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BS Computer Science Department

THE EVOLUTION OF FROZEN FOOD: A DEEP DIVE INTO CONVENIENCE AND QUALITY

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Abstract

Introduction

Technology and e-commerce have changed how businesses connect with consumers. This learning, using Mahusay Frozen Goods as a case, explores how a website can boost sales, convenience, and brand trust by shifting from a physical store to an online platform. It examines how shifting from a physical store to an online platform can support growth and competitiveness.

Problem definition

Many small frozen food businesses struggle to grow due to limited reach and low engagement from relying only on traditional selling, missing the expectations of modern consumers who prefer convenience and online access.

Objectives, scope and delimitation, and beneficiary

This study shows how a traditional frozen food business can benefit from going online through a website that improves product access, boosts sales, and enhances convenience. It also highlights the value of digital tools for business growth and serves as a guide for owners, consumers, developers, students, and future researchers.

Result

The website for Mahusay Frozen Goods enhanced customer engagement by providing 24/7 access, expanding reach, and improving sales. Customers benefited from real-time product availability, easy order tracking, and increased trust. Operational efficiency improved with simplified inventory and customer data management, leading to higher sales, satisfaction, and competitiveness.

Conclusion

This training shows that transitioning from a physical store to an online platform can boost sales, enhance customer engagement, and improve operational efficiency for frozen food businesses. By adopting digital tools like websites and online marketing, businesses can stay competitive and expand their reach in the modern market.

Recommendations

Due to time limits, it's best to first launch a simple website with key features like product listings and ordering, using tools like WordPress or Wix. Enhancements such as marketing tools and inventory updates can follow over time.



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I. INTRODUCTION

The frozen food industry has undergone significant changes since its inception in the early 20th century. Initially introduced as a way to preserve food for longer periods, frozen food has now become an essential part of modern living, catering to the needs of busy consumers. The demand for frozen foods has increased with the rise of working professionals, offering them convenience without compromising quality. This study investigates the balance between convenience and quality, focusing on how frozen food stores meet these dual demands in today's market.

This study explores the evolution of the frozen food industry, focusing on how it has balanced convenience with quality over time. Beginning with Clarence Birdseye's groundbreaking quick-freezing technology in the early 20th century, which revolutionized food preservation by maintaining flavor, texture, and nutritional value, the industry has continually adapted to meet consumer demand. After World War II, as demand for convenience grew, frozen food became more mainstream, though early frozen meals struggled with quality issues. However, advances in freezing methods, packaging, and ingredient sourcing have greatly improved quality over the years. In recent times, the industry has responded to growing consumer demands for healthier, sustainable, and higher-quality options, leading to the rise of organic, plant-based, and low-calorie frozen foods. Despite these advancements, challenges related to nutritional concerns and environmental impact persist.

Background of the study

The frozen food industry has become an essential part of modern consumer lifestyles, offering convenience, longer shelf life, and easy meal preparation. Traditionally, frozen food products were sold through physical stores, relying on face-to-face transactions and limited local reach. However, as society becomes more digitally connected and consumer behavior shifts toward online shopping, many small and medium-sized frozen food businesses face challenges in adapting to these changes. To stay competitive and meet evolving customer expectations, these businesses must embrace digital transformation.

This exercise focuses on how a traditional frozen food store can transition from a purely physical setup to an online platform, specifically through the development of a dedicated website. Using Mahusay Frozen Goods as a case study, the research explores how digital tools—like websites developed using Visual Studio Code, HTML, and MongoDB—can enhance product visibility, increase customer engagement, and ultimately improve sales. A well-structured website provides a user-friendly interface for consumers to browse products, read nutritional information, and make purchases anytime, anywhere.

This not only improves customer convenience but also helps the business expand its market beyond local foot traffic. Furthermore, the website supports digital marketing strategies, such as promotions, customer feedback, and social media integration, which are crucial in attracting and retaining customers in today's digital economy. By upgrading from a traditional store to an online platform, frozen food businesses can meet the expectations of a modern, tech-savvy society. The study highlights that digital transformation is not just a trend, but a necessary step for small food retailers to grow, build customer trust, and remain relevant in a competitive market.



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Company Organization Chart

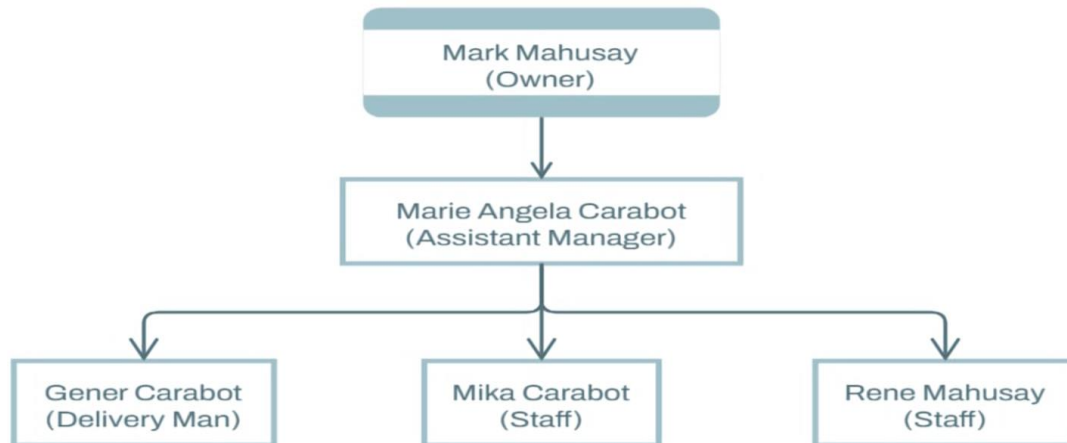


Figure 1. The Company Organization Chart

As seen in Figure 1, at the top of the structure is Mark Mahusay, the owner, who oversees business operations and decision-making. Assisting in management responsibilities is Marie Angela Carabot, the Assistant Manager, who ensures proper inventory handling, labeling, and quality control. Supporting the daily operations are Mika Carabot and Rene Mahusay, who assist in stocking products, store preparation, and maintaining inventory. Additionally, Genre Carabot, the Delivery Man, is responsible for ensuring timely and efficient deliveries to customers. This structure enables Mahusay Frozens to operate smoothly by clearly defining responsibilities, ensuring efficient workflow, and maintaining quality service for its growing customer base.

Statement of the Problem

The frozen food industry has continuously evolved to meet consumer demands for convenience and quality. While frozen food offers a quick and accessible alternative to fresh meals, many consumers still question its nutritional value, taste, and overall quality. As a result, businesses must find ways to improve product quality, enhance marketing strategies, and adopt modern technology to remain competitive.

The learning sought answer to the following questions:

1. What marketing strategies help frozen food businesses attract and retain customers?
2. How do frozen food businesses ensure quality while maintaining convenience?
3. Who are the primary consumers of frozen food, and what are their preferences?
4. Who benefits the most from the use of a promotional website in the frozen food industry?
5. How do digital marketing strategies impact the sales and growth of frozen food businesses?
6. Where can businesses expand their frozen food market to reach more consumers?

