

1. System Overview – brief description and purpose of the system

The system is a **CodeIgniter 4 (CI4) Inventory Product Management** web application. Its main purpose is to let users **log in** and manage product records using **CRUD**. Products can be viewed in a **table layout** (with pagination + search) and a **card layout** (with barcode display).

2. System Architecture – explanation of the CI4 structure (controllers, models, views, modules)

Controllers (app/Controllers)

AuthController

- `loginView()` – loads login page
- `login()` – checks username/password and creates session
- `logout()` – destroys session and redirects to login

ProductController

- `index()` – displays product list (table view) with pagination (5 per page)
- `cards()` – displays product cards view (shows all products)
- `add()` – loads add product form
- `editForm($id)` – loads edit product form with product data
- `create()` – inserts new product then redirects with flash message
- `update($id)` – updates product then redirects with flash message
- `delete($id)` – deletes product then redirects with flash message

Models (app/Models)

UserModel

- Table: users
- Fields: username, password
- Methods:
 - `checkUser($username)` – fetches a user by username
 - `hashPassword($password)` – bcrypt hashing method for password storage

ProductModel

- Table: products
- Fields: product_name, description, price
- CRUD Methods:
 - createProduct(\$data)
 - getProduct(\$id)
 - updateProduct(\$id, \$data)
 - deleteProduct(\$id)

Views (app/Views)

- login.php – login form with Bootstrap + flash messages
- product_view.php – product table list with sidebar, search, pagination, edit/delete
- product_card.php – product card layout with barcode image per product
- add_product.php – add product form (with CSRF)
- edit_product.php – edit product form (with CSRF)

Modules

1. Authentication Module (Login/Logout Session)
2. Product Management Module (CRUD)
3. Product Display Module (Table View + Card View + Barcode)

3. Database Design – ER diagram, table structure, and relationships

ER Diagram

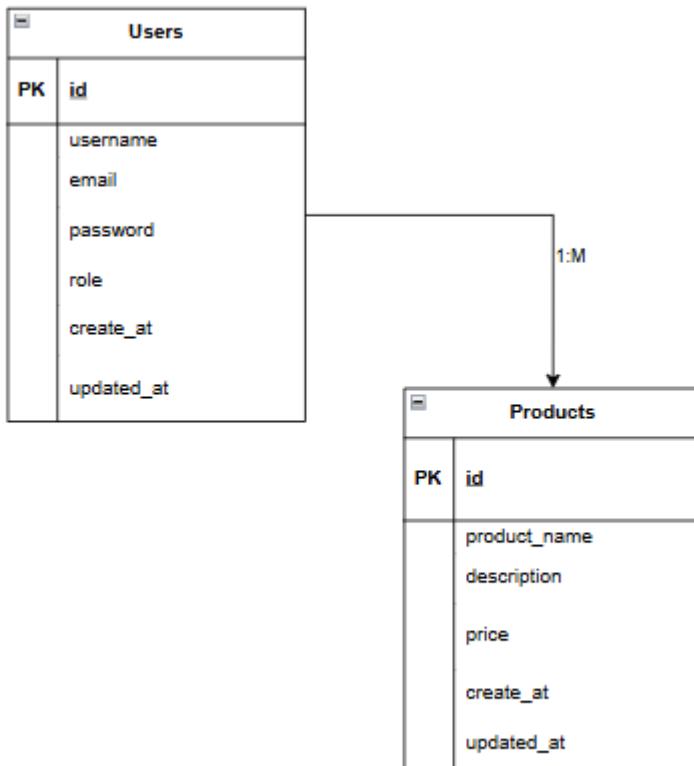


Table Structure

Table: users

- id (Primary Key)
- username
- password (*hashed using bcrypt*)

Table: products

- id (Primary Key)
- product_name
- description
- price
- created_at (*displayed in product table*)
- updated_at (*displayed in product table*)

Relationships

- Current implementation shows **no foreign key relationship** between users and products (products are shared/global once logged in).

4. Authentication Module – brief description of login/logout process and role management

Login Process

1. User opens GET / → login form displayed.
2. User submits credentials via POST /login.
3. System checks username using UserModel::checkUser(\$username).
4. If user exists, password is validated using password_verify().
5. If valid, session is created:
 - o isLoggedIn, user_id, username
6. Redirects to /dashboard.

Logout Process

1. User clicks logout (GET /logout).
2. System destroys session via session()->destroy().
3. Redirects to /?logout=1.

Role Management

- Current code does **not include roles** (e.g., admin/staff). It only checks if login is successful.

5. API Integration – description of the API used, sample endpoint(s), and purpose

API Used: QR Code Generator (External API)

In the *Product Cards* view, QR codes are generated using the **goQR / QRServer API** (api.qrserver.com) and displayed on each product card.

Purpose:

To generate a scannable **QR code per product** for faster product identification. The QR code encodes a custom string composed of the product ID and product name (e.g., PRODUCT-000123 | Product Name), which can be scanned using a phone camera or QR scanner.

Sample Endpoint Format:

- <https://api.qrserver.com/v1/create-qr-code/?size=150x150&data={DATA}&bgcolor=000000&color=FFFFFF&margin=10>

Implementation:

For each product, the system builds a data string using the product ID (zero-padded) and product name, then constructs the QR code URL dynamically. The QR is rendered in the card layout using an `` tag:

- `data = "PRODUCT-" + padded_id + "|" + product_name`
 - ``
-

6. System Features / Modules – summary of key CRUD functionalities

Product CRUD Features

- **Create Product**
 - Route: POST products/store
 - Input: product name, description, price
 - Output: flash message “Product created successfully!”
- **Read / View Products**
 - Table View: GET /dashboard (pagination + search UI)
 - Card View: GET /products/cards (all products + barcode)
- **Update Product**
 - Edit page: GET products/edit/{id}
 - Update action: POST products/update/{id}
 - Output: flash message “Product updated successfully!”
- **Delete Product**
 - Route: GET products/delete/{id}
 - Confirmation prompt before delete
 - Output: flash message “Product deleted successfully!”

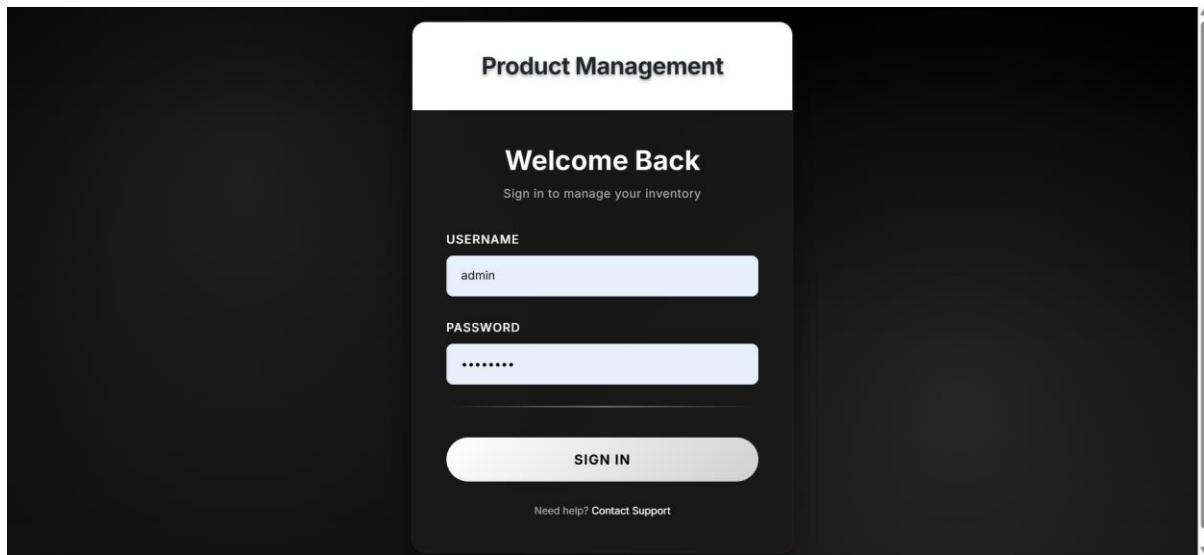
7. Security Implementation – password hashing and CSRF protection

