1.1 Historical Background

Joy's Goodies is a pastry online shop that was first established in 2020 during pandemic. It serves delicious pastries like brownies and thanks to delectable coconut macaroons which have soared in popularity in the past year.

Joy's Goodies have found time and opportunity amid the upheaval caused by COVID-19 to make, sell goods from new home's kitchen and to create sweet new entrepreneurial ventures. Although it is started with no oven at all, now it is making up to 100 to 200 coconut macaroons a day out of oven and delivering them all locally on the same day. As the time goes by, Joy's Goodies is started taking up customized cakes and baking dessert orders through Facebook.

Product lines:

- 1. Brownies
- 2. Macaroons
- 3. Custom Cake
- 4. Bento Cake
- 5. Cookies

1.3 Statement of the Problem

Specifically, the main purpose of this web application is to assist the business Joy's Goodies in tracking and organizing information they obtain whenever the business is operating.

This would generally aim to acquire the following in their chronological sequence:

- List of consumer names
- List of respective product orders
- Dates of transaction

The web application would also be able to:

- Track customer orders to be completed
- Withdraw settled orders
- Keep a history of orders accomplished and order details
- Sort transactions in accordance to when they have been registered in the system

1.4 Scope and Delimitation

The study will focus in tracking and keeping record of purchasing of consumers from Joy's Goodies. The system will only focus on the transactions on the deal of the client, buying from the business itself. Hence, will not cover beyond the sales, purchasing and inventory system.

CHAPTER TWO: SYSTEM ANALYSIS

2.1 System Name and Background

Joy Goodies is an online pastry shop that serves brownies, macaroons, cakes, etc. The production of these quality pastries is done in the owner's house, as well as storage of the necessary ingredients they used.

The process of this small pastry business circulates to sales, and order-tracking: from production of these delectable goods and selling it online, then tracking orders of each customer.

The system's entities that would focus on order tracking includes the name of the customer, order products, transaction date.

2.2 System Analysis Tools

2.2.1 Systems Outline

Account Login and Signup

- 1. Allows to create an administrative account
 - a. First Name
 - b. Last Name
 - c. Email
 - d. Password
- 2. Login an Account
 - a. Email
 - b. Password

Order Display

- 1. Adding of Customer Orders to the List
 - a. Name of the Customer
 - b. Order Product (Brownies, Macaroons, Custom Cake, Bento Cake, Cookies)
 - c. Transaction Date
- 2. Track the completed order in the List
- 3. Cancellation of Order in the List
- 4. Searching Order in the List by the client's name or product name

History of Order

- 1. Display all completed order and pending order.
- 2. The cancel order will not go to the history of Orders

2.2.2 Data Dictionary

Account Registration

riccoun	t itegisti ation		
Field Name	Field Type	Data Length	Description
Email	VARCHAR	Default (255)	Email Address use to
			Login
First Name	VARCHAR	Default (255)	First Name of User
Last Name	VARCHAR	Default (255)	Last Name of User
Password	VARCHAR	Default (255)	Password use to
			Login

Order List

Field Name	Field Type	Data Length	Description
date	VARCHAR	Default (255)	Date of Order
fullname	VARCHAR	Default (255)	Customer Fullname
product	VARCHAR	Default (255)	Product Order

History List

Field Name	Field Type	Data Length	Description
date	VARCHAR	Default (255)	Date of Order
fullname	VARCHAR	Default (255)	Customer Fullname
product	VARCHAR	Default (255)	Product Order

2.1.1 User Requirements

Personnel:

Business Owner

- Head of the Company.
- Directs and handles all responsibilities for the business.

Marketing

- Responsible for promoting, selling and distributing the services or products.
- Responsible for getting clients and customers interested in the services or products. Operation
- Responsible for ensuring and overseeing the processes in all the elements of a business.
- Oversees the performance of the entire setup.

Finance

• Responsible for providing funds for the business.