The answers to these questions will provide insights into how frozen food businesses can adapt to consumer expectations, leverage technology, and use digital platforms to enhance business growth.

Fishbone Diagram

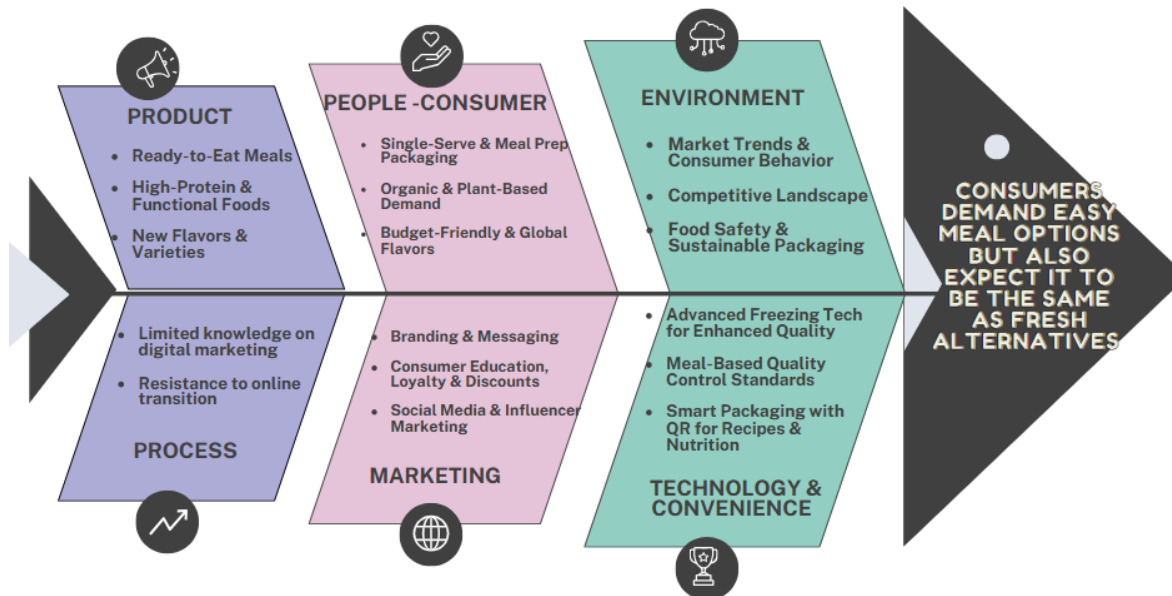


Figure 2.1. The Cause and Effect of Consumer's Demand For Alternative Meals

Figure 2.1 shows a fishbone diagram identifying the root causes of the company's weak online presence. Key issues include poor website design, slow loading, lack of mobile optimization, and weak SEO and social media integration. Low customer engagement, limited content, technical problems, and lack of digital marketing skills also contribute to the company's struggle to attract and retain online customers.

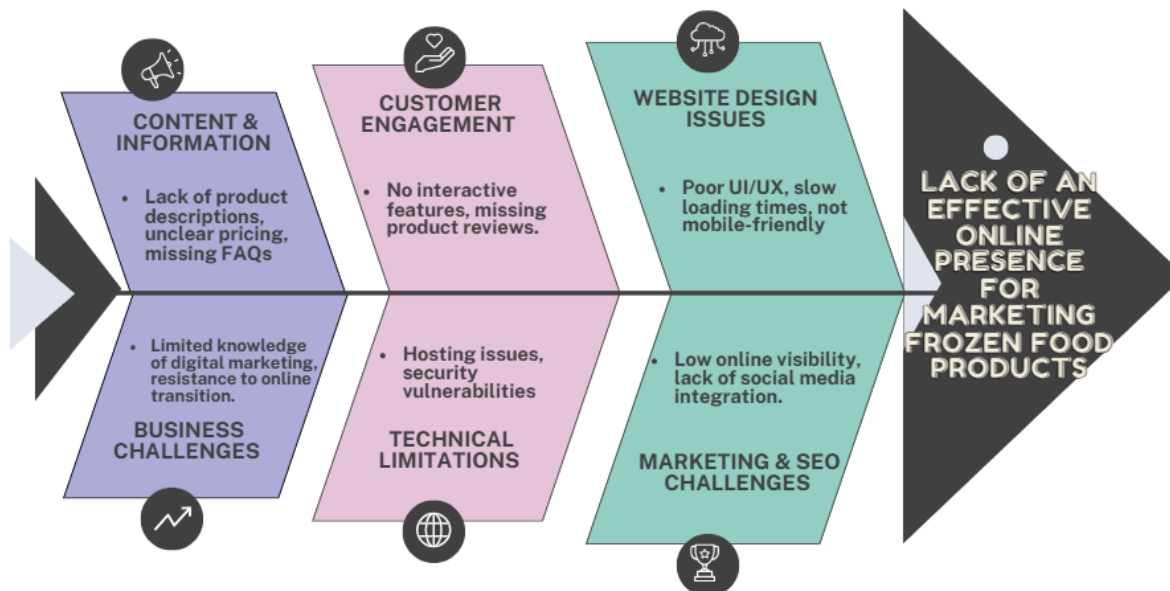


Figure 2.2. The Root Causes of Ineffective Online Presence in Marketing Frozen Food Products

Figure 2.2 presents a fishbone diagram identifying the root causes of the company's poor online presence. Key issues include weak website design (poor UI/UX, slow loading, and lack of mobile responsiveness), low online visibility, and no social media integration. Customer engagement is limited by missing interactive features and reviews. Technical issues like unstable hosting and security risks, along with incomplete content and internal resistance to digital marketing, also hinder online growth.



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Objectives of the Study

General Objectives

We aimed to explore the evolution of frozen food in terms of convenience and quality while developing a promotional website that highlights technological advancements, consumer perceptions, and marketing strategies in the frozen food industry.

Specific Objectives

1. To analyze how frozen food businesses, ensure quality and convenience in their products.
2. To examine consumer preferences, perceptions, and concerns regarding frozen food.
3. To identify technological advancements that have improved frozen food quality and storage.
4. To evaluate the effectiveness of a digital platform in promoting frozen food businesses.
5. To develop a promotional website that showcases frozen food products and business strategies.

Scope and Delimitation

Scope

1. This study focuses on the evolution of frozen food in terms of convenience and quality, as well as the role of a digital platform in marketing frozen food products. Specifically, it covers. The history and advancements in freezing technology and how they have improved frozen food quality.
2. Consumer perceptions and preferences regarding frozen food, including factors influencing their purchasing decisions.
3. Marketing strategies used by frozen food businesses, particularly how a website can enhance customer engagement.
4. The development of a promotional website showcasing frozen food products and business strategies.
5. The effectiveness of an online platform in helping frozen food businesses attract and retain customers

Delimitation

1. The research is conducted only within the selected frozen food store's market (Mahusay Frozen Goods) and does not include nationwide or international businesses.
2. The training examines the history and evolution of frozen food up to the present but does not make predictions about future industry trends.
3. While convenience and quality are discussed, the research does not focus on the detailed nutritional content, environmental impact, or sustainability practices of frozen food products.
4. The study focuses on frozen meals and ready-to-eat foods but does not include frozen ingredients (e.g., frozen vegetables, fruits, or raw meat).
5. While convenience and quality are discussed, the research does not focus on:
 - 5.1. Detailed nutritional content of frozen food products.
 - 5.2. Environmental impact or sustainability practices in the frozen food industry.



