

T.A. Marryshow Community College.

Computer and Electronics Department



Project Report

Student Name	Kemayah Noel
Student ID No.	AL2024015941
Course and No.	Web Design CIT232
Lecturer	Mr. Christopher Mignon
Project Title	Flavorful Website
Date	12/05/2025
Hosted URL	noels.rf.gd
GitHub Repository URL	Flavorful Website Link

Contents

1.	Introduction	1
1.1.	Background	1
1.2.	Problem	1
1.3.	Objective and Scope	1
2.	Technology Stack & Requirement Analysis	1
2.1.	Technology Stack	1
2.2.	Feature List	1
2.3.	Feasibility study	1
2.4.	Budget estimate	1
3.	Design	1
3.1.	Project plan & Timeline	1
3.2.	High level designs	2
4.	Implementation	2
5.	Database Design & CMS Structure	2
6.	Testing and Deployment	2
7.	Project Reflection & Conclusion	2
8.	References	3
9.	Appendix	3

1. Introduction

The Flavorful Website is a web-based ordering and delivery platform developed as a test site for the Flavourful company, which produces and distributes Penacool products throughout Grenada. The system allows customers to register, login, place orders, and track balances while enabling the business to manage orders more efficiently.

1.1. Background

Flavourful currently operates as just a face-to-face distributor without an online ordering system or website. This project was created to demonstrate how the company could expand digitally. The website also served as a learning exercise to apply web development concepts such as hosting, database integration, and full-stack development.

1.2. Problem

The company frequently visits customers who may not be ready to purchase, resulting in wasted fuel, time, and resources. Customers also lack a convenient way to pre-order products. An online ordering platform helps solve these issues by allowing advance orders and better delivery planning.

1.3. Objective and Scope

The primary objective was to design and implement a responsive web application consisting of 13 functional pages: Home, About, Prices, Team, Socials, Contact, Buy Now, Order, Delivery, Balance, Calculator, Login and Register. The website supports user authentication, online ordering, balance tracking and delivering requests.

2. Technology Stack & Requirement Analysis

You need to use a hosting site to make your website available online., GitHub for version control to save your files and the files that show the information that shows on the website. A database is needed to hold the user's information, balance, and what they want delivered. To hold the products, updated users account balance and order items. PHP is needed to hide the connection to the database and to hold the database.

2.1. Technology Stack

Front-End Technologies:

- HTML
- CSS
- JavaScript

Back-End Technologies:

- PHP
- MySQL

Tools and Platforms:

- InfinityFree (Hosting)
- GitHub (Version Control)
- Visual Studio Code (Code Writing & Debugging)
- phpMyAdmin (Import Database)

2.2. Feature List

- User registration and secure login system
- Role-based authentication
- Product browsing and ordering
- Delivery option selection
- Account balance management
- Transaction history tracking
- Built-in calculator
- External calculator
- Contact and support form
- Fully responsive design

2.3 Feasibility Study

The project was technically and economically feasible. All system requirements were met using freely available tools and platforms. The project also provided practical experience with CRUD operations, authentication, and database management.

2.4 Budget Estimate

The estimated budget for the project was USD \$12. However, no financial cost was incurred since GitHub and InfinityFree were used as free development and hosting platforms.

3.1 Project Plan and Timeline

The estimated project duration was three (3) weeks.

- Planning – 2 days
- Design – 3 days
- Development – 5 days
- Testing – 6 days
- Deployment – 2 days

3.2. High level designs

- **Sitemap:** A diagram showing the structure of the 13 pages.
- **Wireframes/Low-Fidelity Mockups:** Sketches of key page layouts.
- **User Interaction Diagrams (Optional):** Use Case or Activity Diagram for key features (e.g., login process, form submission).

4. Implementation

The project follows a modular file structure for maintainability and scalability:

/phpMyAdmin
Schema.sql

/htdocs
index.php
about.php
prices.php
workers.php
socials.php
contact.php
buy-now.php
order.php
delivery.php
calculator.php
register.php
login.php

balance.php
utils.php

Reusable PHP components were used to maintain consistent navigation. CSS media queries and Flexbox were implemented to ensure responsiveness across different devices. JavaScript was used for form validation, dynamic cart updates, and modal interactions.

5. Database Design and CMS Structure

The database consists of the following core tables:

- users
- products
- orders
- order_items
- transactions

PDO prepared statements were used to ensure database security. Passwords are hashed, and authentication checks prevent unauthorized access.