Existing Computer Specifications:

No. of personal computer (for business use): 1

Hardware Specifications	Computer/Laptop
	4GB RAM
	250GB HDD space or larger
	Operating System: Windows 10
Software Specifications	Web browser:
	Internet Explorer, Google Chrome, Microsoft Edge

Personnel Requirements	Any personnel with knowledge in using personal computer

CHAPTER THREE: GENERAL DESIGN

3.1 General Objectives

The main objectives of the study are to apply system analysis and design concepts and principles to address the company's current issues and to develop an automated adding, listing and inventory system that will facilitate and enhance the work of Joy's Goodies' staff.

3.2 Specific Objectives

These are the specific objectives of the study based on the problems stated:

- 1. With the use of the system, it is possible to improve the working conditions within the production.
- 2. The process becomes more streamlined, efficient, faster production speeds, and betterquality production. This dramatically improves your factory <u>productivity</u>.
- 3. To improve the filling capability of the company for easy retrieving and listing of orders.

3.3 Presentation of Alternatives

3.3.1 Alternative no. 1: Standalone Set-up System

Standalone is a type of system where only one computer or one user will be accessing the program and no other workstations or computers will connect to it in order to access the database.

In this alternative, we advise the business to have at least one computer with the suggested system installed. The benefits of this choice include the following:

- High reliability of data and processes data access does not depend on network solutions.
 The database of the system depends on the proposed system resulting in high availability of data.
- 2. Data security / privacy data resources cannot be accessed on a computer by other computers. Hence, data privacy is maintained.

3. Simplicity / less expensive - standalone system costs less compare to any other computer system like network with LAN or WAN. It is also less complicated to set-up standalone computer system unlike other solutions that requires specific set-up of actual network/s.

In this proposed system, the users (Business Owner, Marketing, Finance and Operations) will have their position as username with their corresponding password. These accounts will determine the access level of information that a particular user can do the commands assign to them.

3.3.1.2.2 Database/Tables (Standalone set-up)

User Accounts

Field Name	Field Type	Size	Decimal
Email	Alphanumeric	45	0
Password	Alphanumeric	45	0

List of Orders

Field Name	Field type	Size	Decimal
Customer's Name	Alphanumeric	45	0
Product	Alphanumeric	45	0
Date	Alphanumeric	45	0

Order History

Field Name	Field type	Size	Decimal
Customer's Name	Alphanumeric	45	0
Product	Alphanumeric	45	0
Date	Alphanumeric	45	0

Add Order

Field Name	Field type	Size	Decimal
Customer's Name	Alphanumeric	45	0
Product	Alphanumeric	45	0
Date	Alphanumeric	45	0

User Registration

Field Name	Field type	Size	Decimal
First Name	Alphanumeric	45	0
Last Name	Alphanumeric	45	0
Email	Alphanumeric	45	0
Password	Alphanumeric	45	0

3.3.1.2.3 Reports (Standalone Set-up)

• Daily Report – report containing all the items on hand and items that are consumed for a day.

3.3.1.2.4 Manual Process (Standalone Set-up)

- Filling out of Official receipts.
- Physical checking of stocks.
- Manual counting of stocks.

3.3.1.3 Requirement Definition (Standalone Set-up)

ITEMS	REQUIRED	EXISTING	NEEDED

Hardware			
Personal Computer Definition			
(Realme Book i3-1115G4	1	1	1
11 th Gen. Intel Core i3-1115G4/			
8GB LPDDR4X RAM/			
256GB SSD/			
Integrated Intel Iris Xe Graphics)			
Software			
Operating System (Windows 10)			
	1	1	1
Back-up			
Toshiba 500GB Portable Hard Drive (USB			
3.0 & 2.0) Canvio Go			
	1	1	1