Implemented Security Measures

- **Password verification**
 - Uses `password_verify()` for checking hashed passwords stored in DB.
- **Password hashing support**
 - `UserModel::hashPassword()` uses bcrypt (`PASSWORD_BCRYPT`) for secure storage.
- **CSRF Protection**
 - Forms include `<?= csrf_field() ?>` (seen in add/edit product forms).
- **Basic client confirmation**
 - Logout and delete actions use confirmation dialog (`confirm()`).

(Optional improvement: protect routes like /dashboard with CI4 Filters to block access when not logged in.)

8. Testing and Validation



The login page lets users enter their username and password, then submits the form to **/login** where the system validates the credentials, creates a user session, and redirects the user to the dashboard upon successful authentication.

Product_View.php

A screenshot of the product list view. The top navigation bar includes links for "Inventory", "Products Table", "Product Cards", "Add Product", and "Logout". Below the navigation is a header with "Product List", a search bar with placeholder "Search products...", and a "Add Product" button. On the left, a box shows "2 Total Products". The main area is a table with columns: PRODUCT NAME, DESCRIPTION, PRICE (₱), CREATED AT, UPDATED AT, and ACTIONS. Two rows of data are shown: "Table" (Square, ₱ 1,000.00) and "Zest-O" (barato, ₱ 12.00). Each row has "Edit" and "Delete" buttons in the ACTIONS column.

The product view presents all records in a tabular format, providing options to view, edit, and delete entries, allowing users to efficiently manage and maintain the stored data.

Product_Cards.php

The screenshot shows a dark-themed web application interface. At the top, there's a navigation bar with icons for 'Inventory Product Management', 'Products Table', 'Product Cards' (which is the active tab), 'Add Product', and 'Logout'. Below the navigation, the title 'Product Cards' is displayed, along with a message indicating 'Total Products: 2'. The main content area contains two product cards. The first card is for a product named 'Table', which is described as 'Square' and has a price of 'P 1,000.00'. The second card is for a product named 'Zest-O', described as 'barato' and has a price of 'P 12.00'. Each card features a QR code with the text 'SCAN ME · ID: 5' and 'SCAN ME · ID: 7' respectively. Below each QR code are 'Edit' and 'Delete' buttons.

The product card view shows products in a card layout and generates a QRCode image for each product using its ID.

Add_Product.php

The screenshot shows a dark-themed web application interface. At the top, there's a navigation bar with icons for 'Inventory Product Management', 'Products Table', 'Product Cards', 'Add Product' (which is the active tab), and 'Logout'. The main content area features a modal window titled 'Add New Product' with the sub-instruction 'Fill in the details to add a new product to your inventory'. The form includes three fields: 'PRODUCT NAME' with an input field containing 'Enter product name', 'DESCRIPTION' with an input field containing 'Enter product description' and a character limit of '0/500', and 'PRICE (P)' with an input field containing '0.00'.

The add product page provides a form to create a new product (name, description, price) and saves it to the database with CSRF protection.

Edit_Product.php

The screenshot shows a dark-themed web application interface for 'Inventory Product Management'. At the top, there's a navigation bar with icons for 'Products Table', 'Product Cards', and 'Add Product', along with a 'Logout' button. The main content area is titled 'Edit Product' with 'ID: 5' and a sub-instruction 'Update the details for Table'. The form contains three fields: 'PRODUCT NAME' with the value 'Table', 'DESCRIPTION' with the value 'Square' and a character count of '6/500', and 'PRICE (₹)' with the value '1000.00'.

The edit product page preloads the selected record's information into a form, allowing the user to modify the details and save the updated data back to the database.

9. System Setup Guide – installation steps and dependencies for running the project

Requirements / Dependencies

- PHP (compatible with CodeIgniter 4)
- Composer
- MySQL/MariaDB (or any DB CI4 supports)
- Bootstrap / Icons via CDN (no local install needed)
- Internet connection (for bwip-js barcode API + CDN libraries)

Setup Steps

1. Download / clone the CI4 project.
2. Run: composer install
3. Configure database in .env (DB host/user/pass/name).
4. Create database tables:
 - users
 - products
5. Insert at least one user record with **bcrypt hashed password**.
6. Run the server:
 - php spark serve
7. Open in browser:
 - / login page
 - /dashboard after successful login

10. Conclusion / Future Improvements – limitations and enhancements

Conclusion

This project demonstrates a complete **CI4 MVC CRUD system** with authentication, product management, UI views (table + card), pagination, and barcode integration using an external API.

Future Improvements

- Add **role-based access** (admin vs staff)
- Add **login-required route protection** via CI4 Filters
- Change delete action to **POST/DELETE** instead of GET (more secure)
- Add server-side validation rules (e.g., price must be > 0)
- Link products to users (add user_id FK) for multi-user ownership
- Add import/export features (CSV/PDF) for inventory reporting

Cod

es:

Vie

ws:

