackage
	orderQuantity	Quantity	INT(11)	N/A	N/A	N/A	No	100	N/A

	orderRequestStatus	Status of order request	VARCHAR(45)	N/A	N/A	N/A	Yes	Pending	N/A
--	--------------------	-------------------------	-------------	-----	-----	-----	-----	---------	-----

Table name: tblorder_requestcnt

key	Field name	description	Data type	min	max	default	required	Sample data	Validation
pk	Orreq_cntID	The id of the order request count.	Int(11)	n/a	n/a	n/a	yes	1	n/a
fk	Orreq_ID	The id of the order request	Int(11)	n/a	n/a	n/a	yes	1	n/a
	Orreq_quantity	The quantity of the order requests.	Int(11)	n/a	n/a	n/a	yes	1	n/a
	Orreq_prodFinish	The quantity of order requests that are finished	Int(11)	n/a	n/a	n/a	no	35	Must not be more than the total quantity of order requests
	Orreq_returned	Quantity of	Int(11)	n/a	n/a	n/a	no	100	Must not be more

		returned products under warranty							than the products that are delivered to the user.
	Orreq_released	Quantity of order requests that are released	Int(11)	n/a	n/a	n/a	no	45	Must not be more than the requested products.

Table Name: tblorder_return

Related Table:

Description: This table contains the record of orders that have been returned

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	returnID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	dateReturned	Date the furniture is returned	DATE	N/A	N/A	N/A	Yes	2017-08-28	N/A
	returnRemarks	Remarks about the return	VARCHAR(450)	N/A	N/A	N/A	No	A remark	N/A
	returnStatus	Status of the	VARCHAR(4	N/A	N/A	N/A	Yes	Pending	N/A

	s	transaction	5)						
--	---	-------------	----	--	--	--	--	--	--

Table Name: tblorders

Related Table: tbluser, tblcustomer

Description: This table contains the orders made by the customers

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	orderID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	receivedbyUserID	ID of user who accepted the order	INT(11)	N/A	N/A	N/A	Yes	Pending	N/A
	dateOfReceived	Date the order was received	DATE	N/A	N/A	N/A	Yes	2018-08-24	N/A
	dateOfRelease	Date the order was released	DATE	N/A	N/A	N/A	Yes	2018-08-30	Must exist in tblproducts
FK	custOrderID	ID of customer who ordered	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblcustomer
	orderPrice	Price of the	DOUBLE	N/A	N/A	N/A	Yes	1	N/A

		order							
	orderStatus	Status of the order	VARCHAR(45)	N/A	N/A	N/A	Yes	1	N/A
	shippingAddress	Shipping Address of the order	VARCHAR(45)	N/A	N/A	N/A	No	100	N/A
	orderType	Type of the order	VARCHAR(45)	N/A	N/A	N/A	Yes	Pending	N/A
	orderRemarks	Remarks	VARCHAR(100)	N/A	N/A	N/A	No	Pending	N/A

Table Name: tblpackage_inclusions

Related Table: tblpackage,tblproduct

Description: This table contains the products included in every packages.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	package_inclusionID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	product_inclID	ID of product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in

									tblproducts
FK	package_incID	ID of package this record is included	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblpackage
	package_incStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table name: tblpackage_orderreq

Related table:

Description: here lies the requests for packages.

key	Field name	description	Data type	min	max	default	required	Sample data	Validation
pk	Por_ID	Id for requested packages	Int(11)	n/a	n/a	n/a	yes	1	n/a
Fk	Por_orReqID	Id of the orderRequest							

Table Name: tblpackage

Related Table:

Description: This table contains the packages available in the shop.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	packageID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	packagePrice	Price of the package	DOUBLE	N/A	N/A	N/A	Yes	10000	Must exist in tblproducts
	packageDescription	Description or name of the package	VARCHAR(250)	N/A	N/A	N/A	Yes	Winter Package	Must exist in tblpackage
	packageStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblpayment_details

Related Table: tblinvoicedetails, tblmodeofpayment

Description: This table contains the payments made by the customer

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	payment_detail	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A

	IsID								
FK	invID	ID of the invoice	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblinvoicedetails
	dateCreated	Date of payment	DATETIME	N/A	N/A	N/A	Yes	2017-08-25	N/A
	amountPaid	Amount Paid	DOUBLE	N/A	N/A	N/A	Yes	5000	N/A
FK	mopID	ID of mode of payment	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblmodeofpayment
	paymentStatus	Status of payment	VARCHAR(45)	N/A	N/A	N/A	Yes	Paid	N/A

Table Name: tblpenalty

Related Table:

Description: This table contains the penalties of the shop.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	penaltyID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	penaltyName	Penalty name	VARCHAR(45)	N/A	N/A	N/A	Yes	1	N/A
	penaltyRateType	Rate type	VARCHAR(45)	N/A	N/A	N/A	Yes	Amount	N/A

	penaltyRate	Rate	DOUBLE	N/A	N/A	N/A	Yes	5000	N/A
	penaltyRemarks	Remarks	VARCHAR(250)	N/A	N/A	N/A	No	A remark	N/A
	penStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblphases

Related Table:

Description: This table contains the phases a furniture must undergo under the production

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	phaseID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	phaseName	Phase name	VARCHAR(250)	N/A	N/A	N/A	Yes	Carpentry	N/A
	phaseIcon	The filename of the phase's icon	VARCHAR(450)	N/A	N/A	N/A	Yes	Carpentry.png	N/A
	phaseStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblprod_images

Related Table: tblproduct

Description: This table contains the other images of the product

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	prodImageID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	prodImgID	ID of the product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblproduct
	prodImageName	The filename of the image	VARCHAR(100)	N/A	N/A	N/A	Yes	Carpentry.png	N/A
	prodImgStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblprod_info

Related Table: tblproduct,tblphases

Description: This table contains the production information of a product according to phase.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	prodInfoID (Primary)	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A

FK	prodInfoProduct	ID of the product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblproduct
FK	prodInfoPhase	ID of phase	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblphases
	prodInfoStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblprod_materials

Related Table: tblprod_info,tblmaterials,tblmat_var

Description: This table contains the materials needed in every production phase of the product

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	p_matID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	p_prodInfoID	ID of the product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblprod_info
FK	p_matMaterialID	ID of the material	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblmaterials
FK	p_matDescID	ID of material variant	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblmat_var

	p_matQuantity	Quantity needed	VARCHAR(250)	N/A	N/A	N/A	Yes	10	N/A
	p_matUnit	ID of phase	VARCHAR(45)	N/A	N/A	N/A	Yes	pcs	N/A
	p_matStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblprodsonpromo