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Significance of the Study

This research aims to highlight the evolution and growing importance of frozen food in modern society, emphasizing both the technological advancements in freezing methods and the integration of digital platforms like e-commerce websites. It explores how convenience and quality can be balanced to meet the changing demands of consumers. The significance of this study is outlined below:

For Business Owners and Entrepreneurs

This study provides valuable insights into how frozen food businesses, particularly small and medium-sized enterprises like Mahusay Frozen Goods, can benefit from digital transformation. By showcasing the development and impact of an online platform, the study emphasizes how websites can increase customer reach, improve sales, and enhance brand trust. It serves as a guide for traditional businesses seeking to adapt to modern consumer behaviors through technology and digital marketing.

For Students

Business and IT students will benefit from the interdisciplinary nature of this research, which combines entrepreneurship, marketing, web development, and consumer behavior analysis. It can serve as a reference for those studying digital transformation, food industry trends, and e-commerce solutions. Furthermore, it encourages innovation and critical thinking in applying classroom knowledge to real-world business scenarios.

For the Environment

Although not the main focus, the study indirectly touches on environmental considerations by promoting efficient inventory and storage management, which can reduce food waste in the frozen food industry. Through better monitoring systems and customer engagement, businesses can manage demand more accurately, minimizing expired or unsold products that would otherwise contribute to environmental waste.

For Households and Consumers

This research supports modern households that rely on convenience in meal preparation without compromising quality. It explains how frozen foods have improved in taste, nutrition, and accessibility. The website platform also empowers consumers by offering 24/7 access to products, delivery options, and nutritional transparency—making it easier for working individuals and families to plan their meals efficiently.



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II. RELATED LITERATURE

Nutrient Stability in Food Processing

Karmas and Harris (2012) highlighted that nutrients are highly sensitive to factors such as pH, oxygen, light, and heat. These factors, often in combination, can lead to significant nutrient loss during food processing. Enzymes and trace elements like copper and iron further accelerate these effects. For instance, vitamin A remains stable in an inert atmosphere but degrades rapidly when exposed to oxygen, especially at high temperatures. Oxidation or dehydrogenation can completely destroy vitamin A, and it is particularly sensitive to UV light exposure.

Increased Efficiency in Freezing Technology

Evans and Johnson (2018) asserted that the advancement of freezing technology has played a critical role in transforming the modern food industry. These innovations have influenced both consumer habits and food preservation techniques. Initially, food preservation relied on natural freezing in cold environments, but industrial freezing methods have revolutionized food storage and consumption. The improvement in freezing techniques has made frozen food more accessible, efficient, and able to retain better quality over time.

The Role of Digital Technology in Reducing Food Waste in Frozen Food Companies

Ramanathan, Ramanathan, Adefisan, Da Costa, Cama-Moncunill, and Samriya (2022) emphasized the importance of cold storage in maintaining food freshness within predetermined time frames, making it a cornerstone of food supply chains. However, many cold storage facilities lacked accurate, real-time temperature and humidity monitoring, which negatively impacted food quality. By incorporating digital technologies to monitor and track food quality during storage and transportation, businesses enhanced the efficiency and reliability of cold storage operations, ultimately reducing food waste and improving product consistency.

The Impact of Digital Marketing on Frozen Food Sales During the Covid-19 Pandemic

Hayati and Jaelani (2024) found that the Covid-19 pandemic prompted many Indonesian businesses to employ digital marketing strategies in order to counteract the income drop. According to their research on frozen food purchases in West Java, digital marketing increased customer involvement, enhanced product quality, and led to a significant rise in sales during the pandemic. This illustrates how frozen food products may benefit from increased sales and visibility thanks to digital platforms, which may also help businesses adapt to market challenges.

The Role of Food Processing in Health and Sustainability

Food processing had both beneficial and detrimental effects on health, as discussed by Forde and Decker (2022). Food processing guaranteed food safety, preservation, and accessibility, but it also resulted in nutritional loss, toxin development, and excessive consumption of fat, sugar, and salt. Ultra-processed foods were shown to have a higher energy density and lower nutritional value, which may have led to overconsumption. To offset these drawbacks, new developments in food processing and product formulation offered opportunities to produce more sustainable and healthful food solutions.



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Technological Advancements in Freezing Technology

According to Adams (2017), current freezing technologies including vacuum sealing, flash freezing, and cryogenic freezing have significantly improved food quality and shelf life. The creation of Individual Quick Freezing (IQF) technology in the middle of the 20th century made it possible to freeze individual food pieces, which decreased clumping and increased convenience for consumers and the food industry alike (Brown & Taylor, 2020).

Analyzing Consumer Perception on Quality and Safety of Frozen Foods in Emerging Economies

Hasani, Kokthi, Zoto, Berisha, and Miftari (2022) looked into how consumers in emerging economies felt about frozen meals (FFs). They discovered that although freezing technology successfully maintains food's nutritional value and quality, FFs are frequently viewed as being less good than fresh products. 380 consumers in Kosovo and Albania participated in the poll, and the results showed that while Albanian consumers favored fresh food and were dubious about the safety requirements related to frozen food, Kosovo consumers had a more positive attitude of these products. For the purpose of minimizing food waste and assisting regional farmers, the study suggests that authorities inform customers about the quality of frozen goods.

Quality Evolution of Blast-Frozen Ready-to-Eat Meals

Dottori, Urbani, Sordini, Servili, Selvaggini, Veneziani, Ranucci, Taticchi, and Esposto (2023) conducted a study on the quality of blast-frozen ready-to-eat meals, specifically vegetable soup and tortellini, over a 70-day shelf life at temperatures of -30°C and -18°C. Their research assessed various quality factors such as texture, acidity, peroxide values, carotenoids, phenols, volatile compounds, and sensory evaluation, revealing the impact of freezing temperatures on the quality and longevity of these meals.

Historical Development of Freezing Technology

A historical review of the practice of freezing food was given by Smith (2015), who traced its roots to ancient cultures who preserved food using ice and snow. Commercial freezing methods, however, did not appear until the early 1900s. The quick-freezing method was created in the 1920s by Clarence Birdseye, who is frequently recognized as a pioneer in the frozen food sector. This innovation revolutionized food preservation by not only better preserving food's texture and quality than previous techniques but also opening the door for the mass manufacture and distribution of frozen food items.

Consumer Trends and Market Growth

Wilson (2022) pointed out that consumer preferences for convenience, longer shelf life, and less food waste have caused a recent spike in the demand for frozen food. Advances in food processing and preservation technologies are expected to support the continued growth of the worldwide frozen food market, which was assessed at \$250 billion in 2022 (worldwide Market Insights, 2023). Furthermore, the growing demand for healthier, organic, and plant-based frozen meals is a reflection of broader consumer trends toward more sustainable and health-conscious eating habits.



