



College of Science
BICOL UNIVERSITY
Legazpi City



B&B STORE

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BSIT 2B

Table of Contents

I.	Title Page.....	1
II.	Table of Contents.....	2
III.	About the client.....	3
	a. Name of Business/Organization.....	3
	b. Nature of Business.....	3
	c. Address.....	3
	d. Contact Person and Designation.....	3
IV.	Corporate Planning Objects.....	3
	a. Organizational Units.....	3
	b. Organizational Locations.....	4
	c. Business Functions.....	4
	d. Entity Types.....	4
	e. Information Systems.....	5
V.	Solution.....	5
VI.	Entity-Relationship Diagram.....	6
VII.	Relational Data Model.....	7
VIII.	Data Dictionary.....	7
IX.	SQL Codes for Table Creation and Initial Data Entries.....	9
X.	Scanned copies (or pictures) of sample Forms (Input) and Reports (Output)..	13
XI.	References.....	15

III. About the client

a. Name of Business/Organization :

B&B STORE

b. Nature of Business :

It is a business that buys products at wholesale and sells them at retail price. The overall objective of the store is to sell products at a price point higher than what they cost them.

c. Address :

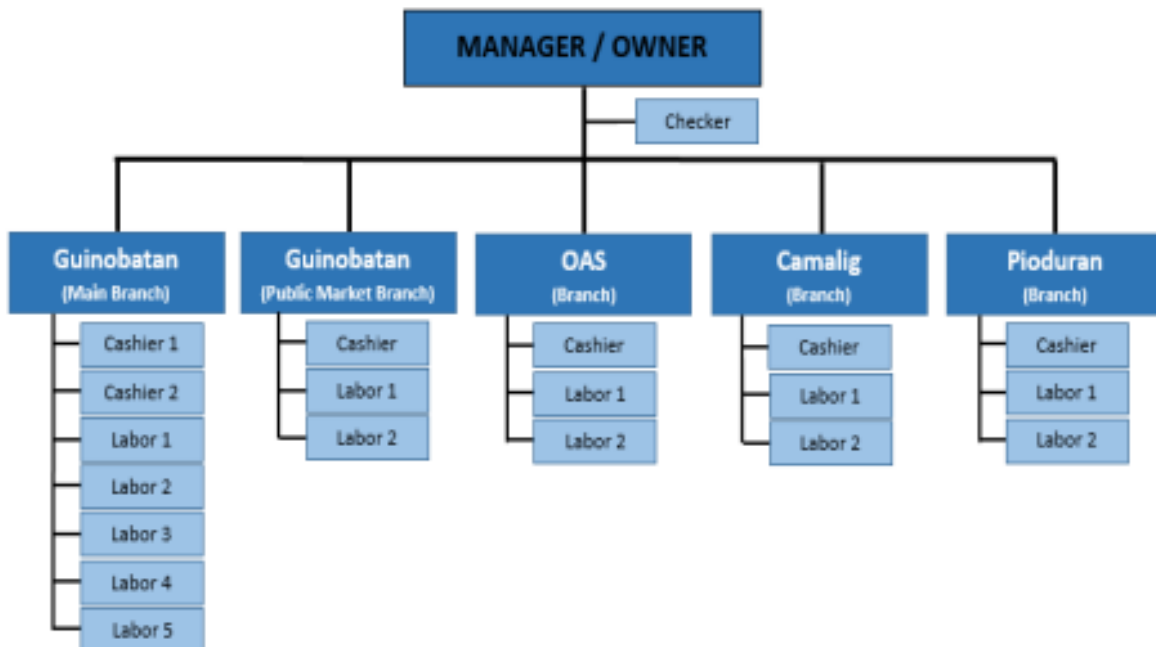
Guinobatan, Albay

d. Contact Person and Designation :