Related Table: tblprod_info,tblmaterials,tblmat_var

Description: This table contains the materials needed in every production phase of the product

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	onpromoID (Primary)	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	prodPromoID	ID of the product	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblproduct
FK	promoDescID	ID of the promo	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblpromo
	onPromoStatus	Status of record	INT(11)	N/A	N/A	N/A	Yes	Active	Must exist in the tblmat_var

Table Name: tblproduct

Related Table: tblfurn_category,tblfurn_type,tblframeworks

Description: This table contains the furniture that the shop can make.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	productID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	prodCatID	ID of category	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblfurn_category
FK	prodTypeID	ID of type	INT(11)	N/A	N/A	N/A	Yes	2	Must exist in the tblfurn_type
FK	prodFrameworkID	ID of framework	INT(11)	N/A	N/A	N/A	Yes	4	Must exist in the tblframework
	prodDesign	ID of design	VARCHAR(50)	N/A	N/A	N/A	Yes	5	N/A
	prodFabricID	ID of fabric	INT(11)	N/A	N/A	N/A	No	6	N/A
	productName	Product Name	VARCHAR(45)	N/A	N/A	N/A	Yes	1	N/A
	productDes	Product Description	VARCHAR(450)	N/A	N/A	N/A	No	1	N/A

	cription								
	productPrice	Product Price	DOUBLE	N/A	N/A	N/A	Yes	50000	N/A
	prodMainPic	Product Main Pic	VARCHAR(100)	N/A	N/A	N/A	Yes	IMAGE.JPEG	N/A
	prodSizeSpecs	Size Specification	VARCHAR(100)	N/A	N/A	N/A	Yes	34,56,78	N/A
	prodStat	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblproduction

Related Table: tblorder_request

Description: This table contains the production information of every ordered furniture

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	productionID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	productionOrderReq	ID of order_request	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblorder_request
	prodStartD	Date start	INT(11)	N/A	N/A	N/A	Yes	2017-08-25	N/A

	ate								
	prodEndDate	Date start	INT(11)	N/A	N/A	N/A	Yes	2017-08-26	N/A
	production Remarks	Remarks	VARCHAR(50)	N/A	N/A	N/A	Yes	A remark.	N/A
	production Status	Status of production	INT(11)	N/A	N/A	N/A	No	Ongoing	N/A

Table Name: tblproduction_phase

Related Table: tblproduction, tblemployee

Description: This table contains the information of production per phases of production.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	prodHistID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	prodID	ID of production	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblproduction

FK	prodPhase	ID of phase	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblphases
FK	prodEmp	ID of employee	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in the tblemployee
	prodDateStart	Date start	DATE	N/A	N/A	N/A	Yes	2017-08-25	N/A
	prodDateEnd	Date end	DATE	N/A	N/A	N/A	Yes	2017-08-26	N/A
	prodRemarks	Remarks on production	VARCHAR(450)	N/A	N/A	N/A	Yes	A remark.	N/A
	prodStatus	Status of production	VARCHAR(45)	N/A	N/A	N/A	No	Ongoing	N/A

Table Name: tblpromo

Related Table:

Description: This table contains the promos.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	promoID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	promoName	Promo name	VARCHAR(45)	N/A	N/A	N/A	Yes	Grand Opening	N/A

								Promo	
	promoDescription	Promo description	VARCHAR(450)	N/A	N/A	N/A	Yes	Buy 1 free 1 table	N/A
	promoStartDate	Promo start date	DATE	N/A	N/A	N/A	Yes	2017-08-25	N/A
	promoEnd	Promo End	VARCHAR(450)	N/A	N/A	N/A	Yes	2017-08-25	N/A
	promoImage	Promo image display	VARCHAR(450)	N/A	N/A	N/A	Yes	Promo1.png	N/A
	promoStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Free 1 table	N/A

Table Name: tblsupplier

Related Table:

Description: This table contains the suppliers

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	supplierID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	supCompName	Supplier company name	VARCHAR(250)	N/A	N/A	N/A	Yes	FNC	N/A

	supCompAdd	Supplier company address	VARCHAR(100)	N/A	N/A	N/A	Yes	#111 Gangnam SOUKOR	N/A
	supCompNum	Supplier contact number	VARCHAR(20)	N/A	N/A	N/A	Yes	786-9072	N/A
	supContactPerson	Supplier contact person	VARCHAR(100)	N/A	N/A	N/A	Yes	Mr.Lee	N/A
	supPosition	Supplier contact position	VARCHAR(45)	N/A	N/A	N/A	Yes	Manager	N/A
	supStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblunit_cat

Related Table: tblunitofmeasure,tblunitofmeasurement_category

Description: This table contains the category in which the unit of measurement falls.

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	unitcatID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	unitID	ID of unit of measurement	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblunitofmeasure

FK	uncategoryID	ID of unit of measurement category	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblunitofmeasurement_category
	unitcatStatus	Supplier contact number	VARCHAR(20)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblunitofmeasure

Related Table:

Description: This table contains the unit of measurements

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	unID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	unType	Type of unit of measurement	VARCHAR(50)	N/A	N/A	N/A	Yes	Feet	N/A
	unUnit	Unit of unit of measurement	VARCHAR(10)	N/A	N/A	N/A	Yes	ft	N/A
	unStatus	Status of record	VARCHAR(20)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tblunitofmeasurement_category

Related Table:

Description: This table contains the categories of unit of measurements

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	uncategoryID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
	uncategoryName	Category name	VARCHAR(50)	N/A	N/A	N/A	Yes	Length	N/A
	uncategoryDescription	Category description	VARCHAR(50)	N/A	N/A	N/A	No	A measure	N/A
	uncategoryStatus	Status of record	VARCHAR(20)	N/A	N/A	N/A	Yes	Active	N/A

Table Name: tbluser

Related Table: tblcustomer, tblemployee

Description: This table contains the information of the users of the system

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	userID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
PK	userName	User name	VARCHAR(80)	N/A	N/A	N/A	Yes	1	N/A
	userPassword	User password	VARCHAR(45)	N/A	N/A	N/A	Yes	1	N/A

	userStatus	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	Active	N/A
	userType	Type of user	VARCHAR(45)	N/A	N/A	N/A	Yes	admin	
FK	userCustID	ID of customer	INT(20)	N/A	N/A	N/A	Yes	null	Must be existing in tblcustomer
FK	userEmpID	ID of employee	INT(11)	N/A	N/A	N/A	Yes	1	Must be existing in tblemployee
	dateCreated	Date created the user account	DATE	N/A	N/A	N/A	Yes	2017-08-25	N/A