Login.php:

```
<!DOCTYPE html>

<html lang="en">
<head>

    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Login</title>

    <!-- Bootstrap CSS -->
    <link
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
        rel="stylesheet">
</head>

<style>

.form-control:focus{    border-color:
#43a047 !important; /* green border */
box-shadow: 0 0 0 .2rem
rgba(67,160,71,.25) !important; /*
green glow */    outline: 0 !important;
}

</style>

<body class="bg-light d-flex align-items-center justify-content-center vh-100">

<div class="card shadow p-0 overflow-hidden " style="width: 400px;">
```

```
<div class="card-header text-center fw-bold py-3"
style="background: linear-gradient(135deg,#a5d6a7
0%,#66bb6a 100%); color:#1b5e20; border:0;">

    Inventory Product Management

</div>

<div class="card shadow p-4" style="width: 400px;">

    <h3 class="text-center mb-4">Login</h3>

    <!-- Show error message if login fails -->
    <?php if(session()->getFlashdata('error')): ?>
        <div class="alert alert-danger">
            <?= session()->getFlashdata('error') ?>
        </div>
    <?php endif; ?>

    <!-- Show success message if login succeeds or other info -->
    <?php if(session()->getFlashdata('success')): ?>
        <div class="alert alert-success">
            <?= session()->getFlashdata('success') ?>
        </div>
    <?php endif; ?>

    <!-- Show logout message as alert if user just logged out (via query param)
-->
    <?php if (isset($_GET['logout']) && $_GET['logout'] == '1'): ?>
```

```
<script>

window.alert("Success

fully Logged Out");

</script>

<?php endif; ?>

<!-- Show validation errors if any --&gt;

&lt;?php if(isset($validation) &amp;&amp; $validation-&gt;hasError('username')): ?&gt;

&lt;div class="alert alert-danger"&gt;

&lt;?= $validation-&gt;getError('username') ?&gt;

&lt;/div&gt;

&lt;?php endif; ?&gt;

&lt;?php if(isset($validation) &amp;&amp; $validation-&gt;hasError('password')): ?&gt;

&lt;div class="alert alert-danger"&gt;

&lt;?= $validation-&gt;getError('password') ?&gt;

&lt;/div&gt;

&lt;?php endif; ?&gt;

&lt;form action=&lt;?= base_url('/login') ?&gt;" method="post"&gt;

&lt;div class="mb-3"&gt;

&lt;label for="username" class="form-label"&gt;Username&lt;/label&gt;

&lt;input type="text" name="username" id="username" class="form-control" required&gt;

&lt;/div&gt;

&lt;div class="mb-3"&gt;

&lt;label for="password" class="form-label"&gt;Password&lt;/label&gt;</pre>
```

```
    <input type="password" name="password" id="password"
class="form-control" required>
```

```
</div>
```

```
    <button type="submit" class="btn btn-success w-
100">Login</button>
```

```
</form>
```

```
</div>
```

```
<?php
```

```
?>
```

```
</body>
```

```
</html>
```

Product_View.php

```
<!-- app/Views/product_view.php -->
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
    <meta charset="UTF-8">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1">
```

```
    <title>Product List</title>
```

```
    <link
```

```
        href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.
css" rel="stylesheet">
```

```
    <link href="https://cdn.jsdelivr.net/npm/@font-
awesome/6.0.0/css/all.min.css" rel="stylesheet">
```

```
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.11.3/font/bootstrap-icons.min.css">
```

```
<style>

:root{
    --green-700:#2e7d32;
    --green-600:#388e3c;
    --green-500:#43a047;
    --green-100:#eaf6ec;

    --border:#e9ecef;
    --text:#1f2937;
    --muted:#6b7280;

    --sidebar-w: 270px;
}


```

```
body{
background:#ff
ffff !important;
color: var(--text);
}
```

```
/* ===== Sidebar ===== */
```

```
.sideb
ar{
positi
on:
```

```
fixed;  
top: 0;  
left: 0;  
height: 100vh;  
width: var(--  
sidebar-w);  
background: #fff;  
border-right: 1px  
solid var(--border);  
padding: 18px  
16px;  
  
z-index:  
1030;  
  
display:  
flex;  
flex-  
direction:  
column;  
gap:  
14px;  
}  
  
.sidebar-brand{  
display:flex; align-items:center; gap:10px;  
padding: 10px 10px; border-radius: 14px;
```

```
background: linear-gradient(135deg,  
    rgba(234,246,236,.95) 0%, rgba(200,230,201,.7)  
    100%);    border: 1px solid rgba(56,142,60,.22);  
color:#0f3d18;    font-weight: 800;    letter-  
spacing:.2px;  
}  
.sidebar-brand i{ color: var(--green-700); font-size: 1.2rem; }  
  
.sidebar-  
nav{  
margin-top:  
6px;  
display:flex;  
flex-  
direction:  
column;  
gap: 6px;  
}  
  
.sidebar-link{    display:flex;    align-  
items:center;    gap:10px;    padding:  
10px 12px;    border-radius: 12px;  
text-decoration: none;    color: var(--  
text);    border: 1px solid transparent;
```

```
transition: background .12s ease, border-
color .12s ease, transform .12s ease;
}

.sidebar-link i{ color: var(--green-700); }

.sidebar-
link:hover{

background:
rgba(234,246,23
6,.75); border-
color:
rgba(56,142,60,.
22);

transform:
translateY(-1px);

}

.sidebar-
link.active{

background:
rgba(234,246,236
,.9); border-
color:
rgba(56,142,60,.2
8); font-
weight: 700;

}
```

```
.sidebar-spacer{ flex: 1; }
```

```
.sidebar-logout{
```

```
border-top: 1px
```

```
solid var(--
```

```
border);
```

```
padding-top:
```

```
12px;
```

```
}
```

```
.logout-link{
```

```
display:flex; align-
```

```
items:center; justify-
```

```
content:center; gap:10px;
```

```
padding: 10px 12px;
```

```
border-radius: 12px; text-
```

```
decoration:none; font-
```

```
weight: 800;
```

```
color:#b42318; border:
```

```
1px solid
```

```
rgba(180,35,24,.18);
```

```
background:
```

```
rgba(180,35,24,.04);
```

```
transition: transform .12s
```

```
ease, box-shadow .12s ease;
```

```
}

.logout-link:hover{
    transform: translateY(-
1px);    box-shadow: 0
10px 18px
rgba(180,35,24,.10);

}

/* Main content offset for sidebar */

.content{
margin-left:
var(--sidebar-
w);
padding: 18px
18px 30px;
}

/* Mobile: collapse sidebar */

.sidebar-
toggle{
display:none;
position:
fixed; top:
14px; left:
14px; z-
index: 1040;
```

```
border-
radius: 12px
!important;

box-
shadow: 0
10px 18px
rgba(16,24,
40,.10);

}
```

```
@media (max-width: 991.98px){
:root{ --sidebar-w: 280px; }

.sidebar{
transform:
translateX(-
105%);

transition:
transform .18s
ease;
}
```

```
.sidebar.sho
w{
transform:
```

```
translateX(0)

;

}

.content{

margin-left: 0;

padding-top: 64px; /*

space for toggle */

}

.sidebar-toggle{ display:inline-flex; }

/* ===== Your existing styles (kept) ===== */

.card{ border-radius:16px !important; }

.card-green{ background: linear-gradient(135deg,
rgba(234,246,236,.95) 0%, rgba(200,230,201,.7) 100%)
!important; border: 1px solid rgba(56,142,60,.22)
!important; color: #0f3d18 !important; border-
radius: 16px !important;

}

.card-green .text-white{ color:#0f3d18 !important; }

.card-green i{ color: var(--green-700) !important; }

.card.shadow-sm.border-
success{ border:1px solid
var(--border) !important;
```

```
  box-shadow: 0 10px 26px  
    rgba(16,24,40,.08)  
    !important;  
  
  overflow:hidden;  
  
}  
  
.btn-green{  background-  
color: var(--green-600)  
!important; border-color:  
var(--green-600) !important;  
color:#fff !important; font-  
weight:700; border-  
radius:12px !important;  
  
box-shadow: 0 10px 18px  
  rgba(56,142,60,.18);  
  
transition: transform .12s  
ease, box-shadow .12s ease;  
  
}  
  
.btn-green:hover{  
background-color: var(--  
green-700) !important;  
border-color: var(--  
green-700) !important;  
transform: translateY(-  
1px);  box-shadow: 0
```