Aileen O. Cid
0927 213 9291
Cashier

IV. Corporate Planning Objects

a. Organizational Units



b. Organizational Locations

The main store and branches are all located in the province of Albay. The main store is located in Guinobatan, where all the stocks and supplies are stored. There is also one branch situated inside the market of Guinobatan. The three existing branches of the store are located in Oas, Camalig, and Pioduran. Overall, the store has four branches.

c. Business Functions

The store is operating for 10 hours a day, from 7 in the morning to 5 in the evening. In every transaction, it is automatically recorded on the computer. The accepted payment method of the store is cash only, so all the profit is put into the cash drawer. The amount earned in the morning is calculated prior to the start of the employee's shift. The profit in the evening is computed and added to the morning income, then totaling all the amount earned in a day. The sales and revenue of the store are recorded every day in a journal. If there's a new delivery, the staff of the store is responsible for inputting the new product / added supply to the 'daily entry' in the computer. Before the closing hour, one person (an employee) is assigned to list all the products that have been decreased from the purchases of the customers.

d. Entity Types

Inventory Data:

Product	Description
Feeds	Inventory is done per bag (Name, Price, Quantity)
Medicines	Inventory is done per pieces or box (Name, Price, Quantity, Dose)
Insecticide	Inventory is done per piece (Name, Price, Quantity)
Herbicides	Inventory is done per piece (Name, Price, Quantity)

When retailed of feeds and cat food & dog food they did the Inventory per kilogram (Per bag means per sacks).

Customer Data:

Each branch has its own computer and database, the customer information is stored in the store's/branch database, And the information is not accessible for other branches.