Table Name: tblvariant_detail

Related Table: tblmaterial,tblmat_var

Description: This table contains the details of the material variants

Key	Field Name	Description	Data Type	Min	Max	Default	Required	Sample Data	Validation
PK	variantDetailID	ID of the record	INT(11)	N/A	N/A	1	Yes	1	N/A
FK	materialID	ID of material	INT(11)	N/A	N/A	N/A	Yes	1	Must exist in tblmaterials
	variantCounter	Count of variant	INT(11)	N/A	N/A	N/A	Yes	1	N/A
FK	mat_varID	ID of material variant	INT(11)	N/A	N/A	N/A	Yes	Active	Must exist in tblmat_var

	variantDetailStat us	Status of record	VARCHAR(45)	N/A	N/A	N/A	Yes	admin	N/A
--	-------------------------	------------------	-------------	-----	-----	-----	-----	-------	-----

3.4 ARCHITECTURAL DESIGN

3.4.1 INFORMATION SYSTEM ARCHITECTURE

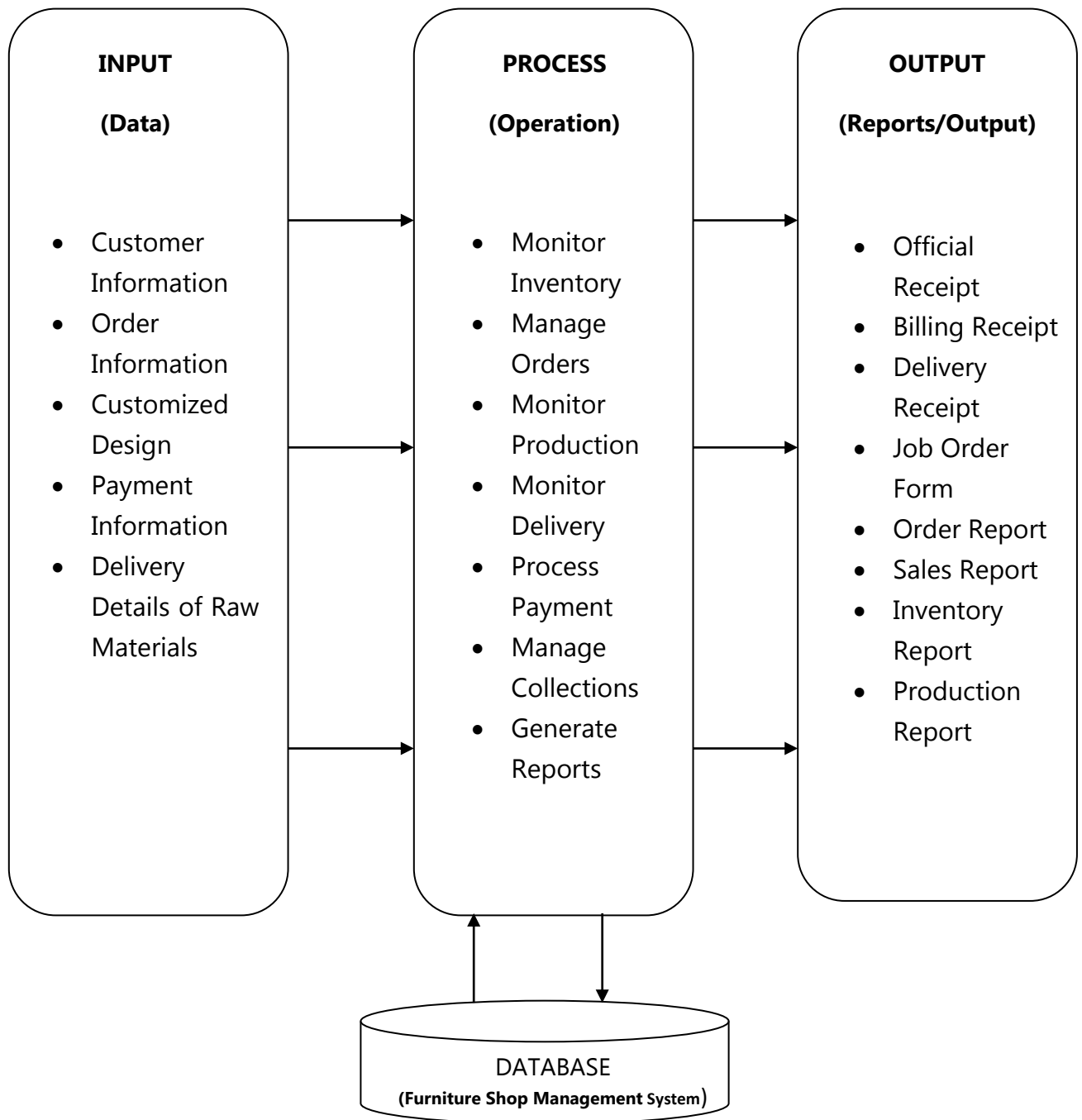


Figure 13. Information System Architecture