12px 22px

rgba(56,142,60,.22);

}

.btn-green i,.btn-green .bi,.btn-green .fas{ color:#fff !important; }

#searchInput{
border:1px solid var(--
border) !important;
border-radius: 12px 0
0 12px !important;
padding: .65rem
.9rem;
}
#searchInput:focus{
border-color:
rgba(67,160,71,.65)
!important; box-shadow: 0
0 0 .2rem rgba(56,142,60,.14)
!important;
}
#searchBtn{ border-radius:0 !important; }
#clearBtn{ border-radius:0 12px 12px 0 !important; }

.table{ margin-bottom:0 !important; }
.table-green th{
background:#f7fbf7

```
!important;  
color:#145a1f !important;  
border-bottom:1px solid  
var(--border) !important;  
font-weight:800; letter-  
spacing:.2px; padding:  
14px 10px;
```

```
}
```

```
.table td{ border-
```

```
color: var(--  
border)
```

```
!important;
```

```
padding: 14px
```

```
10px;
```

```
vertical-align: middle;
```

```
}
```

```
.table-hover tbody
```

```
tr:hover{ background:
```

```
rgba(234,246,236,.75)
```

```
!important;
```

```
}
```

```
.alert{ border-
```

```
radius:14px
```

```
!important;
```

```
border:1px solid var(--  
border) !important;  
  
box-shadow: 0 8px  
18px  
  
rgba(16,24,40,.06);  
  
}
```

```
.alert-success{  
  
background:#f3fbf4  
  
!important;  
  
color:#145a1f  
  
!important; border-  
  
color:  
  
rgba(56,142,60,.22)  
  
!important;  
  
}
```

```
.pagination  
  
.page-link{  
  
color: var(--  
green-600);  
  
border-color:  
  
var(--border);  
  
border-  
  
radius:12px
```

```
!important;  
margin: 0 4px;  
}  
.pagination .page-link:hover{  
color:#fff;  
background:  
var(--green-  
500);  
border-color:  
var(--green-  
500);  
}  
.pagination .page-  
link:focus{ color:#fff;  
background: var(--  
green-600); border-  
color: var(--green-600);  
box-shadow: 0 0 0  
.2rem  
rgba(56,142,60,.14);  
}  
.pagination .page-  
item.active .page-  
link{ color:#fff;  
background: var(--
```

```
green-600);

border-color: var(--  
green-600);

}

.pagination .page-  
item.disabled

.page-link{

color:#a1a1aa;  
background:#fff;  
border-color: var(--border);  
}

.fas, .fa, .bi{ color: inherit !important; }

</style>

</head>

<body>

<!-- Mobile toggle -->

<button class="btn btn-green sidebar-toggle" type="button"  
id="sidebarToggle">  
  <i class="bi bi-list"></i>  
</button>

<!-- Sidebar -->

<aside class="sidebar" id="sidebar">  
  <div class="sidebar-brand">
```

```
<i class="bi bi-bag-check"></i>

<div>

    <div style="line-height:1;">Inventory</div>

    <div class="small" style="font-weight:600; opacity:.85;">Product
Management</div>

</div>

</div>

<nav class="sidebar-nav">

    <!-- Mark active as needed -->

    <a class="sidebar-link active" href="<?= base_url('/dashboard') ?>">
        <i class="bi bi-box-seam"></i>
        <span>Products (Table)</span>
    </a>

    <a class="sidebar-link" href="<?= base_url('products/cards') ?>">
        <i class="bi bi-grid-3x3-gap"></i>
        <span>Product Cards</span>
    </a>

    <a class="sidebar-link" href="<?= base_url('product/productForm') ?>">
        <i class="bi bi-plus-circle"></i><span>Add Product</span>
    </a>

    <!-- Add more links if you want -->

    <a class="sidebar-link" href="<?= base_url('dashboard') ?>">
        <i class="bi bi-speedometer2"></i><span>Dashboard</span>
    </a>

</nav>
```

```
<div class="sidebar-spacer"></div>

<!-- Logout moved here -->

<div      class="sidebar-logout">

<a href=<?= base_url('/logout')?>"

class="logout-link"

onclick="return confirm('Are you

sure you want to logout?');">

    <i class="bi bi-box-arrow-right"></i>

    <span>Logout</span>

</a>

</div>

</aside>

<!-- Main content -->

<main class="content">

<div class="container mt-3 mt-lg-5">

    <!-- Header -->

    <div class="mb-4">

        <h2 class="text-dark mb-3">Product List</h2>

    <div class="row align-items-center">

        <!-- Total Products Card -->

        <div class="col-md-4 mb-3 mb-md-0">

            <div class="card shadow-sm border-0 card-green">

                <div class="card-body text-center py-3">

                    <div class="d-flex align-items-center justify-content-center">
```

```
<div class="me-3">

    <i class="fas fa-box" style="font-size: 1.8rem; opacity: 0.8;"></i>

</div>

<div>

    <h4 class="mb-0 fw-bold text-white"><?= $totalProducts ?></h4>

    <p class="mb-0 small opacity-90 text-white">Total Products</p>

</div>

</div>

</div>

</div>

<!-- Search Bar -->

<div class="col-md-5 mb-3 mb-md-0">

    <div class="input-group">

        <input type="text" class="form-control"
placeholder="Search products..." id="searchInput">

        <button class="btn btn-green" type="button" id="searchBtn">

            <i class="fas fa-search"></i>

        </button>

        <button class="btn btn-green" type="button" id="clearBtn"
title="Clear search">

            <i class="fas fa-times"></i>

        </button>

    </div>

</div>

<!-- Add Product Button -->

<div class="col-md-3 text-md-end">
```

```
</div>
</div>
</div>

<!-- Flash Messages -->

<?php if (session()->has('message')): ?>
<div class="alert alert-success alert-dismissible fade show" role="alert">
  <i class="fas fa-check-circle me-2"></i>
  <?= session('message') ?>
  <button type="button" class="btn-close" data-bs-dismiss="alert" aria-
label="Close"></button>
</div>
<?php endif; ?>

<?php if (session()->has('error')): ?>
<div class="alert alert-danger alert-dismissible fade show" role="alert">
  <i class="fas fa-exclamation-circle me-2"></i>
  <?= session('error') ?>
  <button type="button" class="btn-close" data-bs-dismiss="alert" aria-
label="Close"></button>
</div>
<?php endif; ?>

<?php if (session()->has('warning')): ?>
<div class="alert alert-warning alert-dismissible fade show" role="alert">
  <i class="fas fa-exclamation-triangle me-2"></i>
  <?= session('warning') ?>
  <button type="button" class="btn-close" data-bs-dismiss="alert" aria-
label="Close"></button>
```

```
</div>

<?php endif; ?>

<?php if (session()->has('info')): ?>

<div class="alert alert-info alert-dismissible fade show" role="alert">
    <i class="fas fa-info-circle me-2"></i>
    <?= session('info') ?>
    <button type="button" class="btn-close" data-bs-dismiss="alert" aria-
label="Close"></button>
</div>

<?php endif; ?>

<div class="card shadow-sm border-success">
    <div class="card-body">
        <table class="table table-bordered table-hover text-center">
            <thead class="table-green">
                <tr>
                    <th>Product Name</th>
                    <th>Description</th>
                    <th>Price (₱)</th>
                    <th>Created At</th>
                    <th>Updated At</th>
                    <th>Actions</th>
                </tr>
            </thead>
            <tbody>
                <?php if (!empty($products) && is_array($products)): ?>
                <?php foreach ($products as $product): ?>
                    <tr>
```

```

<td><?= esc($product['product_name']) ?></td>
<td><?= esc($product['description']) ?></td>
<td><?= number_format($product['price'], 2) ?></td>
<td><?= date('M, d Y', strtotime($product['created_at'])) ?></td>
<td><?= date('M, d Y', strtotime($product['updated_at'])) ?></td>
<td>
    <a href="= base_url('products/edit/' . $product['id']) ?&gt;" class="btn btn-green btn-sm"&gt;
        &lt;i class="bi bi-pencil"&gt;&lt;/i&gt; Edit
    &lt;/a&gt;
    &lt;a href="<?= base_url('products/delete/' . $product['id']) ?&gt;" class="btn btn-green btn-sm" onclick="return confirm('Are you sure you want to delete this product?');"&gt;
        &lt;i class="bi bi-trash"&gt;&lt;/i&gt; Delete
    &lt;/a&gt;
&lt;/td&gt;
&lt;/tr&gt;
&lt;?php endforeach; ?&gt;
&lt;?php else: ?&gt;
&lt;tr&gt;
    &lt;td colspan="6" class="text-muted"&gt;No products found.&lt;/td&gt;
&lt;/tr&gt;
&lt;?php endif; ?&gt;
&lt;/tbody&gt;
&lt;/table&gt;

&lt;!-- Pagination --&gt;
</pre