3. Testing and Deployment

- **Testing Summary:** System testing was performed by creating a user account and simulating real orders. Responsiveness was tested using browser developer tools. The website was deployed using InfinityFree and successfully accessed via its public domain.
- **Deployment Process:** Explain the steps taken to host the website. Provide the live URL at the top of the document.

4. Project Reflection & Conclusion

- **Reflection:** This project significantly improved my understanding of full-stack web development. Key learning areas included secure authentication, database integration, form handling, deployment, and real-world problem solving.
- **Conclusion:** The Flavorful Website meets all project objectives by providing a secure and functional online ordering platform. It benefits both customers and the business by improving efficiency,

accessibility, and order accuracy.

5. References

There are no sources in the current document.

InfinityFree, GitHub, Laptop and Visual Studio Code used.

6. Appendix

- Screenshots of the final, hosted website.


Get In Touch

Need to add funds to your account? [Contact us about account recharge methods.](#)

Send us a Message

[Send Message](#)

Our Details

 **Address**
Flavorful HQ, St. George's, Grenada

 **Phone**
+1 (473) 456-2535

Start Your Flavorful Order

Select an option below to proceed with ordering, calculate your needs, or check delivery details.



Place Bulk/Pickup Order

Place an order using your account balance.



Arrange Delivery

See costs and schedule delivery.



Use Calculator

Estimate total costs quickly.



View Account Balance

See your balance, orders, and transactions.

Our Product Prices


Delicious pennacools in various flavors and sizes. All prices are in XCD (Eastern Caribbean Dollars).


Bulk & Wholesale Pricing


**Retail Box (25 units)**
\$35.00
Medium bulk purchase of 25 units for small events.

**Wholesale Case (100 units)**
\$120.00
Bulk case of 100 pennacool units, perfect for retailers.

Individual Packs

**Mango Pennacool (12-pack)**
\$18.00

**Cherry Pennacool (12-pack)**
\$18.00

**Mixed Dozen (12-pack)**
\$19.00
A mixed pack of 12 best-selling single-serve pennacools

Island-wide Delivery Service

Fast Turnaround
Orders placed before 12 PM are typically delivered the same day across the island.

Fixed Delivery Fee
A flat fee of **\$2.00 XCD** applies to all delivery orders, regardless of size.

Coverage Area
We deliver to all major parishes. Please ensure your address is accurate upon ordering.

How to Arrange Delivery

**1. Go to the [Order Page](#)**

**2. Fill your cart with the desired items.**

**3. Check the "Require Delivery" option at checkout.**

**4. Confirm and pay using your account balance.**

Start Your Delivery Order Now

Log In to Your Account

Username or Email Address

Password

LOG IN

Don't have an account? Register Here

Our Journey to Flavorful

Founded on the principle of delivering the freshest, most authentic local flavors, Flavorful has grown from a small operation to a trusted name in St. Andrew's community and beyond.

Our Mission

To delight our customers with the best-tasting, highest-quality frozen treats in Grenada, while supporting local farmers and adhering to stringent sanitation standards. We aim to be the island's favorite pennacool supplier.

Our Vision

To expand our flavorful reach across the Caribbean, becoming a recognized regional brand synonymous with refreshment, quality, and Caribbean authenticity, all while maintaining a sustainable business model.

Core Values

Fresh Ingredients

Source & Taste
Authentic Caribbean Flavors
We are committed to using the best ingredients to capture the true taste of the islands.

Quality Control

Quality Assurance
Fresh, local ingredients with strict sanitation protocols
We pride ourselves on offering a refreshing

Delivery Network

Logistics
Fast and Reliable Delivery
Utilizing our delivery network, we ensure your order reaches you promptly and in perfect condition.