3.4.2 WEB ARCHITECTURE

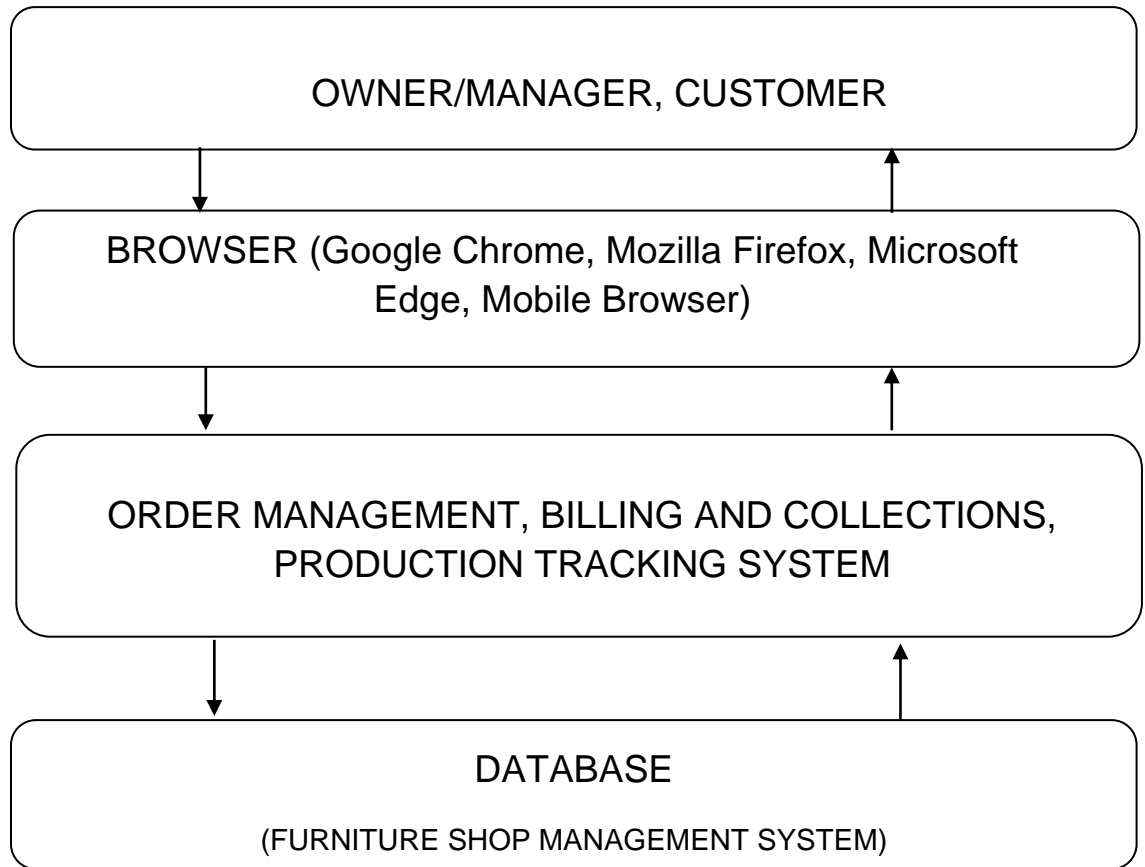


Figure 14. Web Architecture

The system will be accessible to the owner/manager of the Furniture Shop and the customers through the browsers as mentioned, Google Chrome, Mozilla Firefox, Microsoft Edge and mobile browsers. Its processes includes order management, billing and collections and production tracking. All the records gathered through this transactions will be saved in the database.

3.4.3 CLIENT/SERVER ARCHITECTURE

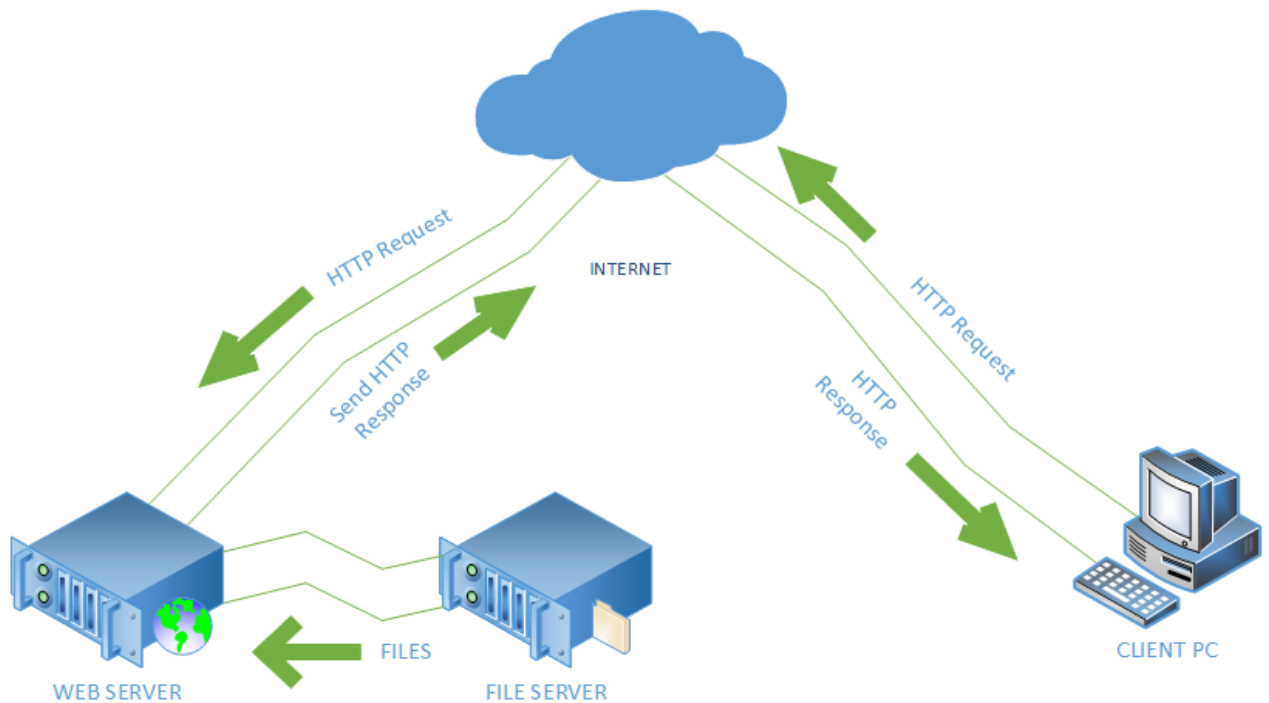


Figure 15. Client/Server Architecture

The File Server will store the files needed for the system. Web Server serves as the middle man wherein it processes requests via HTTP and distribute information on the internet. This information will be displayed as web pages to for the clients to interact.