```

```
<?php if ($totalPages > 1): ?>

<nav aria-label="Product pagination" class="mt-4">
  <ul class="pagination justify-content-center">
    <?php if ($currentPage > 1): ?>
      <li class="page-item">
        <a class="page-link" href="= base_url('?page=' .
($currentPage - 1)) ?&gt;" aria-label="Previous"&gt;
          &lt;span aria-hidden="true"&gt;&amp;laquo;&lt;/span&gt;
        &lt;/a&gt;
      &lt;/li&gt;
    &lt;?php else: ?&gt;
      &lt;li class="page-item disabled"&gt;
        &lt;span class="page-link" aria-label="Previous"&gt;&lt;span aria-
hidden="true"&gt;&amp;laquo;&lt;/span&gt;&lt;/span&gt;
      &lt;/li&gt;
    &lt;?php endif; ?&gt;

    &lt;?php for ($i = 1; $i &lt;= $totalPages; $i++): ?&gt;
      &lt;?php if ($i == $currentPage): ?&gt;
        &lt;li class="page-item active"&gt;&lt;span class="page-link"&gt;&lt;?= $i
?&gt;&lt;/span&gt;&lt;/li&gt;
      &lt;?php else: ?&gt;
        &lt;li class="page-item"&gt;&lt;a class="page-link" href="<?=
base_url('?page=' . $i) ?&gt;"&gt;&lt;?= $i ?&gt;&lt;/a&gt;&lt;/li&gt;
      &lt;?php endif; ?&gt;
    &lt;?php endfor; ?&gt;

    &lt;?php if ($currentPage &lt; $totalPages): ?&gt;
      &lt;li class="page-item"&gt;</pre
```

```
    <a class="page-link" href="= base_url('?page=' . ($currentPage + 1)) ?&gt;" aria-label="Next"&gt;
        &lt;span aria-hidden="true"&gt;&amp;raquo;&lt;/span&gt;
    &lt;/a&gt;
&lt;/li&gt;
&lt;?php else: ?&gt;
    &lt;li class="page-item disabled"&gt;
        &lt;span class="page-link" aria-label="Next"&gt;&lt;span
            aria-hidden="true"&gt;&amp;raquo;&lt;/span&gt;&lt;/span&gt;
    &lt;/li&gt;
&lt;?php endif; ?&gt;
&lt;/ul&gt;
&lt;/nav&gt;

&lt;div class="text-center text-muted mt-2"&gt;
    &lt;small&gt;
        Showing &lt;?= (($currentPage - 1) * $perPage) + 1 ?&gt; to
        &lt;?= min($currentPage * $perPage, $totalProducts) ?&gt; of
        &lt;?= $totalProducts ?&gt; products
    &lt;/small&gt;
&lt;/div&gt;
&lt;?php endif; ?&gt;
&lt;/div&gt;
&lt;/div&gt;

&lt;/div&gt;
&lt;/main&gt;</pre
```

```
<script>

document.addEventListener('DOMContentLoaded', function() {

    // Sidebar toggle (mobile)

    const sidebar =
        document.getElementById('sidebar');
    const toggle =
        document.getElementById('sidebarToggle');

    if (toggle) {
        toggle.addEventListener('click', () =>
            sidebar.classList.toggle('show'));
    }

    // Your search script (unchanged)

    const searchInput =
        document.getElementById('searchInput');
    const searchBtn =
        document.getElementById('searchBtn');
    const clearBtn =
        document.getElementById('clearBtn');

    const tableRows =
        document.querySelectorAll('tbody tr');
    const noProductsRow =
        document.querySelector('tbody tr
```

```
td[colspan']); let
originalNoProductsMessage = "";

if (noProductsRow) {
  originalNoProductsMessage =
    noProductsRow.innerHTML;
}

function performSearch() {
  const searchTerm =
    searchInput.value.toLowerCase()
    ().trim(); let visibleRows = 0;

  tableRows.forEach(row
=> { if
  (row.querySelector('td[
    colspan]')) return;

  const productName =
    row.cells[0].textContent.toLowerCase()
    e(); const description =
    row.cells[1].textContent.toLowerCase()
    e(); const price =
    row.cells[2].textContent.toLowerCase()
    e();
} );
```

```
if (searchTerm
    === "" ||

productName.includes
(searchTerm) ||

description.includes(se
archTerm) ||

price.includes(searchT
erm)) {

row.style.display = "";

visibleRows++;

} else {

row.style.displ
ay = 'none';

}

});


if (searchTerm !== "" && visibleRows
== 0) { if (noProductsRow) {

noProductsRow.innerHTML = 'No
products found matching your search.';

noProductsRow.parentElement.style.displ
ay = "";

}

} else if (searchTerm === "" || visibleRows
> 0) { if (noProductsRow) { if
```

```
(searchTerm === "")  
  
noProductsRow.innerHTML =  
  
originalNoProductsMessage;      if  
  
(visibleRows > 0)  
  
noProductsRow.parentElement.style.display =  
  
'none';  
  
}  
  
}  
  
  
const pagination =  
  
document.querySelector('nav[aria-  
  
label="Product pagination"]');  const  
  
paginationInfo = document.querySelector('.text-  
  
center.text-muted');
```



```
if (searchTerm !== "") {  if  
  
(pagination)  
  
pagination.style.display =  
  
'none';  if (paginationInfo)  
  
paginationInfo.style.display =  
  
'none';  
  
} else {      if  
  
(pagination)  
  
pagination.style.displ  
  
ay  =  "";      if
```

```
(paginationInfo)

paginationInfo.style.d
isplay = "";

}

}

function

clearSearch() {
searchInput.value =
";
performSearch();
searchInput.focus();

}

searchBtn.addEventListener(
click', performSearch);
clearBtn.addEventListener('cl
ick', clearSearch);
searchInput.addEventListener(
r('input', performSearch);

searchInput.addEventListener
```

```
('keypress', function(e) {      if
(e.key === 'Enter') {
e.preventDefault();
performSearch();
}
});
});

</script>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

Product_Card.php

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Product Cards</title>

<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">
<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css" rel="stylesheet">
```

```
<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.11.3/font/bootstrap-icons.min.css">

<style>

:root{
    --green-700:#2e7d32; --green-600:#388e3c; --green-500:#43a047; --green-
    100:#eaf6ec;
    --border:#e9ecef; --text:#1f2937; --muted:#6b7280;
    --sidebar-w: 270px;
}

body{ background:#fff
    !important; color:var(--text); }

/* Sidebar */

.sidebar{    position:fixed; top:0; left:0;
height:100vh; width:var(--sidebar-w);
background:#fff; border-right:1px solid var(--border);
    padding:18px 16px; z-index:1030; display:flex; flex-direction:column; gap:14px;
}