Create Your Account

Username

Email Address

Country

Address

Phone

Password (Min 8 Chars)

☐ I agree to the Terms & Conditions

CREATE ACCOUNT

Already have an account? [Login](#)

Account Overview

Current Available Balance

\$41.00

XCD

User: thetester | ID: 3

Recharge Account

Transaction History

<div><div>Order</div><div>Dec 05, 2025 07:13 AM</div><div>View Order Details (1 Items)</div></div>	Purchase for Pickup - Order #3: 1x Soursop Pennacool (12-pack) @ \$20.00	-20.00
<div><div>Order</div><div>Dec 04, 2025 07:32 AM</div><div>View Order Details (2 Items)</div></div>	Purchase for Delivery - Order #2: 1x Mango Pennacool (12-pack) @ \$18.00; 1x Mixed Dozen (12-pack) @ \$19.00	-39.00
<div><div>Order</div><div>Dec 02, 2025 04:02 PM</div><div>View Order Details (2 Items)</div></div>	Purchase for Pickup - Order #1: 3x Mango Pennacool (12-pack) @ \$18.00; 2x Mixed Dozen (12-pack) @ \$19.00	-92.00

Flavorful

[Home](#)[About](#)[Prices](#)[Team](#)[Socials](#)[Contact](#)[Buy Now](#)

T

Logout

Flavorful: The Best Pennacool in Grenada

Flavorful is dedicated to providing high-quality, refreshing pennacool with exceptional customer service. We offer a variety of flavors and flexible order options to satisfy both individual customers and large retailers.

Place an Order Now

Flavorful Product Showcase

Flavorful

[Home](#)[About](#)[Prices](#)[Team](#)[Socials](#)[Contact](#)[Buy Now](#)

T




Logout

Meet the Flavorful Family




Our dedicated team works hard every day to bring you the best pennacools on the island. Get to know the faces behind the flavor!

Key Personnel




Noel

Noel
Founder & Manager
The visionary behind Flavorful, Noel oversees all operations of flavorful.


Ezekiel

Ezekiel
Logistics & Operations
Ezekiel handles all delivery and supply chain management, ensuring your order arrives on time.


Tom

Tom
Production & Customer Service
Our dedicated employee works daily to maintain the quality and freshness you expect.


Calculator

C

+/-

%

/

7

8

9

*

4

5

6

-

1

2

3

+

0

.

=

[Back to Order Options](#)

Place Your Order

Your Current Balance:

\$41.00 XCD

Select Products

Search products...

Cherry Pennacool (12-pack)

\$18.00

-

0

+

Mango Pennacool (12-pack)

\$18.00

-

0

+

Mixed Dozen (12-pack)

\$19.00

-

0

+

Retail Box (25 units)

\$35.00

-

0

+

Soursop Pennacool (12-pack)

\$20.00

-

0

+

Wholesale Case (100 units)

\$120.00

-

0

+

Your Cart

Your cart is empty.

Require Delivery (\$2.00)

☐

Subtotal:

\$0.00

Delivery Fee:

\$0.00

Total:

\$0.00

Confirm & Place Order

© 2025 Flavorful. | All rights reserved.

11

Exported sql code

```
-- phpMyAdmin SQL Dump
-- version 4.9.0.1
-- https://www.phpmyadmin.net/
--
-- Host: sql300.infinityfree.com
-- Generation Time: Dec 05, 2025 at 12:19 PM
-- Server version: 11.4.7-MariaDB
-- PHP Version: 7.2.22

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET AUTOCOMMIT = 0;
START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `if0_40502206_flavorful`
--

-----
```

```

--
-- Table structure for table `orders`
--

CREATE TABLE `orders` (
  `order_id` int(11) NOT NULL,
  `user_id` int(11) NOT NULL,
  `order_date` timestamp NULL DEFAULT current_timestamp(),
  `total_amount` decimal(10,2) NOT NULL,
  `status` enum('Pending','Processing','Completed','Cancelled') DEFAULT 'Pending',
  `delivery_required` tinyint(1) DEFAULT 0
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `orders`
--

INSERT INTO `orders` (`order_id`, `user_id`, `order_date`, `total_amount`, `status`, `delivery_required`) VALUES
(1, 3, '2025-12-03 00:02:12', '92.00', 'Pending', 0),
(2, 3, '2025-12-04 15:32:25', '39.00', 'Pending', 1),
(3, 3, '2025-12-05 15:13:34', '20.00', 'Pending', 0);

-----

--
-- Table structure for table `order_items`
--