3.4.4 NETWORK ARCHITECTURE

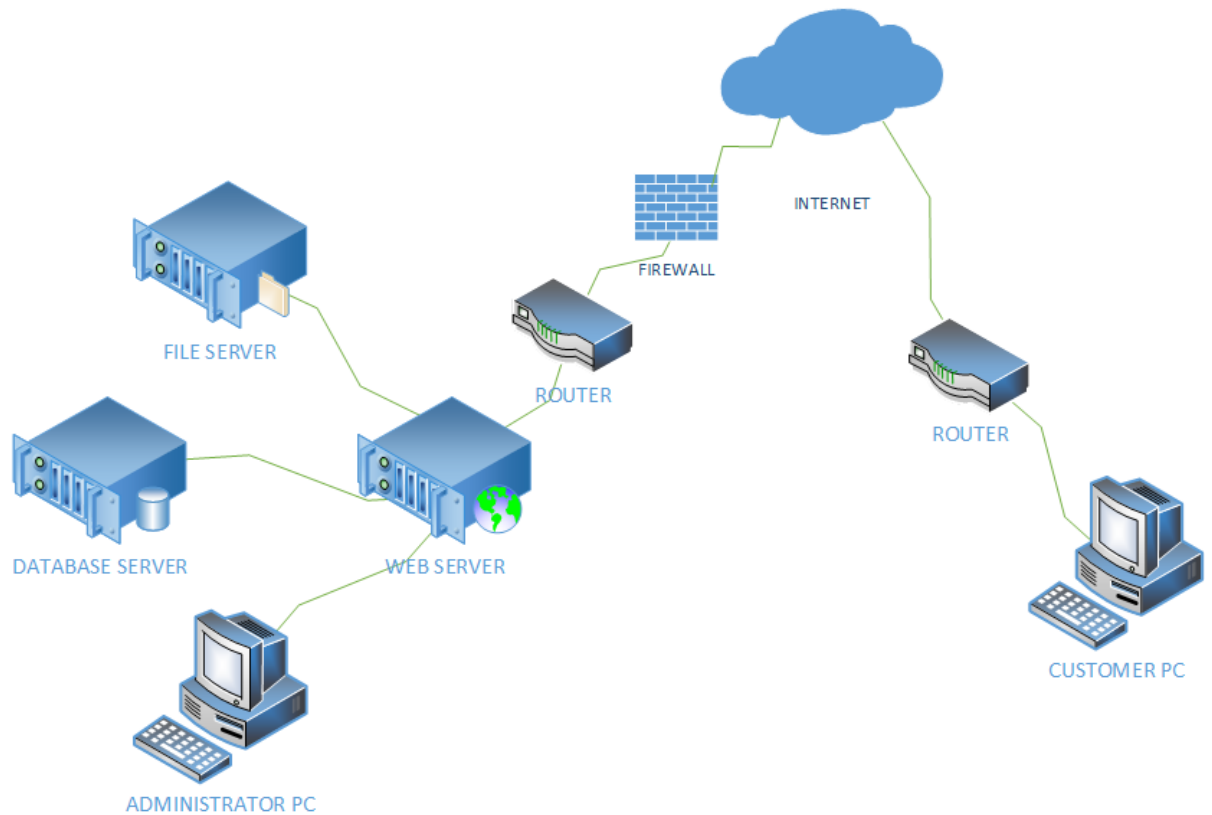


Figure 16. Network Architecture

Having a Web Application requires a quality network performance that will ensure the security of data and information of the project. Smooth transaction process will also be experienced. The diagram shows that the firewall will secure the safety of the server and avoid malwares. The files and database used in this system will come from the file server and database server and send to the web server, which serves the customer the web pages they will interact.

CHAPTER 4

IMPLEMENTATION PLAN

4.1 TESTING PLAN

4.1.1 TEST DESIGN PROCESS

After analyzing the developed system, to be able to detect the defects before deployment and implementation, the proponents choose to conduct four types of testing. It includes the following;

- **Unit Testing**

Under the unit testing, testing of modules and components are done by the programmers themselves. The programmers validated the modules that they made.

- **System Testing**

The system testing, the entire system should be tested as per the requirement and must cover all the parts of the system. A person other than the programmers tested the system to identify other errors and bugs.

- **Security Testing**

The security testing, security is vital when it comes to e-commerce websites because it stores sensitive customer information that's why we require to conduct a security testing.

4.1.2 TEST EXECUTION PROCESS

Execute the test cases, report bugs, and capture information about the tests continuously, taking into account previous test results for each subsequent test. Capture and report information about the test just executed.

4.2. REQUIREMENTS PLAN

4.2.1 HARDWARE REQUIREMENTS

4.2.1.1 SERVER

Hardware Component	Specification
Processor	4 GHz, Intel Core i7
Installed Memory (RAM)	8.00GB or higher
Network	5Mbps
Hard Disk Drive	1TB or higher
Operating System	Windows 7 or higher

4.2.1.2 WORKSTATION

COMPONENT	SPECIFICATION
Operating System	Windows 7 or higher
Web Browser	Google Chrome, Mozilla Firefox, Microsoft Edge, Mobile Browser

4.2.2 SOFTWARE REQUIREMENTS

COMPONENT	SPECIFICATION
Language	PHP 7, HTML 5, CSS 3
Browser	Google Chrome, Mozilla Firefox, Microsoft Edge, Mobile Browser

4.2.2.1 OPERATING SYSTEMS

COMPONENT	SPECIFICATION
Operating System	Windows 7 or higher

4.2.2.2 DBMS

COMPONENT	SPECIFICATION
Database	MySQL

4.2.3 PEOPLEWARE (End Users, Systems Administration, Etc)

ACTOR	RESPONSIBILITIES
Furniture Shop Owner/Manager	Administrator of the Furniture Shop Management System. Head of the Furniture Shop. Manages transactions of the system.
Customer	Orders a furniture, can be from the brochures or sent customize design. Monitors production and delivery of his/her purchased order.

4.3 QUALITY PLAN

Quality plays a big role in considering a project successfully finished. To ensure the system's great performance, accuracy, reliability and usability, here are the plan followed:

- The system undergone series of test in order to ensure it is running smoothly and produces valid and reliable outputs
- People other than the proponents tried using the system to ensure the user friendliness of the system.
- The team conducted daily to weekly meetings in order for everyone to be updated on the project's status.
- The team communicates with each other and tells everyone the updates that they have done so far as well as the concerns and other ideas they have to ensure the project's quality.

4.4 SECURITY PLAN

SECURITY POLICIES	SECURITY FEATURES
<ul style="list-style-type: none">• User Policies	Users allowed to access the system will only be the owner/manager and any user that has confirmed his registration through the email

	confirmation feature.
<ul style="list-style-type: none">• Password Policies	Restriction of access of records for files containing confidential information. The system secures restriction of access from authenticated users only.
<ul style="list-style-type: none">• Internet Policies	The website has a feature of CAPTCHA that prevents bot from registering on the website.