.sidebar-brand{    display:flex; align-items:center;
gap:10px; padding:10px;    border-radius:14px;
background:linear-gradient(135deg,
    rgba(234,246,236,.95), rgba(200,230,201,.7));
border:1px solid rgba(56,142,60,.22); color:#0f3d18; font-weight:800;
```

```
}

.sidebar-brand i{ color:var(--green-700); font-size:1.2rem; }

.sidebar-nav{ display:flex; flex-direction:column; gap:6px; margin-top:6px; }

.sidebar-link{   display:flex; align-
items:center; gap:10px; padding:10px 12px;
border-radius:12px;   text-decoration:none;
color:var(--text); border:1px solid
transparent;   transition:.12s ease;
}

.sidebar-link i{ color:var(--green-700); }

.sidebar-link:hover{ background:rgba(234,246,236,.75); border-
color:rgba(56,142,60,.22); transform:translateY(-1px); }

.sidebar-link.active{ background:rgba(234,246,236,.9); border-
color:rgba(56,142,60,.28); font-weight:700; } .sidebar-spacer{
flex:1; }

.sidebar-logout{ border-top:1px solid var(--border); padding-top:12px; }

.logout-link{   display:flex; align-
items:center; justify-content:center; gap:10px;
padding:10px 12px;   border-radius:12px;
text-decoration:none; font-weight:800;
color:#b42318;   border:1px solid
rgba(180,35,24,.18);
background:rgba(180,35,24,.04);
}

.content{ margin-left:var(--sidebar-w); padding:18px 18px 30px; }
```

```
.sidebar-toggle{ display:none; position:fixed; top:14px; left:14px; z-index:1040; border-radius:12px !important; }

@media (max-width: 991.98px){

:root{ --sidebar-w: 280px; }

.sidebar{ transform:translateX(-105%); transition:transform .18s ease; }

.sidebar.show{ transform:translateX(0); }

.content{ margin-left:0; padding-top:64px; }

.sidebar-toggle{ display:inline-flex; }

}

/* Cards */ .p-card{

border:1px solid var(--border); border-radius:16px; box-shadow: 0 10px 26px rgba(16,24,40,.08);

overflow:hidden;

}

.p-card .badge{

background:rgba(56,142,60,.12)

; color: var(--green-700);

border: 1px solid rgba(56,142,60,.18)

;
```

```
    }

    .barcode{
background:#fff;
border:1px
dashed var(--border);
border-radius:12px;
padding:10px;

    }

</style>
</head>

<body>
<!-- Mobile toggle -->
<button class="btn btn-success sidebar-toggle" type="button"
id="sidebarToggle">
<i class="bi bi-list"></i>
</button>

<!-- Sidebar -->
<aside class="sidebar" id="sidebar">
<div class="sidebar-brand">
<i class="bi bi-bag-check"></i>
<div>
<div style="line-height:1;">Inventory</div>
```

```
<div class="small" style="font-weight:600; opacity:.85;">Product  
Management</div>  
</div>  
</div>  
  
<nav class="sidebar-nav">  
  <a class="sidebar-link" href="#"><?= base_url('/dashboard') ?>>  
    <i class="bi bi-box-seam"></i><span>Products (Table)</span>  
  </a>  
  
  <a class="sidebar-link active" href="#"><?= base_url('products/card') ?>>  
    <i class="bi bi-grid-3x3-gap"></i><span>Product Cards</span>  
  </a>  
  
  <a class="sidebar-link" href="#"><?= base_url('product/productForm') ?>>  
    <i class="bi bi-plus-circle"></i><span>Add Product</span>  
  </a>  
</nav>  
  
<div class="sidebar-spacer"></div>  
  
<div class="sidebar-logout">  
  <a href="#"><?= base_url('/logout') ?>"  
    class="logout-link"  
    onclick="return confirm('Are you  
sure you want to logout?');">  
    <i class="bi bi-box-arrow-right"></i>  
    <span>Logout</span>  
  </a>
```

```
</div>

</aside>

<main class="content">

<div class="container">

<div class="d-flex align-items-center justify-content-between flex-wrap gap-2 mb-3">

<div>
    <h2 class="mb-1">Product Cards</h2>
    <div class="text-muted small">Total: <?= esc($totalProducts ?? 0) ?></div>
</div>
</div>

<div class="row g-3">
    <?php if (!empty($products) && is_array($products)): ?>
    <?php foreach ($products as $p): ?>
        <?php

$barcodeText = (string)($p['id'] ?? '');

$barcodeUrl = 'https://bwipjs-api.metafloor.com/?bcid=code128'
. '&text=' . urlencode($barcodeText)
. '&scale=3'
. '&height=8'
. '&includetext'
. '&textsize=10'
. '&paddingwidth=10'
. '&paddingheight=5';
```

```
?>

<div class="col-12 col-md-6 col-lg-4">
  <div class="p-card p-3 h-100">
    <div class="d-flex justify-content-between align-items-start mb-2 text-center">
      <div class="fw-bold"><?= esc($p['product_name']) ?? "" ?></div>
      <span class="badge rounded-pill">₱ <?= number_format((float)($p['price'] ?? 0), 2) ?></span>
    </div>

    <div class="text-muted small mb-3 text-center" style="min-height:42px;">
      <?= esc($p['description']) ?? "" ?>
    </div>

    <div class="barcode text-center mb-3">
      "
        class="img-fluid"
        loading="lazy"
      >
      <div class="small text-muted mt-1">ID: <?= esc($barcodeText) ?></div>
    </div>

    <div class="d-flex gap-2 mt-auto">
```

```
    <a href="= base_url('products/edit/' . $p['id']) ?&gt;" class="btn
btn-success btn-sm w-50"&gt;

        &lt;i class="bi bi-pencil"&gt;&lt;/i&gt; Edit
    &lt;/a&gt;

    &lt;a href="<?=
base_url('products/delete/' . $p['id']) ?&gt;"
class="btn btn-success btn-sm w-50"
onclick="return confirm('Are you sure you
want to delete this product?');"&gt;

        &lt;i class="bi bi-trash"&gt;&lt;/i&gt; Delete
    &lt;/a&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;?php endforeach; ?&gt;
&lt;?php else: ?&gt;
&lt;div class="col-12"&gt;
    &lt;div class="alert alert-light border"&gt;No products found.&lt;/div&gt;
&lt;/div&gt;
&lt;?php endif; ?&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/main&gt;

&lt;script&gt;
document.addEventListener('DOMContentLoaded'
oaded', function () {    const sidebar =</pre
```

```

document.getElementById('sidebar');

const toggle = 

document.getElementById('sidebarToggle');

if (toggle) toggle.addEventListener('click', () 

=> sidebar.classList.toggle('show'));

});

</script>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.min.js"></script>

</body>

</html>