```

```

CREATE TABLE `order_items` (
  `order_item_id` int(11) NOT NULL,
  `order_id` int(11) NOT NULL,
  `product_id` int(11) NOT NULL,
  `quantity` int(11) NOT NULL,
  `price_at_order` decimal(10,2) NOT NULL
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--

-- Dumping data for table `order_items`

--

INSERT INTO `order_items` (`order_item_id`, `order_id`, `product_id`, `quantity`, `price_at_order`) VALUES
(1, 1, 1, 3, '18.00'),
(2, 1, 4, 2, '19.00'),
(3, 2, 1, 1, '18.00'),
(4, 2, 4, 1, '19.00'),
(5, 3, 3, 1, '20.00');

-----

--

-- Table structure for table `products`

--

CREATE TABLE `products` (
  `product_id` int(11) NOT NULL,

```

```

`name` varchar(100) NOT NULL,
`price` decimal(10,2) NOT NULL,
`description` text DEFAULT NULL,
`type` enum('single','bulk') NOT NULL
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `products`
--

INSERT INTO `products` (`product_id`, `name`, `price`, `description`, `type`) VALUES
(1, 'Mango Pennacool (12-pack)', '18.00', 'A convenient pack of 12 single-serve Mango pennacools.', 'single'),
(2, 'Cherry Pennacool (12-pack)', '18.00', 'A convenient pack of 12 single-serve Cherry pennacools.', 'single'),
(3, 'Soursop Pennacool (12-pack)', '20.00', 'A convenient pack of 12 single-serve Soursop pennacools (Premium Flavor).', 'single'),
(4, 'Mixed Dozen (12-pack)', '19.00', 'A mixed pack of 12 best-selling single-serve pennacools.', 'single'),
(5, 'Wholesale Case (100 units)', '120.00', 'Bulk case of 100 pennacool units, perfect for retailers.', 'bulk'),
(6, 'Retail Box (25 units)', '35.00', 'Medium bulk purchase of 25 units for small events.', 'bulk');

-----

--
-- Table structure for table `transactions`
--

CREATE TABLE `transactions` (
  `transaction_id` int(11) NOT NULL,
  `user_id` int(11) NOT NULL,

```

```

`order_id` int(11) DEFAULT NULL,
`transaction_type` enum('Order','Recharge','Refund') NOT NULL,
`amount` decimal(10,2) NOT NULL,
`description` text DEFAULT NULL,
`transaction_date` timestamp NULL DEFAULT current_timestamp()
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--

-- Dumping data for table `transactions`

--

INSERT INTO `transactions` (`transaction_id`, `user_id`, `order_id`, `transaction_type`, `amount`, `description`,
`transaction_date`) VALUES

(1, 3, 1, 'Order', '-92.00', 'Purchase for Pickup - Order #1: 3x Mango Pennacool (12-pack) @ $18.00; 2x Mixed
Dozen (12-pack) @ $19.00', '2025-12-03 00:02:12'),

(2, 3, 2, 'Order', '-39.00', 'Purchase for Delivery - Order #2: 1x Mango Pennacool (12-pack) @ $18.00; 1x Mixed
Dozen (12-pack) @ $19.00', '2025-12-04 15:32:25'),

(3, 3, 3, 'Order', '-20.00', 'Purchase for Pickup - Order #3: 1x Soursop Pennacool (12-pack) @ $20.00', '2025-12-05
15:13:34');

-----

--

-- Table structure for table `users`

--

CREATE TABLE `users` (
`user_id` int(11) NOT NULL,
`username` varchar(50) NOT NULL,

```

```

`email` varchar(100) NOT NULL,
`password_hash` varchar(255) NOT NULL,
`country` varchar(50) DEFAULT NULL,
`address` text DEFAULT NULL,
`phone` varchar(20) DEFAULT NULL,
`balance` decimal(10,2) DEFAULT 0.00,
`role` enum('user','admin') DEFAULT 'user',
`created_at` timestamp NULL DEFAULT current_timestamp()
) ENGINE=MyISAM DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--

-- Dumping data for table `users`

--

INSERT INTO `users` (`user_id`, `username`, `email`, `password_hash`, `country`, `address`, `phone`, `balance`,
`role`, `created_at`) VALUES
(3, 'thetester', 'bo@gmail.com', '$2y$10$tbJYR2E.5bSKULPxNAnpzeZ4KwQ6H2/Z4VTG/opeQIQ5ou.G83vpW',
'Grenada', 'St. David', '473404-5559', '41.00', 'user', '2025-12-02 23:42:33');

--

-- Indexes for dumped tables

--

-- Indexes for table `orders`

--

ALTER TABLE `orders`

ADD PRIMARY KEY (`order_id`),