4.5 SYSTEM MAINTENANCE AND SUPPORT PLAN

4.5.1 PREVENTIVE MEASURE PLAN

In order to attain a smooth transaction process of the system and avoid unnecessary errors, the proponents have acquired preventive measure plan that will help the users of the system, these are the following:

- Critical data and vital records should be backed up and sent off-site for storage.
- A necessarily proper training on how to use the system will be conducted for the users.
- The work areas are comfortable and safe.
- Back up files every night, to multiple locations.
- Install anti-virus, anti-malware and a firewall software.
- Do not click suspicious ads or emails.
- Read and apply instruction from the User Manual.

4.5.2 CORRECTIVE MEASURE PLAN

On the assumption of errors and failures, there are corrective measure to be executed upon the circumstances:

- Scan for viruses with the malware software installed on your PC.
- Retrieve files from the synced data from the trusted host server.

- Contact a professional regarding the failure of the hard drive.

4.5.3. BACKUP AND RECOVERY PLAN

To secure the files and maintain the functionality of the system, it must have a backup plan. The proponents think of the following as backup and recovery plan:

- **Virus/Malware**

In case of an attack of a malware, the system has installed anti-virus software that will avoid the virus to spread.

- **File Corruption**

To secure files on the system, the proponents determine to have File Server Backup Software installed. To keep files from the transactions made in the system.

- **Database Backup**

Nightly back up of database is stored in the system files. Furthermore, it is also being back up in the Database Server.

CHAPTER 5

RECOMMENDATION

Upon determining and evaluating every problems encountered by the business, the proponents affirm that the Furniture Shop Management System will be effective in helping the furniture shop from its tedious business process of managing orders and monitoring its production and delivery operation.

The system will be able to lessen the excessive use of papers, and the voluminous brochures. Charts of fabric are organized and stored in the system, wherein the customers can choose from the list of it. It also uses the proper forms needed for every transaction made that will decrease the possible rate of losing a data.

With the Furniture Shop Management System, the shop will have increase in sales because of the reachable way of ordering, through the website. Monitoring of the production and delivery will be easier for both the customer and the management. Queries and Reports will be automatically generated wherein they can track the progress of the business.

APPENDICES

DATA GATHERING INSTRUMENTS

The proponents used the following instruments in gathering data from the client to support the development of the project:

1. UNSTRUCTURED INTERVIEW

- The proponents initially conducted an unstructured interview on the day we found our client. This is the part where we asked them if they are alright with sharing information with us regarding our study and also where they introduced us to the basic in and outs of the business and what problems they encounter at times.

2. OBSERVATION

- We, the proponents observed the shop situation every interview. We observe how they organize their brochures, their forms and how they interact with the client to further identify what problems they encounter and what solution we can provide them.

3. TRANSCRIBING

The proponents were given some documents and forms to study. We transcribe those documents and filter what data or information is needed the most. We got out form fields from these documents and forms.

CLIENT FORMS & REPORTS

Sales Invoice

Sold to: Rosario Hernandez Date: December 12, 2016
Address: _____ Contact No.: 0916 393705

Quantity	Particular Item	Amount
1 sala set	Paraleña	Total amount
	Fabric bold Rami	170,000.00
	Color 19C	- 100,000.00
	1 pc. love seat	
	1 pc. Center Table	<u>70,000.00</u>
	2 pc. Side Table	
	1 set dining set	

Received By: [Signature]
Signature over Printed Name

Sales Invoice Format

SI # 123 - ROSARIO HERNANDEZ

1 set sala set - Manilaña

Fabric: Keld Pani

Color: 19C

1 pc. Love seat

1 pc. Center Table 22 x 42"

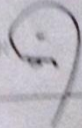
2 pcs. Side Table 18 x 22"

1 set living set w/ 8 chairs

3 pcs Hi-Chair

Job Order Format

QTY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
Trade To Order				
1	Set	sala set manilaña 1 sofa 1 love seat 1 center table 22x42" 2 pcs side table 18x22"		170,000
1	Set	living set with 8 chairs		70,000
3	pcs	Hi-chain		
Total Amount				240,000

Received By: 

Prepared By: _____

DR. No.: 152
Date: 2-4-17

Delivery Receipt

DELIVERY RECEIPT

Name: Arthur Lozano

Address: Rek - Lot 9 the lane III Payara Luna

DR. No.: 151

Date: _____

QTY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
1	Set	Set Sofa Clefete		80,000
		6 for Natural Varnish		1,000
				81,000
				40,000
				41,000
				1,000
				42,000
				43,000
				44,000
				45,000
				46,000
				47,000
				48,000
				49,000
				50,000
				51,000
				52,000
				53,000
				54,000
				55,000
				56,000
				57,000
				58,000
				59,000
				60,000
				61,000
				62,000
				63,000
				64,000
				65,000
				66,000
				67,000
				68,000
				69,000
				70,000
				71,000
				72,000
				73,000
				74,000
				75,000
				76,000
				77,000
				78,000
				79,000
				80,000
				81,000
				82,000
				83,000
				84,000
				85,000
				86,000
				87,000
				88,000
				89,000
				90,000
				91,000
				92,000
				93,000
				94,000
				95,000
				96,000
				97,000
				98,000
				99,000
				100,000

Received By: [Signature]

Prepared By: _____

Total Amount: 82,000

Delivery Receipt

Payment of the following:

PARTICULARS	Amount
Amount Due	82,000
Less: SC/PWD Discount	
TOTAL AMOUNT DUE	82,000

Payment in the form of:

CASH ☐

CHECK No. 1000000000000000

Bank Bank of the Philippines

TOTAL AMOUNT DUE 82,000

OFFICIAL RECEIPT

No. **0001**

Date _____

RECEIVED FROM _____

Address _____

TIN _____ engaged in the Business Style of _____

the sum of _____ (Php 82,000.00)

In full () partial () payment of _____

Issued by: _____

Sr Citizen TIN _____

OSCA/PWD ID No. _____

Signature _____

Authorized Signature _____

"This Document is not Valid for Claiming Input Taxes"

This Official Receipt shall be valid for five(5) years from the date of ATP.

10 BIR 60x2 001-500
BIR ATP 1AU0001393828
Date Issued 8/17/15 valid until 8/17/20
LAKEVIEW PRINTING/TIN 180-222-770-000 NV
Tolentino East, Tagaytay City (046) 4132576
EVELYN G. MALLARI - Prop.