```

Edit_Product.php

```

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>Edit Product</title>

<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">

<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css" rel="stylesheet">

<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.11.3/font/bootstrap-icons.min.css"> <style>

```

```
/* Green theme matching Product_View palette */

body {
background:
#e8f5e9
!important;
color: #1b5e20
!important; min-
height: 100vh;
display: flex;
align-items:
center; justify-
content: center;
}

.form-
containe
r { max-
width:
500px;
width:
100%;
margin:
20px
auto;
}
```

```
.card {    border: 2px solid  
#43a047 !important;    border-  
radius: 20px !important;    box-  
shadow: 0 10px 30px rgba(67,  
160, 71, 0.15) !important;  
background: #fff !important;  
overflow: hidden;  
}
```

```
.card-header {    background: linear-  
gradient(135deg, #a5d6a7 0%, #66bb6a  
100%) !important;    color: #1b5e20  
!important;    font-weight: bold;    text-  
transform: uppercase;    letter-spacing:  
1px;    padding: 1.5rem;    border-  
bottom: none !important;  
}
```

```
.card-body {  
background:  
#fff  
!important;  
padding: 2rem  
!important;  
}
```

```
.form-label  
{    color:  
    #1b5e20  
    !important;  
    font-weight:  
    600;    text-  
    transform:  
    uppercase;  
    letter-  
    spacing:  
    0.5px;  
    font-size:  
    0.9rem;  
}  
  
}
```

```
.form-control {  
    border: 2px solid  
    #a5d6a7  
    !important;  
    border-radius: 8px  
    !important;  
    padding: 0.75rem  
    1rem; transition:  
    all 0.3s ease;
```

}

.form-control:focus { border-

color: #43a047 !important;

box-shadow: 0 0 0 0.2rem

rgba(56, 142, 60, 0.25)

!important; transform:

translateY(-1px);

}

.btn {

font-weight:

bold; text-

transform:

uppercase;

letter-spacing:

1px;

padding:

0.75rem

1.5rem;

border-radius:

8px !important;

transition: all

0.3s ease;

}

```
.btn-green, .btn-outline-
success, .btn-outline-primary

{    background: #43a047
!important;    color: #fff
!important;    border-color:
#388e3c !important;
}
```

```
.btn-green:hover, .btn-outline-
success:hover, .btn-outline-
primary:hover {    background:
#388e3c !important;    border-color:
#2e7d32 !important;    color: #fff
!important;    transform: translateY(
-2px);    box-shadow: 0 5px 15px
rgba(67, 160, 71, 0.3) !important;
}
```

```
.btn-outline-
secondary {
background:
transparent
!important;
color: #388e3c
!important;
```

```
border: 2px solid
```

```
#a5d6a7
```

```
!important;
```

```
}
```

```
.btn-outline-
```

```
secondary:hover {
```

```
background:
```

```
#a5d6a7
```

```
!important; color:
```

```
#1b5e20
```

```
!important;
```

```
border-color:
```

```
#a5d6a7
```

```
!important;
```

```
transform:
```

```
translateY(-2px);
```

```
}
```

```
.fas, .fa, .bi {
```

```
margin-
```

```
right:
```

```
0.5rem;
```

```
color:
```

```
    inherit  
    !important;  
}  
  
  
h4 {  
margin: 0  
!importan  
t;    font-  
size:  
1.25rem;  
}  
  
  
.table-green th {  
background-color:  
#a5d6a7 !important;  
color: #1b5e20  
!important;  
}  
  
</style>  
</head>  
<body class="bg-light">  
  
  
<div class="container mt-5">  
  <div class="form-container">  
    <div class="card shadow-sm">  
      <div class="card-header">
```

```
<h4 class="mb-0"><i class="fas fa-edit me-2"></i>Edit Product</h4>
</div>

<div class="card-body">

    <form action="= base_url('products/update/'.$product['id']) ?&gt;" method="post"&gt;
        &lt;?= csrf_field() ?&gt;

        &lt;div class="mb-3"&gt;
            &lt;label for="product_name" class="form-label"&gt;&lt;i class="bi bi-tag me-2"&gt;&lt;/i&gt;Product Name&lt;/label&gt;
            &lt;input type="text" name="product_name" id="product_name" class="form-control" value="<?= esc($product['product_name']) ?&gt;" required&gt;
        &lt;/div&gt;

        &lt;div class="mb-3"&gt;
            &lt;label for="description" class="form-label"&gt;&lt;i class="bi bi-file-text me-2"&gt;&lt;/i&gt;Description&lt;/label&gt;
            &lt;textarea name="description" id="description" class="form-control" rows="3"&gt;&lt;?= esc($product['description']) ?&gt;&lt;/textarea&gt;
        &lt;/div&gt;

        &lt;div class="mb-3"&gt;
            &lt;label for="price" class="form-label"&gt;&lt;i class="bi bi-currency-dollar me-2"&gt;&lt;/i&gt;Price (₱)&lt;/label&gt;
            &lt;input type="number" step="0.01" name="price" id="price" class="form-control"&gt;
        &lt;/div&gt;
    &lt;/form&gt;
&lt;/div&gt;</pre
```

```
value=<?=esc($product['price']) ?>" required>

</div>

<div class="d-flex justify-content-between">

    <a href=<?= site_url('/dashboard') ?>" class="btn btn-outline-secondary"><i class="bi bi-arrow-left me-2"></i>Back</a>

    <button type="submit" class="btn btn-outline-primary"><i class="bi bi-arrow-repeat me-2"></i>Update Product</button>

</div>

</form>

</div>

</div>

</div>

</body>

</html>
```

Add_Product.php:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title>Add Product</title>
```

```
<link
  href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">

<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0/css/all.min.css" rel="stylesheet">

<link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.11.3/font/bootstrap-icons.min.css">

<style>
:root{
  --green-700:#2e7d32;
  --green-600:#388e3c;
  --green-500:#43a047;
  --green-100:#eaf6ec;