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III. METHODOLOGY

This education used the Prototyping Method and followed the Web Development Life Cycle (WDLC) to design and build a functional e-commerce website for Mahusay Frozen Goods. Key tools included diagrams and models to guide and structure development.

Block Diagram

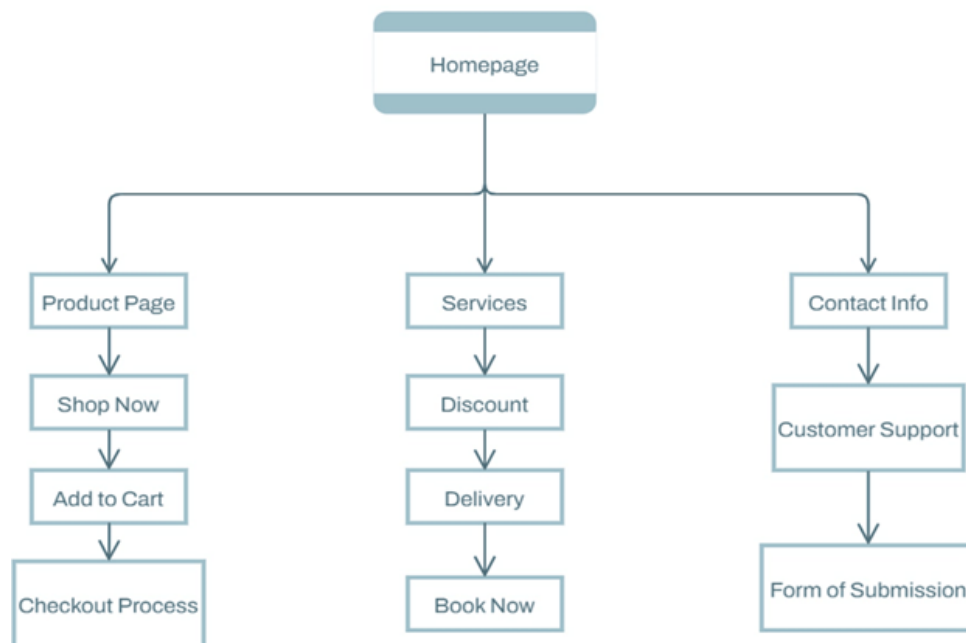


Figure 3. Block Diagram

Figure 3 shows the website's structure, starting at the Homepage and branching into three main sections: Product Page, **Services**, and Contact Info. Users can browse products, add to cart, and checkout via the Product Page. The Services section offers delivery info, discounts, and a booking feature. Contact Info provides customer support and a feedback form. This layout ensures smooth and easy navigation for users.



```
graph TD
    CI[Customer Information] -- "List of Customers" --> CD[Customers Database]
    PI[Product Information] -- "List of Customers" --> CD
    PI -- "List of Orders" --> Admin[Admin]
    Admin -- "Products Update" --> PD[Product Database]
    Admin -- "Prices Info" --> SD[Sales Database]
    Admin -- "Transaction Details" --> TD[Transaction Database]
    Admin -- "Purchase Update" --> CI
    Admin -- "Order Info" --> CI
    Admin -- "Payment Info" --> CP[Checkout Process]
    Admin -- "Info List" --> TD
    Admin -- "Receipt Details" --> T[Transactions]
    CI -- "Order Info" --> Admin
    CP -- "Payment Info" --> Admin
    CP -- "Info List" --> TD
    T -- "Receipt Details" --> CP
```

Figure 4 shows the data flow of the e-commerce system. Customers browse products, place orders, and check out, while admins manage products, pricing, and orders. All actions update separate databases for users, products, sales, and transactions, ensuring a complete and organized record system.



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System Architecture

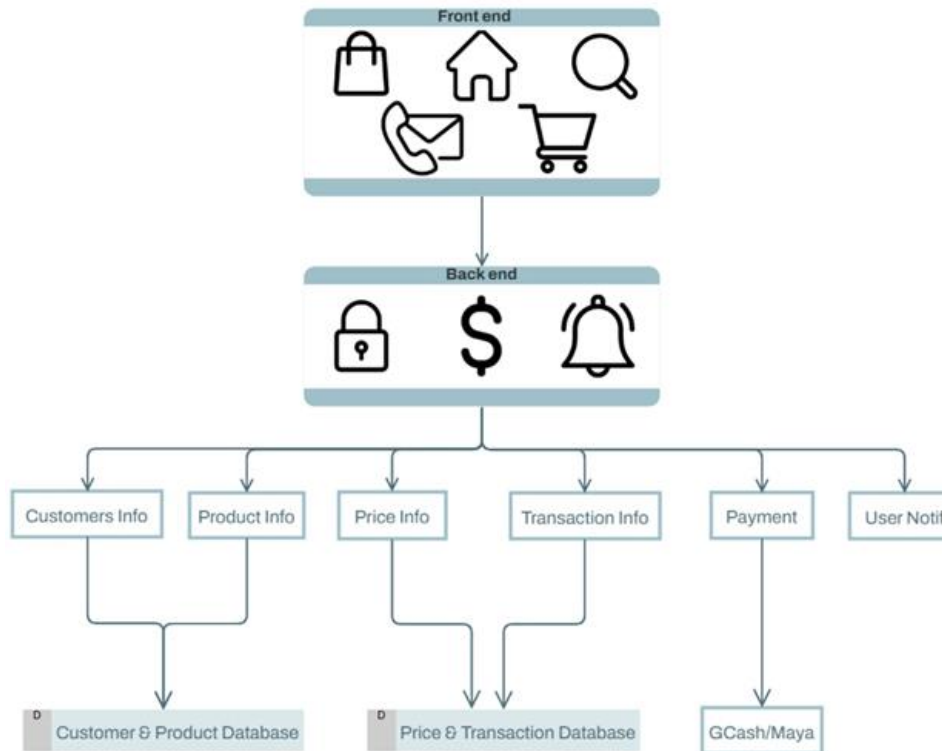


Figure 5. System Architecture

Figure 5 shows the system architecture diagram, illustrating how the front end connects to the back end, which manages secure operations such as customer and product information, pricing, transactions, payments (via GCash/Maya), and user notifications. All data is stored in separate databases for customer/product details and pricing/transaction records.