Printers A.N. 54AMP20130000000006
Date Issued 12/23/13

Official Receipt

Furniture Name	Date Sold	Quantity	Unit Cost	Total
Rocking Chair Regular	12/8/2016	2	15,000	30000.00
Manillenia Divan	12/25/2016	1	5,000	5000.00
Manillenia (Sala Set)	12/25/2016	1	100,000	100000.00
Cleopatra (Sala Set)	12/31/2016	1	150,000	150000.00
			Grand Total:	285,000

Sales Report

LIST OF TABLES

Table 1 List of Forms	7
Table 2 List of Reports	12
Table 3 Business Requirement	15
Table 4 Business Policies	16
Table 5 Problems and Requirements	18
Table 6 Feature-Requirements Matrix	22
Table 7 List of Classes	47

LIST OF FIGURES

Figure 1 Waterfall Model with Feedback	5
Figure 2 Sample Sales Invoice Format	8
Figure 3 Sample Job Order Format	9
Figure 4 Sample Delivery Receipt	10
Figure 4.1 Sample Delivery Receipt	10
Figure 5 Sample Official Receipt	11
Figure 6 Sample Sales Report Format	12
Figure 7 Context Diagram	13
Figure 8 Level 1 Data Flow Diagram	14
Figure 9 Fishbone Diagram	17
Figure 10 Top Level Use Case	23
Figure 11 Manage Order Class Diagram	48
Figure 11.1 Monitor Inventory Class Diagram	49
Figure 11.2 Monitor Production Class Diagram	50
Figure 11.3 Process Payment Class Diagram	51
Figure 11.4 Manage Collections Class Diagram	52
Figure 11.5 Monitor Delivery Class Diagram	53
Figure 12 Activity Diagram	58
Figure 13 Information System Architecture	104

Figure 14 Web Architecture	105
Figure 15 Client/Server Architecture	106
Figure 16 Network Architecture	107

AIRA MARIE BARRAMEDA CORONADO

Address: #62 Resolution Street, Batasan Hills Quezon City

Email Address: hongkaira@gmail.com

Contact Number: (+63) 919 5436 694
(+63) 936 6728 549



EDUCATIONAL BACKGROUND

2014 – Present	Bachelor of Science in Information Technology Polytechnic University of the Philippines Sta. Mesa, Manila
2010 – 2014	Batasan Hills National High School Batasan Hills, Quezon City
2004 – 2010	Batasan Hills Elementary School Batasan Hills, Quezon City

CORE QUALIFICATIONS

- Knowledgeable with the following:
 - PHP, Java Script, CSS, HTML, jQuery, Bootstrap
 - Database Administration (MySQL Workbench, MS SQL Server, PHPMyAdmin)
- Basic knowledge with the following:
 - COBOL, C, C#, Java SE, Java EE
 - Adobe Photoshop
 - Adobe Flash
- Proficient in Microsoft Office Tools (MS Word, MS Excel, MS PowerPoint).
- Possesses good communication skills.
- Dedicated and hardworking in accomplishing tasks given.
- Flexible in working with a team.
- Adaptable and eager to learn.

CERTIFICATES AND ACHIEVEMENTS

- Dean's Lister – 2nd Year 1st Semester – **June 2015**
 - Proxor Rating 3 SDE – Java Certification – **September 2016**
 - DOST-SEI JLSS Scholar – **Year 2016**
-

AFFILIATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **5th IT Research Forum**
Polytechnic University of the Philippines
2017
- **iBITS Mid-Year Seminar 2017**
Polytechnic University of the Philippines
2017

CHARACTER REFERENCE

Prof. Rachel A. Nayre

Chairperson, Department of Information Technology
PUP-CCIS
(+63) 921 4084 612
ranayre@pup.edu.ph

Mr. Alex Uy

Information Systems Analyst / ICT Instructor
PUP-CCIS
(+63) 998 5528 261
uyalexb@gmail.com

Ms. Eurrance Mancio

Physical Therapist / Choreographer
(+63) 936 9307 073
barbie_ace25@yahoo.com

ELISSA JOY PANGANIBAN ESTORES

Address: B4 L40 Portobello Homes, GB-1, San Mateo, Rizal

Email Address: elissaestores@gmail.com

Contact Number: 09984711662



EDUCATIONAL BACKGROUND

2014 – Present	Bachelor of Science in Information Technology Polytechnic University of the Philippines Sta. Mesa, Manila
2010 – 2014	San Jose National High School San Jose, Rodriguez, Rizal
2004 – 2010	San Mateo Elementary School Sta. Ana, San Mateo, Rizal

CORE QUALIFICATIONS

- Basic knowledge with the following:
 - C, Java, C#, COBOL
 - Web Design
 - Database (MS Access, MySQL Workbench, PHPMyAdmin)
 - Adobe Photoshop and Adobe Premiere
- Proficient in MS Office Applications.
- Experienced in Technical Documentation.
- Experienced in Quality Testing.
- Possesses good communication and analytical skills.
- Dedicated and hardworking in accomplishing tasks given.
- Flexible in working with a team.
- Adaptable and eager to learn.
- Self-motivated, resourceful and efficient.

ORGANIZATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **5th IT Research Forum**
Polytechnic University of the Philippines
2017
- **iBITS Mid-Year Seminar 2017**
Polytechnic University of the Philippines
2017

CHARACTER REFERENCES

Prof. Rachel A. Nayre

Chairperson, Department of Information Technology
PUP-CCIS
09214084612
ranayre@pup.edu.ph

Aaron Jose Apigo

Senior Software Development Lead
AS White, Net Lima Bldg.
BGC, Taguig City
09178157360

Katherine Kimpo

Group Leader, Risk and Compliance
Concentrix
09499928842

SEAN LESTER AUSTERO EFA

Road 18, Lot 31, Phase III COGEO Village,
Brgy. Bagong Nayon, Antipolo City, Rizal
Mobile No. 0926-7564307(+63)

E-mail Address: efasean06@gmail.com



EDUCATIONAL BACKGROUND

2014 – Present **Bachelor of Science in Information Technology**
Polytechnic University of the Philippines
Sta. Mesa, Manila

2010 – 2014 **Don Antonio de Zuzuarregui Sr. Memorial**
Academy
Brgy. Inarawan, Antipolo City, Rizal

2004 – 2010 **Sto. Niño de Antipolo School**
Road 18, COGEO Village, Antipolo City, Rizal

CORE QUALIFICATIONS

- Good computer skills
- Good communication skills
- Ability to multitask
- Efficiency and Attention to details
- Willing to serve others
- Ability to adapt to different environments and situation

- **Web Development**

Skills and Tools: HTML, CSS, JavaScript, JQuery, PHP, Laravel Framework, and MySQL

- **Desktop Development**

Skills and Tools: C, COBOL, Java, C#, and Microsoft SQL Server

- **Mobile Development**

Skills and Tools: Android Studio

- Basic knowledge about ROM porting and ROM modification.
-

- **Others**
 - Strong knowledge about Hardware and Software configuration and troubleshooting.
 - Proficient in Adobe Photoshop and Microsoft Office.
- Average knowledge about operating systems and networking.