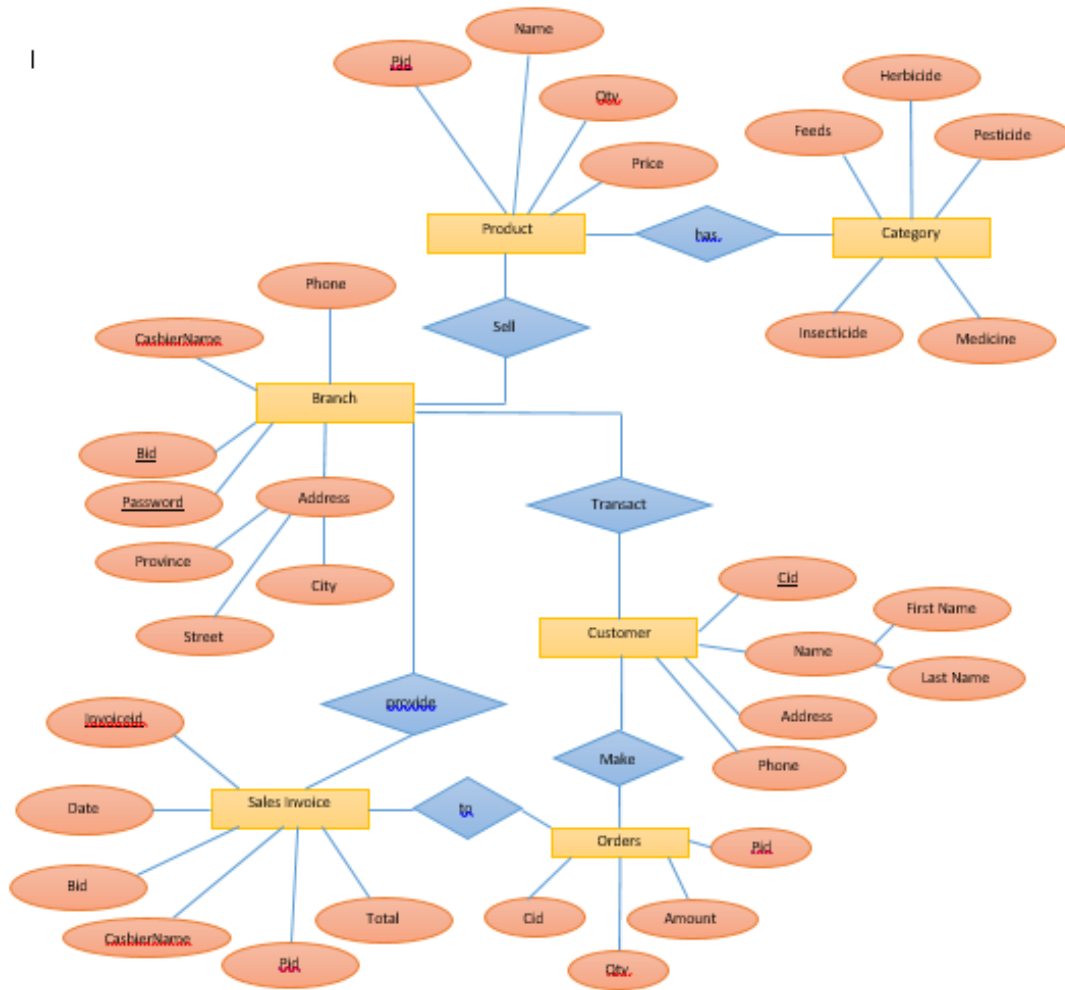
e. Information Systems

The store has integrated various types of equipment, including computers, receipt printers, and scanners, to enhance the efficiency and accuracy of processing transactions. These equipment help in simplifying and streamlining the sales process, allowing for faster and more accurate handling of customer purchases. Additionally, the store provides a receipt to every customer to serve as proof of purchase and ensure transparency in transactions. This receipt contains essential details such as the name of the store, the items purchased, the quantity, and the total amount paid. For some customers who require an official record of their purchase, the store offers an official receipt (OR) that serves as legal proof of the transaction. The OR contains more detailed information such as the name of the buyer, the tax identification number of the store, and other necessary details mandated by law. Overall, the store's use of modern equipment and provision of receipts, including the OR, demonstrates its commitment to providing high-quality customer service and ensuring transparency and accuracy in its transactions.