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System Development Life Cycle Model (PC/Desktop/Android Mobile/Web)

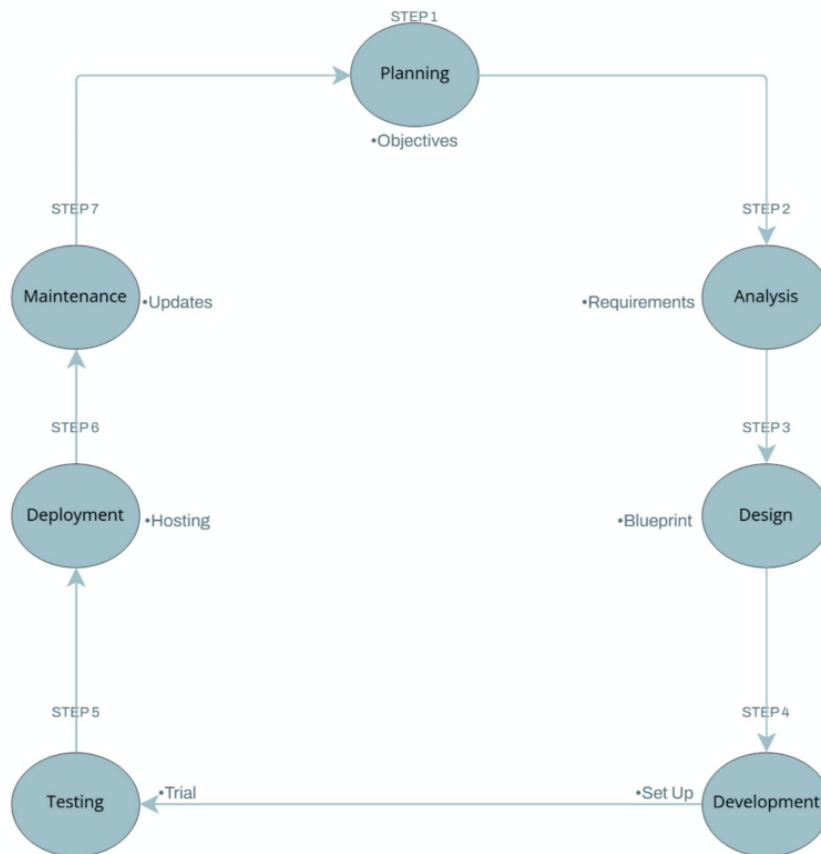


Figure 6. System Development Life Cycle Model

Figure 6 the System Development Life Cycle Model illustrates a well-structured framework that gives an idea in developing a system. It includes Planning, Analysis, Design, Development, Testing, Deployment and Maintenance that each phase plays a vital role in ensuring the system is successfully developed.



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System/Program Flowchart

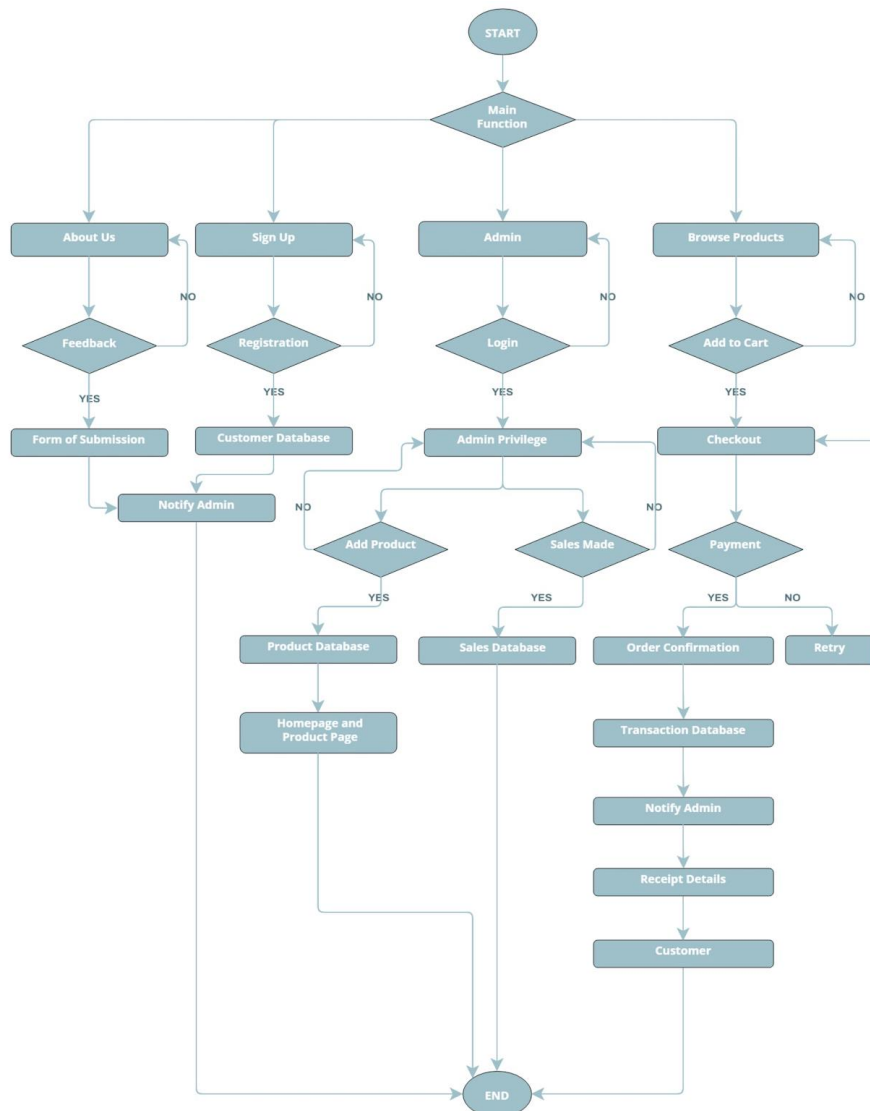


Figure 7. Program Flowchart

Figure 7 shows the Program Flowchart, illustrating how users can sign up, browse products, provide feedback, or proceed to checkout, while administrators log in to manage products and track sales. Successful actions update the relevant databases and notify the admin, supporting both customer and business needs.



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List of Hardware and Software Components

- Visual Studio Code
- MongoDB

Preferred Programming Language

- Javascript
- HTML
- CSS

Database Design (Data Dictionary, Data Base, Schema, ERD)

Data Dictionary

Table 1. Users

Column Name	Data Type	Description
User id	Int(PK)	Identifier
Name	Varchar(255)	Name
Email	Varchar(255)	Email
Password	Varchar(255)	Password
Role	Enum(customer,admin)	Role

Table 2. Products

Column Name	Data Type	Description
Products	Int(PK)	Identifier
Price	Int	Price

Figure 8. Database Design

This database design outlines the structure of two main tables used in the website: Users and Products. Each table lists the columns, their data types, and their purposes. The Users table stores information such as user ID, name, email, password, and role (either customer or admin), which are essential for user authentication and management. The Products table contains product IDs and prices, forming the basis of the online shop's inventory. This data dictionary ensures proper organization, retrieval, and security of customer and product data throughout the website.