CERTIFICATES AND ACHIEVEMENTS

- iSeminar Event Organizer
- Proxor Rating 3 – SDE-JAVA (Gurango Software Corporation)
- 2015 - 2016 College Scholar (Dean's Lister)
- iBITS iVote Online Election Assistant
- College Academic Contest Participant
- Experiencing ICT in Web Development 1

ORGANIZATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **iSeminar: Laravel and The Future of Digital Forensics**
Bulwagang Balagtas, NALLRC

PUP, Sta. Mesa, Manila

September 16, 2017
 - **Career Talk 2017**
Bulwagang Balagtas, NALLRC
PUP, Sta. Mesa, Manila
September 12, 2017
 - **5th IT Research Forum**
Bulwagang Bonifacio, NALLRC
PUP, Sta. Mesa, Manila
March 6, 2017
 - **4th IT Research Forum**
-

Claro M. Recto Hall
PUP, Sta. Mesa, Manila
March 7, 2016

- **The Present and Future of COBOL**
5th Floor, South Wing, Main Bldg.
PUP, Sta. Mesa, Manila
October 16, 2015

REFERENCES

- Prof. Rachel A. Nayre : Chairperson, DIT
PUP-CCIS
09214084612
ranayre@pup.edu.ph
- Mr. Alex B. Uy : Systems Analyst
Court of Appeals
09985528261

MARIANO S LOZANO III
Block-4, Lot 32. Phase-3D, Tawilis St.
Kaunlaran Village, Caloocan City
09452566031
lozanomarianosapico@gmail.com



EDUCATIONAL BACKGROUND

2014 – Present **Bachelor of Science in Information Technology**
Polytechnic University of the Philippines
Sta. Mesa, Manila

2010 – 2014 **Jose Panganiban National High School**

2004 – 2010 **Jose Panganiban Elementary School**

SUMMARY OF QUALIFICATIONS

- Proficient in HTML, CSS, PHP, JavaScript, jQuery, Ajax, Android Programming and MySQL,
- Knowledgeable in C, C++, C# and JAVA,
- Beginner in PHP Laravel Framework, basic Ruby and Python
- Computer Literate; Microsoft Office (Word, Excel, Powerpoint)

ORGANIZATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **5th IT Research Forum**
Polytechnic University of the Philippines
2017
 - **iBITS Mid-Year Seminar 2017**
Polytechnic University of the Philippines
2017
-

CHARACTER REFERENCES

Prof. Rachel A. Nayre

Chairperson, Department of Information Technology

PUP-CCIS

09214084612

ranayre@pup.edu.ph

MARK JOSEPH B. PUBLICO
Blk. 1, Lt. 6, UCV Village, Sapang Viejo,
Ligid-Tipas, Taguig City
+63 919 7464 382
+63 948 9455 156
mjoseph.publico@gmail.com



EDUCATIONAL BACKGROUND

2014 – Present	Bachelor of Science in Information Technology Polytechnic University of the Philippines Sta. Mesa, Manila
2010 – 2014	Parang High School
2004 – 2010	Saint Mary Elem. School

SUMMARY OF QUALIFICATIONS

- Can communicate using English and Filipino.
- Can work under pressure.
- Willing to learn.
- Familiar with programming languages such as PHP, Java, JavaScript, C++, and C#.
- Familiar in web development tools such as HTML, CSS, and Bootstrap.
- Familiar with MySQL.
- Knowledgeable in Microsoft Office Suites (Word, PowerPoint, Excel, etc.).
- Knowledgeable in Multimedia tools such as Adobe Photoshop and Sony Vegas Pro.

ORGANIZATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **5th IT Research Forum**
Polytechnic University of the Philippines
2017
-

- **iBITS Mid-Year Seminar 2017**
Polytechnic University of the Philippines
2017

CHARACTER REFERENCES

Prof. Rachel A. Nayre

Chairperson, Department of Information Technology

PUP-CCIS

09214084612

ranayre@pup.edu.ph

John Mark C. Silvestre

- Analyst Programmer
- H2 Software

Hasmen Grace V. Cuachin

- Client Service Associate
 - BDO Rizal Montalban
 - +63 977 4574 007
-

CYRENE JANE B. AMARILLA

Blk 203 Lot 28 Tañaquin St., Pembo, Makati City

cyrene.amarilla@yahoo.com

09305161647



EDUCATIONAL BACKGROUND

2014 – Present	Bachelor of Science in Information Technology Polytechnic University of the Philippines Sta. Mesa, Manila
2010 – 2014	Benigno “Ninoy” S. Aquino High School Comembo, Makati City
2004 – 2010	Pembo Elementary School Pembo, Makati City

CORE QUALIFICATIONS

➤ **TECHNICAL SKILLS**

- Programming (PHP, CSS, Javascript, C#, COBOL)
- SQL Scripting
- System Analyst
- System Test
- Project Management
- Business Analyst Skills
- Graphics designing(Adobe Photoshop, Adobe Flash)

➤ **PROFESSIONAL STRENGTH**

- NC II Passer – Computer Hardware Servicing (March 2014)
 - Proxor Rating 3 – SDE-Java (September 2016)
 - Ability to work in a team
 - Leadership Skills
 - Communication Skills
 - Critical thinking
-

ORGANIZATION

- **PUP Institute of Bachelors in Information Technology Studies (IBITS)**
2014 – Present
Member

SEMINARS ATTENDED

- **CCIS@29: The Journey to Success**
(Typography and Adobe Lightroom)
February 10, 2015
- **Block the Hack**
(Association for Computer Intelligence Integration Cyber Security Seminar)
January 29, 2016
- **4th University-Wide IT Research Forum**
(Thesis Project Exhibition)
March 7, 2016
- **5th University-Wide IT Research Forum**
(Thesis Project Exhibition)
March 6, 2017

CHARACTER REFERENCES

Rachel P. Nayre

Department of Information Technology Chairperson, PUP Sta,Mesa
09214084612

Rhoner Rendon

DPWH Employee, Engineering Department
09491145621

Tam Albert Ondevilla

Genesys, Computer Engineer
09059018088