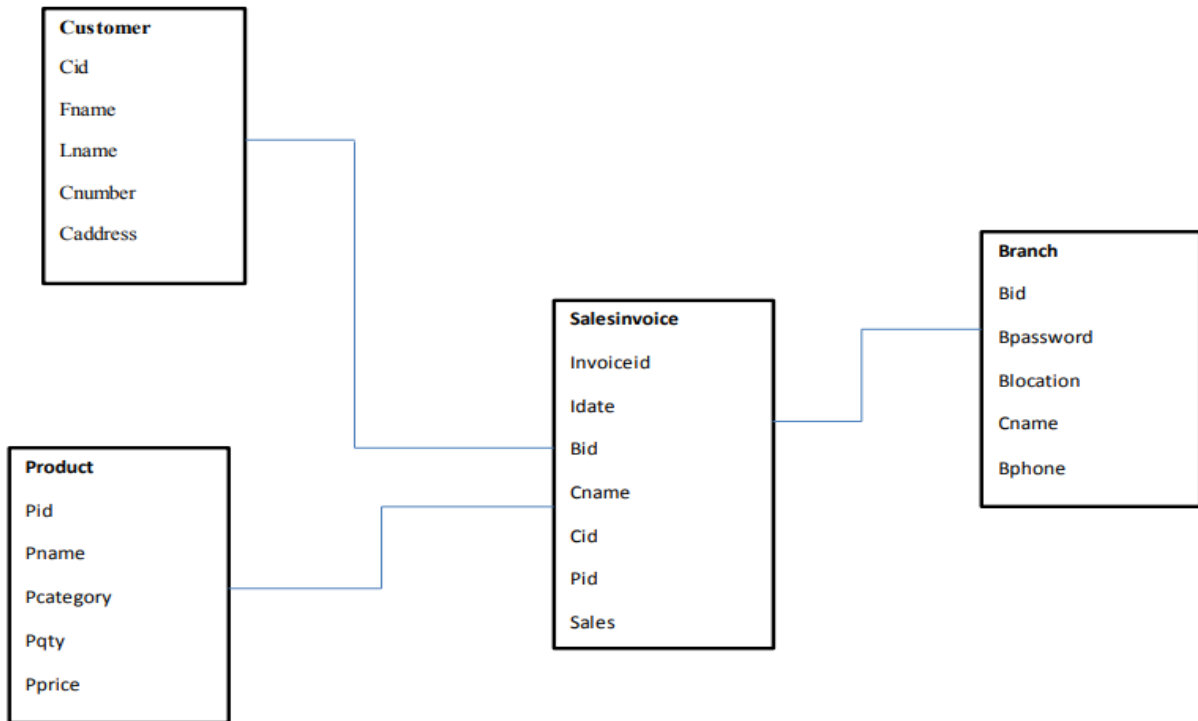
V. Solution

We, the group members, came up with a better and best solution to the problems that the store encountered. We called it "cloud computing," in which the checker can manage and update the prices of the store products through the use of internet access or online. This will help the checker not to go physically anymore to other branches of the store just to manage and update the prices of store products. This will also help the store to grow and earn more money.

VI. Entity-Relationship Diagram



VII. Relational Data Model



VIII. Data Dictionary

Table 1 BRANCH			
Name	Type	Null Value	Description
Bid	int(11)	No	Branch ID
Bpassword	varchar(25)	No	Branch Password
Blocation	varchar(25)	No	Location of branch
Cname	varchar(25)	No	Cashier Name (Full name)
Bphone	varchar(11)	No	Contact of the Branch or person

Table 2 CUSTOMER			
Name	Type	Null Value	Description
Cid	int(11)	No	Customer ID (Auto-generated)
Fname	varchar(25)	No	First Name of Customer
Lname	varchar(25)	No	Last Name of Customer
Cnumber	varchar(25)	No	Phone number of Customer
Caddress	varchar(50)	Yes	Address of Customer

Table 3 PRODUCT			
Name	Type	Null Value	Description
Pid	int(11)	No	ID of the product
Pname	varchar(25)	No	Name of Product
Pcategory	varchar(25)	No	Category of product (ex: Feeds, Medicine)
Pqty	int(11)	No	Quantity of the product
Pprice	int(11)	No	Price of product

Table 4 SALESINVOICE			
Name	Type	Null Value	Description
Invoiceid	int(11)	No	Sales ID or reference (auto generated)
Idate	varchar(25)	No	Date of Purchase
Bid	int(11)	No	Branch ID
Cname	varchar(25)	No	Cashier Name
Cid	int(11)	No	Cashier ID
Pid	int(11)	No	Product ID customer buy
Sales	double	No	Total Purchase

IX. SQL Codes for Table Creation and Initial Data Entries

SQL codes for table creation of branch

```
CREATE TABLE branch (
    Bid INT PRIMARY KEY,
    Bpassword VARCHAR(20),
    Blocation VARCHAR(50),
    Cname VARCHAR(20),
    Bphone VARCHAR(20));
```

```

if (BidTb.getText().isEmpty() || BPassTb.getText().isEmpty() || BLocTb.getText().isEmpty() || BphoneTb.getText().isEmpty())
{
    JOptionPane.showMessageDialog(parentComponent: this, message: "Missing Information");
}
else{
    try{
        Con = DriverManager.getConnection(uri: "jdbc:mysql://localhost:3306/b&b_database", user: "root", password: "");
        PreparedStatement Save = Con.prepareStatement( string: "INSERT INTO branch (Bid, Bpassword, Blocation, Cname, Bphone) VALUES (?, ?, ?, ?, ?)");
        Save.setInt( 1:1, 1: Integer.valueOf(a: BIdTb.getText()));
        Save.setString( 1:2, string: BPassTb.getText());
        Save.setString( 1:3, string: BLocTb.getText());
        Save.setString( 1:4, string: BCashTb.getText());
        Save.setString( 1:5, string: BphoneTb.getText());

        int row; Save.executeUpdate();
    }
    catch (SQLException e) {
        JOptionPane.showMessageDialog(parentComponent: this, message: "Error: " + e.getMessage());
    }
}
}