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Use-Case Diagram

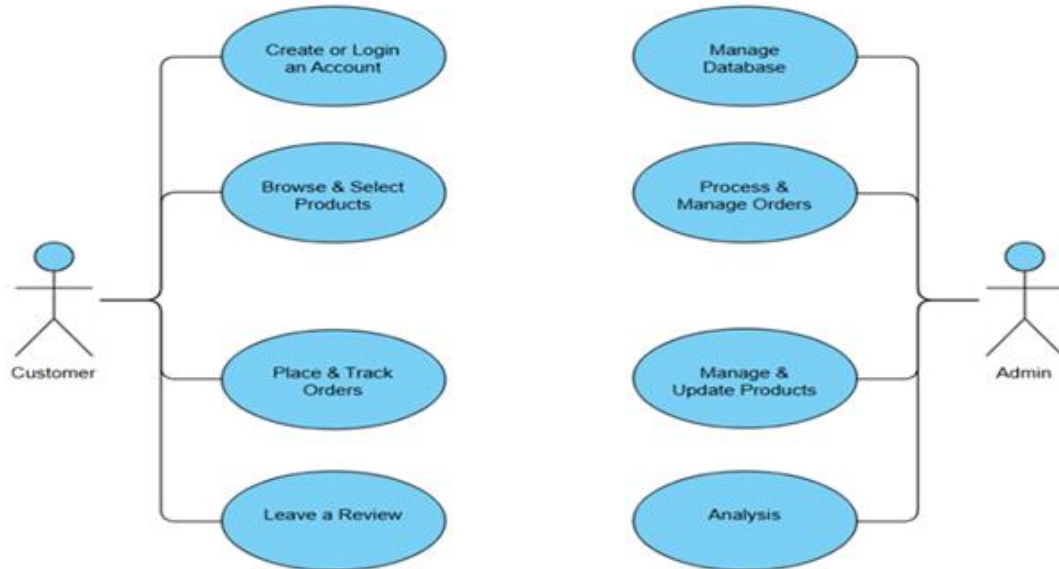


Figure 9. Use-Case Diagram

Figure 9 shows a Use-Case Diagram that visually represents how users (actors) interact with the system. It highlights the system's functional requirements by illustrating the different actions users can perform, such as signing up, browsing products, or managing content. This helps define the roles of customers and admins, and how each engages with specific features of the e-commerce platform.



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Gantt Chart

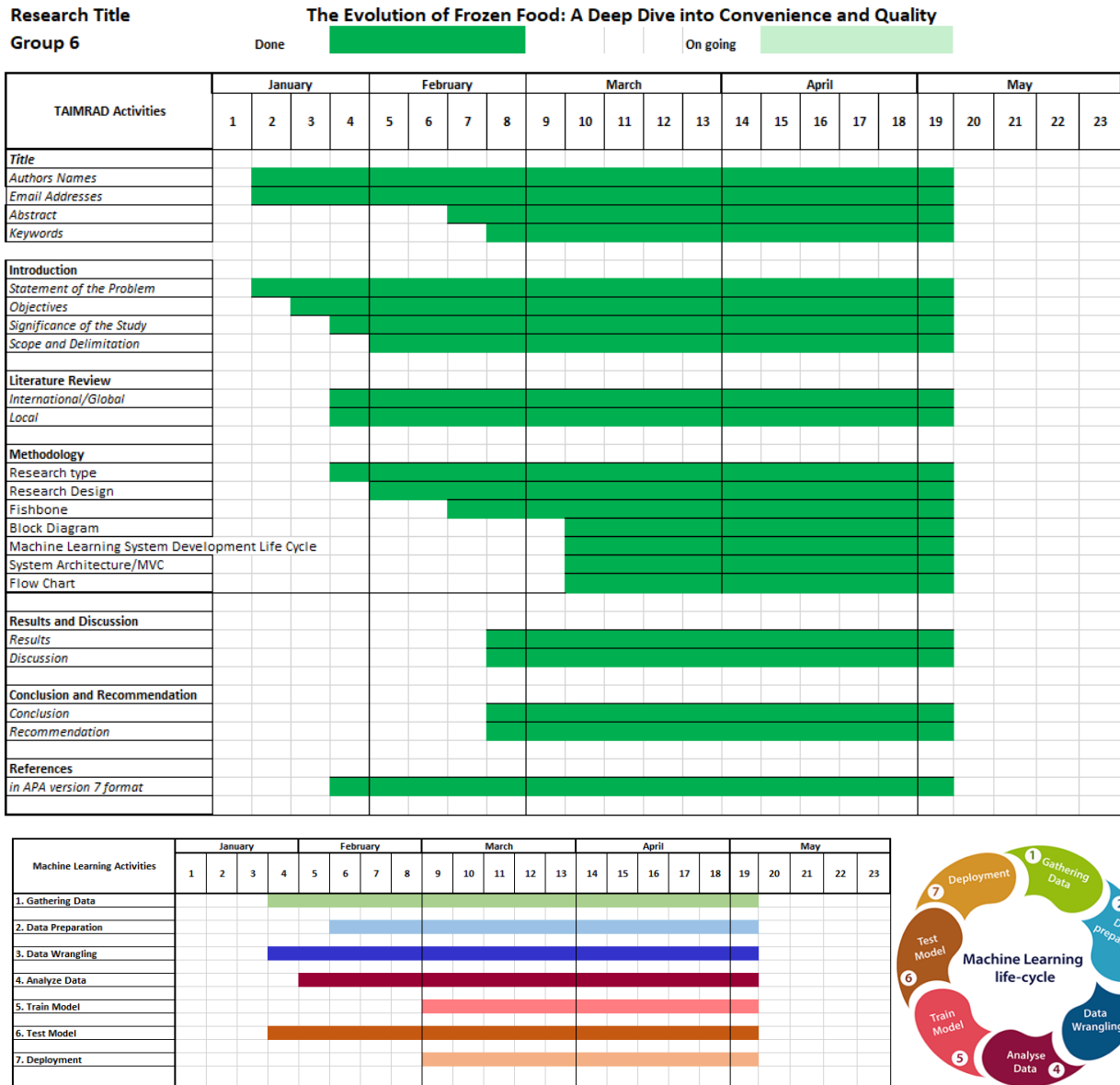


Figure 10. Gantt Chart

This Gantt Chart illustrates the timeline and progress of tasks involved in developing the research project “The Evolution of Frozen Food: A Deep Dive into Convenience and Quality.” It is divided into two parts. The TAIMRAD Activities – These are the major components of the research paper, including the title, introduction, literature review, methodology, results, discussion, and conclusion. Each task is scheduled across a 5-month span from January to May, indicating whether it is completed (green) or ongoing (light green). Specific components such as diagrams, flowcharts, and system architecture are also part of the methodology section.

Machine Learning Activities - This section outlines the stages of machine learning integration in the project. Steps include data gathering, preparation, wrangling, analysis, model training, testing, and deployment. Each task is color-coded and scheduled accordingly, showing systematic development and implementation aligned with the research goals.