3.3.1.4 Cost and Benefit Analysis (Standalone Set-up)

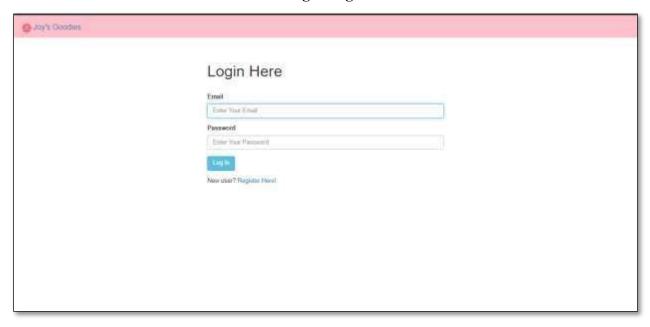
COSTS

ITEMS	COSTS
ONE TIME COST	

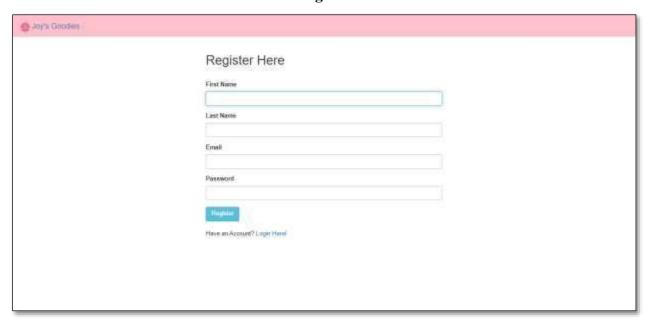
Hardware	
• (1) Personal Computer	PHP 37,990.00
(Realme Book i3-1115G4	
11 th Gen. Intel Core i3-1115G4/	
8GB LPDDR4X RAM/	
256GB SSD/	
Integrated Intel Iris Xe Graphics)	
Software	
• (1) Operating System (Windows 10)	
	Free (Included upon purchasing
Back-Up	the unit)
• (1) Toshiba 500GB Portable Hard Drive	
(USB 3.0 & 2.0) Canvio Go	PHP 2,880.00
TOTAL ONE TIME COST	PHP 40,870.00

3.3.1.5 Graphical User Interface (Standalone Set-up)

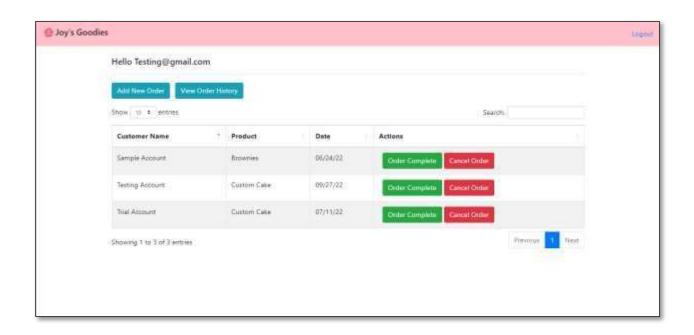
Login Page



User Registration



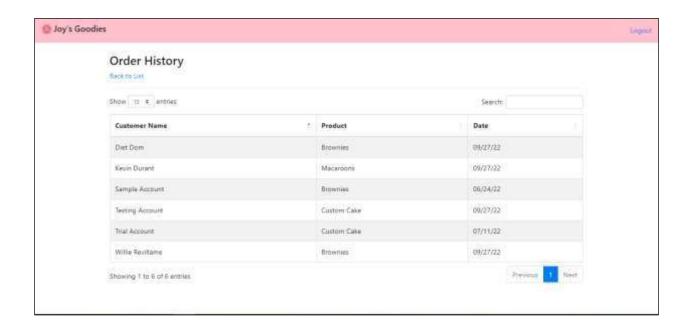
List of Orders



Add Order



Order History



3.1.2 Alternative No. 2: Web Application Set-up (Internet Based Network System)

This alternative is known as Web App or Internet-based Network System. This proposed system offers a connection with the use of internet.