```

SQL codes for table creation of customer

CREATE TABLE customer (

Cid INT AUTO_INCREMENT PRIMARY KEY,

Fname VARCHAR(20) NOT NULL,

Lname VARCHAR(20) NOT NULL,

Caddress VARCHAR(50),

Cnumber VARCHAR(20) NOT NULL;

```

if (CfName.getText().isEmpty() || Clname.getText().isEmpty() || Cnumber.getText().isEmpty() || Caddress.getText().isEmpty())
{
    JOptionPane.showMessageDialog( parentComponent: this,    message: "Missing Information");
}
else{
    try{
        Con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/btb_database", user: "root", password: "");
        PreparedStatement Save = Con.prepareStatement( strings:"INSERT INTO customer (Cid, Fname, Lname, Cnumber, Caddress) VALUES (?, ?, ?, ?, ?)");
        PreparedStatement Save1 = Con.prepareStatement( strings:"SELECT Cid FROM customer");
        Save.setInt( :1,    :1:Custid);
        Save.setString( :2,    strings:CfName.getText());
        Save.setString( :3,    strings:Clname.getText());
        Save.setString( :4,    strings:Cnumber.getText());
        Save.setString( :5,    strings:Caddress.getText());
        int row; Save.executeUpdate();
        JOptionPane.showMessageDialog( parentComponent: this,    message: "Customer Added");
        Con.close();
    }
    catch(Exception e)
    {
    }
}

```

SQL codes for table creation of product

CREATE TABLE product (

Pid INT PRIMARY KEY,

Pname VARCHAR(20),

Pcategory VARCHAR(20),

Pqty VARCHAR(20),

Pprice VARCHAR(20));

```

private void AddBtnMouseClicked(java.awt.event.MouseEvent evt) {
    if (PidTb.getText().isEmpty() || PnameTb.getText().isEmpty() || PCatCb.getSelectedIndex() == -1 || PQtyTb.getText().isEmpty() || PpriceTb.getText().isEmpty())
    {
        JOptionPane.showMessageDialog( parentComponent: this,    message: "Missing Information");
    }
    else{
        try{
            Con = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/btb_database", user: "root", password: "");
            PreparedStatement Save = Con.prepareStatement( strings:"INSERT INTO product (Pid, Pname, Pcategory, Pqty, Pprice) VALUES (?, ?, ?, ?, ?)");
            Save.setInt( :1,    :1:Integer.valueOf( :1:PidTb.getText()));
            Save.setString( :2,    strings:PnameTb.getText());
            Save.setString( :3,    strings:PCatCb.getSelectedItem().toString());
            Save.setInt( :4,    :1:Integer.valueOf( :1:PQtyTb.getText()));
            Save.setInt( :5,    :1:Integer.valueOf( :1:PpriceTb.getText()));

            int row; Save.executeUpdate();
        }
        catch(Exception e)
        {
        }
    }
}