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VTOC (Web-based)

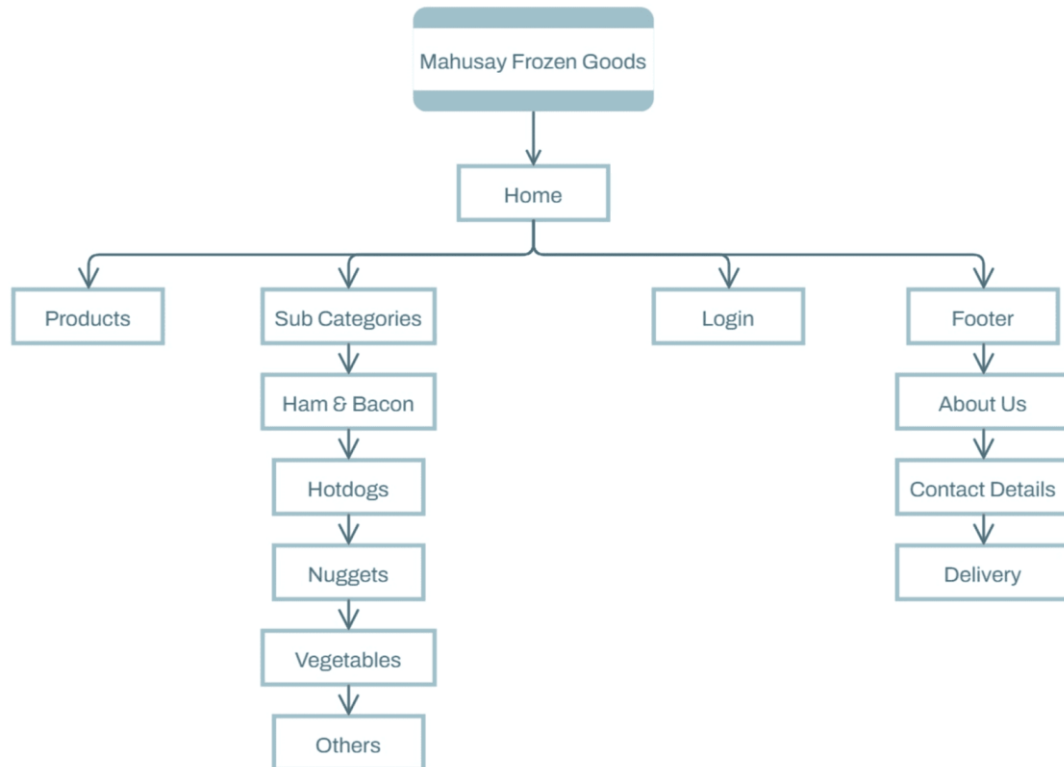


Figure 11. Virtual Table of Contents

Figure 11 presents the virtual table of contents for the homepage layout. It includes main sections such as Products, Subcategories (e.g., Ham & Bacon, Hotdogs, Nuggets, Vegetables, Others), Login, and a Footer that features About Us, Contact Details, and Delivery Information.



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Site Map (Web-Based)

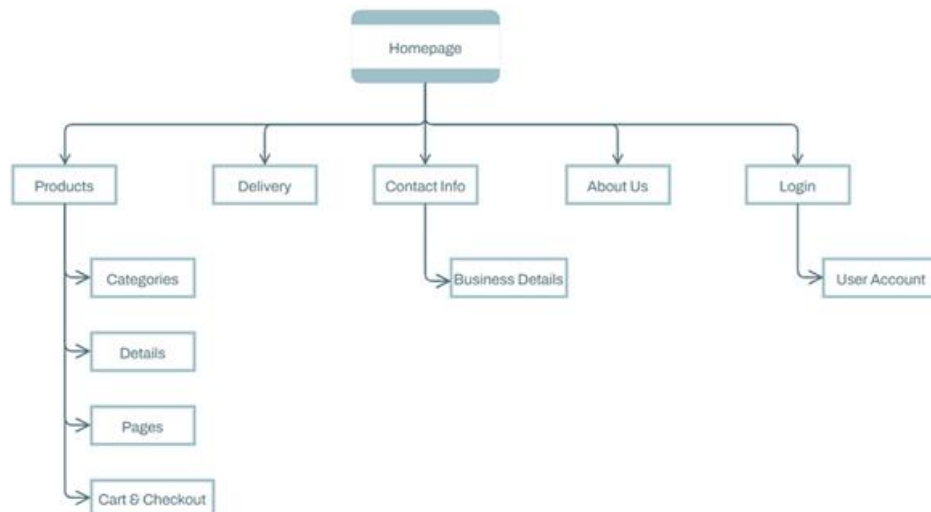


Figure 12. Site Map

Figure 12 illustrates the website's structure starting from the Homepage, branching into five main sections: Products, Delivery, Contact Info, About Us, and Login. The Products section expands into Categories, Product Details, Pages, and Cart & Checkout. Contact Info leads to Business Details, while Login directs users to their Account. This hierarchy reflects the site's organized navigation flow and user interaction paths.



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IV. CONCLUSION AND RECOMMENDATION

Conclusion

The study titled *“The Evolution of Frozen Food: A Deep Dive into Convenience and Quality”* successfully explored how frozen food businesses can adapt to changing consumer behavior through digital transformation. Using Mahusay Frozen Goods as a case study, the research demonstrated that transitioning from a purely physical setup to a web-based platform can significantly improve customer accessibility, marketing effectiveness, and operational efficiency.

The website allows for:

- More effective product presentation through categorized listings
- Real-time user interaction, including orders, contact, and feedback
- Improved back-end processes such as inventory tracking and customer data management

Additionally, the literature review highlighted the importance of freezing technology, nutrient preservation, digital marketing, and evolving consumer trends in shaping the modern frozen food industry. The findings support the idea that digital tools and platforms are not just passing trends, but essential innovations that help local businesses stay competitive in a rapidly evolving market.

Recommendations

Based on the system development process and research findings, the following recommendations are proposed:

1. **Enhance the Website with Real-Time Features**
Integrate real-time inventory updates and order notifications to improve user experience and operational efficiency.
2. **Implement Secure Payment Gateways**
Add digital payment options like GCash or Maya to enable safer and faster transactions.
3. **Provide Educational Content About Frozen Food**
Include blogs or short videos explaining nutritional value, storage safety, and the convenience of frozen meals to address common customer concerns.
4. **Train Staff in Basic Digital Tools**
Provide training for the business team on how to manage the website, update content, and handle digital orders effectively.
5. **Evaluate and Update Regularly**
Conduct periodic system testing and gather user feedback to fix bugs, improve performance, and implement new features.
6. **Promote Sustainability and Health**
Align with current market trends by offering plant-based, low-calorie, or organic frozen products to attract health-conscious customers.