```

```

ADD KEY `user_id` (`user_id`);

--

-- Indexes for table `order_items`

--

ALTER TABLE `order_items`

  ADD PRIMARY KEY (`order_item_id`),

  ADD KEY `order_id` (`order_id`),

  ADD KEY `product_id` (`product_id`);

--

-- Indexes for table `products`

--

ALTER TABLE `products`

  ADD PRIMARY KEY (`product_id`);

--

-- Indexes for table `transactions`

--

ALTER TABLE `transactions`

  ADD PRIMARY KEY (`transaction_id`),

  ADD KEY `user_id` (`user_id`),

  ADD KEY `order_id` (`order_id`);

--

-- Indexes for table `users`

--

ALTER TABLE `users`

```

```

ADD PRIMARY KEY (`user_id`),
ADD UNIQUE KEY `username` (`username`),
ADD UNIQUE KEY `email` (`email`);

--

-- AUTO_INCREMENT for dumped tables

--

--

-- AUTO_INCREMENT for table `orders`

--

ALTER TABLE `orders`

  MODIFY `order_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;

--

-- AUTO_INCREMENT for table `order_items`

--

ALTER TABLE `order_items`

  MODIFY `order_item_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=6;

--

-- AUTO_INCREMENT for table `products`

--

ALTER TABLE `products`

  MODIFY `product_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;

--

-- AUTO_INCREMENT for table `transactions`

```

--

ALTER TABLE `transactions`

MODIFY `transaction_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;

--

-- AUTO_INCREMENT for table `users`

--

ALTER TABLE `users`

MODIFY `user_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;

COMMIT;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;

/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;

/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;

Server: sql300.infinityfree.com » Database: if0_40502206_flavorful » Table: transactions

[Browse](#) [Structure](#) [SQL](#) [Search](#) [Insert](#) [Export](#) [Import](#) [Operations](#)

Showing rows 0 - 2 (3 total, Query took 0.0006 seconds.)

`SELECT * FROM `transactions``

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	transaction_id	user_id	order_id	transaction_type	amount	description	transaction_date
<input type="checkbox"/> Edit Copy Delete	1	3	1	Order	-92.00	Purchase for Pickup - Order #1: 3x Mango Pennacool...	2025-12-02 16:02:12
<input type="checkbox"/> Edit Copy Delete	2	3	2	Order	-39.00	Purchase for Delivery - Order #2: 1x Mango Pennaco...	2025-12-04 07:32:25
<input type="checkbox"/> Edit Copy Delete	3	3	3	Order	-20.00	Purchase for Pickup - Order #3: 1x Soursop Pennaco...	2025-12-05 07:13:34

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console

Server: sql300.infinityfree.com » Database: if0_40502206_flavorful » Table: order_items

[Browse](#) [Structure](#) [SQL](#) [Search](#) [Insert](#) [Export](#) [Import](#) [Operations](#)

Showing rows 0 - 4 (5 total, Query took 0.0006 seconds.)

`SELECT * FROM `order_items``

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	order_item_id	order_id	product_id	quantity	price_at_order
<input type="checkbox"/> Edit Copy Delete	1	1	1	3	18.00
<input type="checkbox"/> Edit Copy Delete	2	1	4	2	19.00
<input type="checkbox"/> Edit Copy Delete	3	2	1	1	18.00
<input type="checkbox"/> Edit Copy Delete	4	2	4	1	19.00
<input type="checkbox"/> Edit Copy Delete	5	3	3	1	20.00

☐ Check all | With selected: [Edit](#) [Copy](#) [Delete](#) [Export](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

[Print](#) [Copy to clipboard](#) [Export](#) [Display chart](#) [Create view](#)

Console

php-myadmin.net/sql.php?db=if0_40502206_flavorful&table=orders&pos=0

Server: sql300.infinityfree.com » Database: if0_40502206_flavorful » Table: orders

Browse Structure SQL Search Insert Export Import Operations

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds.)

SELECT * FROM `orders`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	order_id	user_id	order_date	total_amount	status	delivery_required
<input type="checkbox"/> Edit Copy Delete	1	3	2025-12-02 16:02:12	92.00	Pending	0
<input type="checkbox"/> Edit Copy Delete	2	3	2025-12-04 07:32:25	39.00	Pending	1
<input type="checkbox"/> Edit Copy Delete	3	3	2025-12-05 07:13:34	20.00	Pending	0

☐ Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Console