```

SQL codes for table creation of salesinvoice

CREATE TABLE salesinvoice (

Invoiceid INT AUTO_INCREMENT PRIMARY KEY,

Idate VARCHAR(20)NOT NULL,

Bid INT NOT NULL,
Cname VARCHAR(20)NOT NULL,
Cid INT NOT NULL,
Pid INT NOT NULL,
Sales Double NOT NULL);

```
int salesId = getSalesId();
private void insertSales() {
    try {
        getID();
        DisplayBranch();
        Con = DriverManager.getConnection("jdbc:mysql://localhost:3306/bib_database", "root", "password");
        PreparedStatement Save = Con.prepareStatement("INSERT INTO salesinvoice (Invoiceid, Idate, Bid, Cname, Cid, Pid, Sales) VALUES (?, ?, ?, ?, ?, ?, ?)");
        Save.setInt(1, salesId);
        Save.setString(2, Date_time.getText());
        Save.setInt(3, Integer.parseInt(salesId.getText()));
        Save.setString(4, cashier);
        Save.setInt(5, CustomerId);
        Save.setInt(6, Integer.parseInt(PidTb.getText()));
        Save.setDouble(7, gsdtotal);

        int row = Save.executeUpdate();
        if (row > 0) {
            JOptionPane.showMessageDialog(parentComponent, this, "Sales Added");
        } else {
            JOptionPane.showMessageDialog(parentComponent, this, "Failed to add sales");
        }
        Con.close();
    }
}
```

ALTER TABLE salesinvoice

ADD FOREIGN KEY (Bid) REFERENCES branch(Bid),
ADD FOREIGN KEY (Cid) REFERENCES customer(Cid),
ADD FOREIGN KEY (Pid) REFERENCES product(Pid);

X. Scanned copies of sample Forms and Reports

A. Input Example

Store Management System

LOGIN

B&B

Branch

Branch ID:

Password:

Log In

Logout

2023-05-18 06:40:37

Customer

First Name

Last Name

Phone Number

Address:

Proceed

Receipt

Billing

Category

Product ID

Quantity

Product Name

Price

B&B

Logout

Manage Product

Product ID

Product Name

Category

Quantity

Price

Add

Edit

Delete

Branch Stock

Pid	Pname	Pcategory	Pqty	Pprice
1238	Vantage H...	Feeds	10	3000
3121	Piggy 1st (...)	Feeds	23	500

B. Output Example

- Summary Report

Billing

Category

Feeds

Product ID

3251

Quantity

1

Product Name

B-Meg

Price

1000

Add to Receipt

Branch Stock

Pid	Pname	Pcategory	Pqty	Pprice
3251	B-Meg	Feeds	15	1000
7923	Extreme H...	Feeds	4	3500
8234	Fiesta Hog...	Feeds	5	2700
8345	GTX Finisher	Feeds	14	2800
9431	Crown Duc...	Feeds	23	2800
9941	Lucy	Feeds	10	125
61231	Vantage H...	Feeds	10	3100
84321	RFC Feed	Feeds	4	2300

- Receipt

Customer

2023-05-17 23:26:43

First Name

Coy

Last Name

Wickey

Phone Number

0912345678

Address:

California

Proceed

Receipt

-----B & B Store-----				
Cid	First	Last	Phone #	
1003	Coy	Wickey	0912345678	
Address: California				
InvoiceID: 1002				
-----Invoice-----				
Qty	PID	Product	Price	
1	8345	GTX Finisher	2800	2800

Total: Php2800.0

Print

Clear

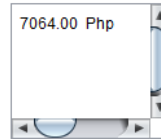
Dashboard

View

Branch 1

Invoiceid	Idate	Bid	Cname	Cid	Pid	Sales
1000	2023-0...	915	Erick Av...	1000	1238	3000.0
1002	2023-0...	915	Erick Av...	1004	12312	1050.0
1003	2023-0...	915	Erick Av...	1005	6123	2764.0
1004	2023-0...	915	Erick Av...	1006	12312	250.0

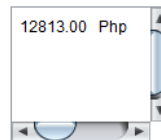
Current Sales



Branch 2

Invoiceid	Idate	Bid	Cname	Cid	Pid	Sales
1001	2023-0...	123142	Mary Ja...	1003	3251	7000.0
1005	2023-0...	123142	Mary Ja...	1007	9324	1538.0
1006	2023-0...	123142	Mary Ja...	1007	1238	3000.0
1007	2023-0...	123142	Mary Ja...	1008	9941	1125.0
1008	2023-0...	123142	Mary Ja...	1008	3212	150.0

Current Sales



XI. References

<https://www.pdfFiller.com/preview/16/74/16074692/large.png>