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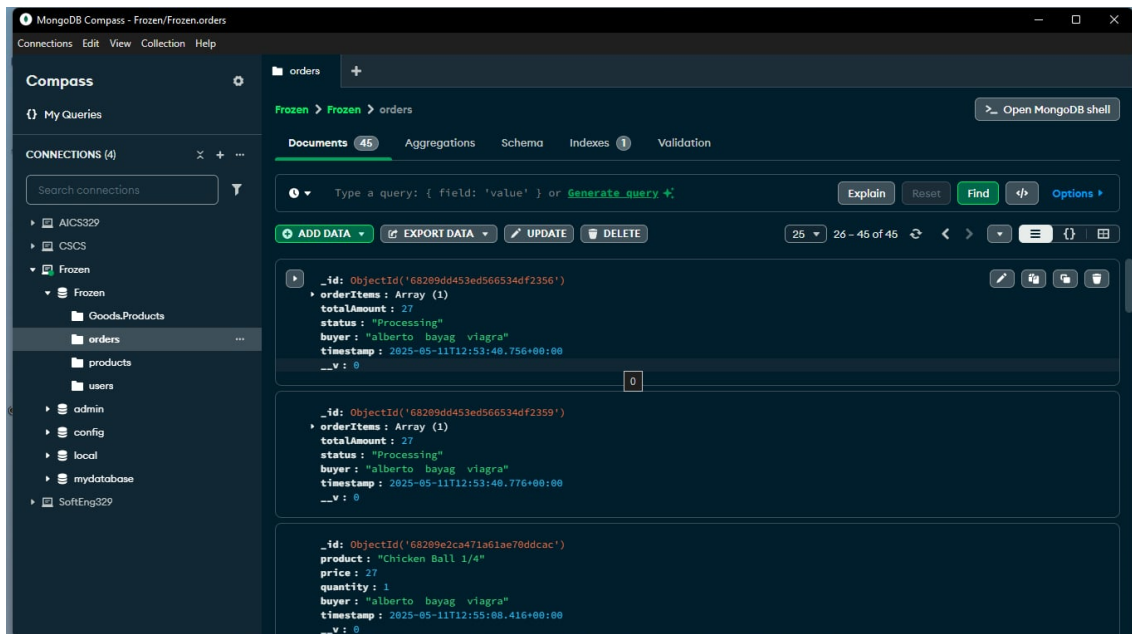
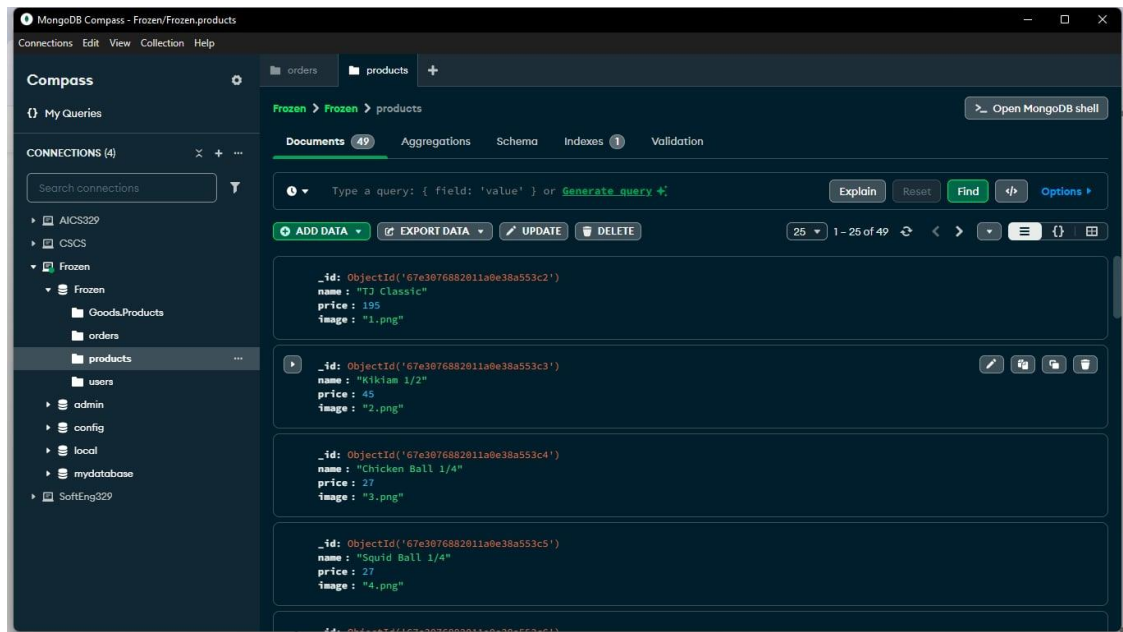


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Sample code and screenshot

Mongoddb





Visual studio code

The screenshot shows the Visual Studio Code editor with the 'Login.html' file open. The code is as follows:

```

1  <html lang="en">
2  <body>
3    <div class="container">
4      <div class="form-container">
5        <div id="registerSection" class="form-section" style="display:none;">
6          <label for="registerFirstName">First Name</label>
7          <input type="text" id="registerFirstName" name="registerFirstName" class="form-control" placeholder="First Name" />
8        </div>
9        <div class="form-group floating-label">
10         <div class="input-group">
11           <input type="text" id="registerMiddleName" name="registerMiddleName" class="form-control" placeholder="Middle Name" />
12           <i class="fas fa-user input-icon"></i>
13           <label for="registerMiddleName">Middle Name (Optional)</label>
14         </div>
15       </div>
16       <div class="form-group floating-label">
17         <div class="input-group">
18           <input type="text" id="registerLastName" name="registerLastName" class="form-control" placeholder="Last Name" />
19           <i class="fas fa-user input-icon"></i>
20           <label for="registerLastName">Last Name</label>
21         </div>
22       </div>
23       <div class="form-group floating-label">
24         <div class="input-group">
25           <input type="email" id="registerEmail" name="registerEmail" class="form-control" placeholder="Email Address" />
26           <i class="fas fa-envelope input-icon"></i>
27           <label for="registerEmail">Email Address</label>
28         </div>
29       </div>
30     </div>
31   </body>
32 </html>

```

The status bar at the bottom indicates the cursor is at line 908, column 27, in a UTF-8 file with 4 spaces, in HTML mode.

The screenshot shows a VS Code editor with a project named 'Website'. The Explorer sidebar on the left lists the following files and folders:

- EXPLORER
 - WEBSITE
 - Profile.html
 - JS scripts
 - JS serverjs (selected)
 - Shipping.html
 - User.html
 - OUTLINE
 - TIMELINE
 - CS-SCRIPT - ACTIVE
 - References

The main editor area shows the code for `server.js`:

```

1  require('dotenv').config();
2  const BASE_API_URL = "https://website-backend-1-w1qd.onrender.com";
3
4
5  const express = require("express");
6  const mongoose = require("mongoose");
7
8  const cors = require("cors");
9  const session = require('express-session');
10 const bcrypt = require("bcryptjs");
11
12
13 const app = express();
14 app.use(express.json());
15 const allowedOrigins = [
16   "https://chaewonigster.github.io",
17   "http://127.0.0.1:5500", // This should be allowed
18   "http://localhost:5500" // You can also try adding this, just in case.
19 ];
20
21 app.use(cors({
22   origin: function(origin, callback) {
23     console.log('Origin:', origin); // Log to check what origin is being sent
24     if (!origin || allowedOrigins.includes(origin)) {
25       callback(null, true);
26     } else {
27       callback(new Error("Not allowed by CORS"));
28     }
29   },
30   credentials: true
31 }));
32
33 app.use(session({
34   secret: "your_secret_key",

```

The bottom status bar shows the following information:

- File: master
- Analyzer: nathanial (29 minutes ago)
- Language: Node.js 12.3.1
- Port: 5500



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