The proposed system can be used by any employees as long as they are connected to the internet and they are logged on. It will be having user and have their distinct positions as their usernames and create a password for security purposes.

For this alternative, here are the advantages of this proposed system:

- 1. Convenience the company can access the system 24 hours of a day or 365 days of a year as long as they are logged on the system. The entire database is available all the time, especially for General Manager and Executive Assistant.
- 2. Data security data is safer against the occurrences of a system failure; data is wellprotected in the online application service.
- 3. Cost-effective the application to be implemented on this proposed system cost lesser than the market software.
- 4. Portability the system can work as long as the user is logged-on or connected to internet.

3.3.1.2.2 Database/Tables (Standalone set-up)

User Accounts

Field Name	Field Type	Size	Decimal
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List of Orders

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Date	Alphanumeric	45	0

Order History

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Product	Alphanumeric	45	0
Date	Alphanumeric	45	0

Add Order

Field Name	Field type	Size	Decimal
Customer's Name	Alphanumeric	45	0
Product	Alphanumeric	45	0
Date	Alphanumeric	45	0

User Registration

Field Name	Field type	Size	Decimal
First Name	Alphanumeric	45	0

Last Name	Alphanumeric	45	0
Email	Alphanumeric	45	0
Password	Alphanumeric	45	0

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Operating System (Windows 10)	1	1	1
	_	1	_
Back-up			
Toshiba 500GB Portable Hard Drive (USB			
3.0 & 2.0) Canvio Go			
	1	1	1

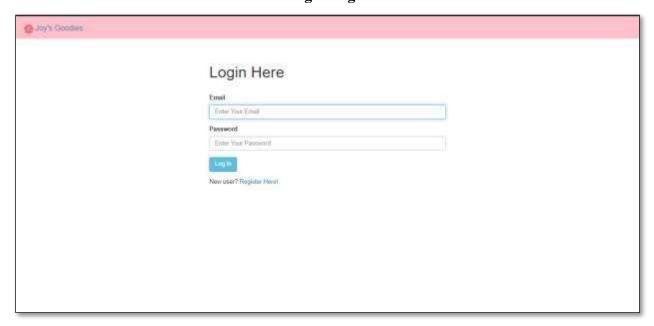
3.3.1.4 Cost and Benefit Analysis (Standalone Set-up)

COSTS

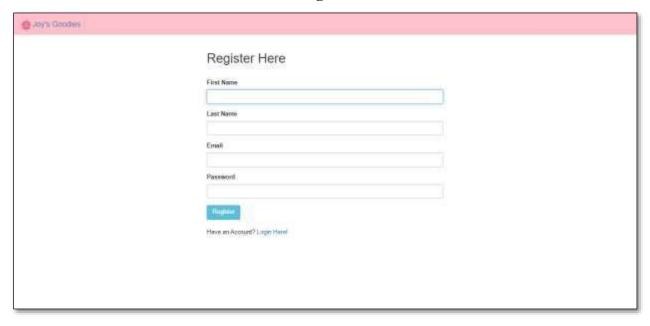
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TOTAL ONE TIME COST	PHP 40,870.00

3.3.1.5 Graphical User Interface (Standalone Set-up)

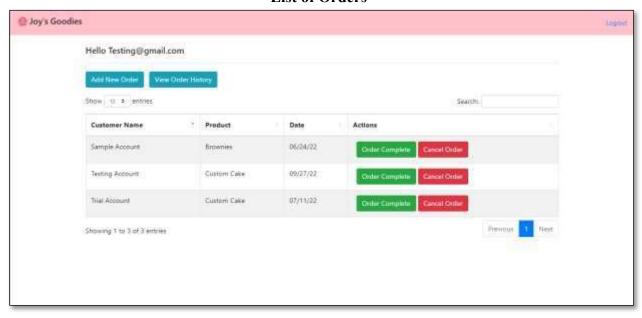
Login Page



User Registration



List of Orders



Add Order



Order History