  --border:#e9ecef;
  --text:#1f2937;
  --muted:#6b7280;
  --sidebar-w: 270px;
}

body{
  background:
    #e8f5e9
    !important;
  color: #1b5e20
    !important;
  min-height:
    100vh;
```

```
}
```

```
/* ===== Sidebar ===== */
```

```
.sideb
```

```
ar{
```

```
positi
```

```
on:
```

```
fixed;
```

```
top: 0;
```

```
left: 0;
```

```
height: 100vh;
```

```
width: var(--
```

```
sidebar-w);
```

```
background: #fff;
```

```
border-right: 1px
```

```
solid var(--border);
```

```
padding: 18px
```

```
16px; z-index:
```

```
1030; display:
```

```
flex; flex-
```

```
direction: column;
```

```
gap: 14px;
```

```
}
```

```
.sidebar-brand{    display:flex;    align-items:center;    gap:10px;    padding: 10px 10px;    border-radius: 14px;    background: linear-gradient(135deg, rgba(234,246,236,.95) 0%,    rgba(200,230,201,.7) 100%);    border: 1px solid    rgba(56,142,60,.22);    color:#0f3d18;    font-weight: 800;    letter-spacing:.2px;  }

.sidebar-brand i{ color: var(--green-700); font-size: 1.2rem; }

.sidebar-
nav{
margin-
top: 6px;
display:fl
ex; flex-
direction:
column;
gap: 6px;
}

.sidebar-link{    display:flex;    align-items:center;    gap:10px;    padding: 10px 12px;    border-radius: 12px;
text-decoration: none;    color: var(--text);
border: 1px solid transparent;
```

```
transition: background .12s ease, border-
color .12s ease, transform .12s ease;

}

.sidebar-link i{ color: var(--green-700); }

.sidebar-
link:hover{

background:
rgba(234,246,236,
.75);    border-
color:
rgba(56,142,60,.2
2);    transform:
translateY(-1px);

}

.sidebar-
link.active{

background:
rgba(234,246,236
,.9);    border-
color:
rgba(56,142,60,.2
8);    font-
weight: 700;

}
```

```
.sidebar-spacer{ flex: 1; }
```

```
.sidebar-logout{
```

```
border-top: 1px
```

```
solid var(--
```

```
border);
```

```
padding-top:
```

```
12px;
```

```
}
```

```
.logout-
```

```
link{
```

```
display:fle
```

```
x; align-
```

```
items:cent
```

```
er;
```

```
justify-
```

```
content:ce
```

```
nter;
```

```
gap:10px;
```

```
padding:
```

```
10px 12px;
```

```
border-
```

```
radius:
```

```
12px; text-
```

```
decoration
```

```
:none;  
font-  
weight:  
800;  
color:#b42  
318;  
border:  
1px solid  
rgba(180,3  
5,24,.18);  
background  
d:  
rgba(180,3  
5,24,.04);  
transition:  
transform  
.12s ease,  
box-  
shadow  
.12s ease;  
}  
.logout-link:hover{  
transform: translateY(-  
1px); box-shadow: 0
```

```
10px 18px  
rgba(180,35,24,.10);  
}  
  
/* Main content offset for sidebar */  
.content{  
margin-left:  
var(--sidebar-  
w);  
padding: 18px  
18px 30px;  
min-height:  
100vh;  
}  
  
/* Mobile: collapse  
sidebar */ .sidebar-  
toggle{  
display:none;  
position: fixed; top:  
14px; left: 14px;  
z-index: 1040;  
border-radius: 12px  
!important; box-
```

```
shadow: 0 10px 18px  
rgba(16,24,40,.10);  
  
}
```

```
@media (max-width: 991.98px){
```

```
:root{ --sidebar-w: 280px; }
```

```
.sidebar{
```

```
transform:
```

```
translateX(-
```

```
105%);
```

```
transition:
```

```
transform .18s
```

```
ease;
```

```
}
```

```
.sidebar.sh
```

```
ow{
```

```
transform:
```

```
translateX(
```

```
0);
```

```
}
```

```
.content{ margin-
```

```
left: 0; padding-
```

```
top: 64px; /* space  
for toggle */  
}  
.sidebar-toggle{ display:inline-flex; }  
}  
  
/* ===== Your form styles ===== */  
.form-  
container  
{ max-  
width:  
520px;  
width:  
100%;  
margin:  
20px  
auto;  
}  
  
.card {  
border: 2px solid #43a047  
!important; border-radius:  
20px !important; box-  
shadow: 0 10px 30px rgba(67,  
160, 71, 0.15) !important;
```

```
background: #fff !important;  
overflow: hidden;  
}  
  
.card-header { background: linear-  
gradient(135deg, #a5d6a7 0%, #66bb6a  
100%) !important; color: #1b5e20  
!important; font-weight: bold; text-  
transform: uppercase; letter-spacing:  
1px; padding: 1.5rem; border-  
bottom: none !important;  
}  
  
.card-body { background: #fff !important; padding: 2rem !important; }  
  
.form-  
label{  
color:#1b5e2  
0 !important;  
font-weight:  
600; text-  
transform:  
uppercase;  
letter-  
spacing:
```

```
.5px; font-
size: .9rem;
}

.form-control{
border:2px solid
#a5d6a7
!important;
border-radius:8px
!important;
padding:.75rem
1rem;
transition: all .3s ease;
}

.form-control:focus{ border-
color:#43a047 !important;
box-shadow: 0 0 0 .2rem
rgba(56, 142, 60, 0.25)
!important; transform:
translateY(-1px);
}

.btn{ font-
weight:bold;
text-transform:
uppercase;
```

```
letter-spacing:  
1px;  
padding:.75re  
m 1.5rem;  
  
border-radius:  
8px !important;  
  
transition: all  
.3s ease;  
}  
  
.btn-green{  
  
background:#43a  
047 !important;  
  
color:#fff  
!important;  
  
border-  
  
color:#388e3c  
!important;  
}  
.btn-green:hover{  
  
background:#388e3c  
!important; border-  
  
color:#2e7d32 !important;  
  
transform: translateY(-2px);  
  
box-shadow: 0 5px 15px
```

```
rgba(67, 160, 71, 0.3)
```

```
!important;
```

```
}
```

```
.btn-outline-
```

```
secondary{
```

```
background:transpa
```

```
rent !important;
```

```
color:#388e3c
```

```
!important;
```

```
border:2px solid
```

```
#a5d6a7
```

```
!important;
```

```
}
```

```
.btn-outline-
```

```
secondary:hover{
```

```
background:#a5d6a7
```

```
!important;
```

```
color:#1b5e20
```

```
!important; border-
```

```
color:#a5d6a7
```

```
!important;
```

```
transform: translateY(-
```

```
2px);
```

```
}
```

```
.fas, .fa, .bi{ color: inherit !important; }

h4{ margin:0 !important; font-size:1.25rem; }

</style>

</head>

<body>

<!-- Mobile toggle -->

<button class="btn btn-success sidebar-toggle" type="button"
id="sidebarToggle">

<i class="bi bi-list"></i>

</button>

<!-- Sidebar -->

<aside class="sidebar" id="sidebar">

<div class="sidebar-brand">

<i class="bi bi-bag-check"></i>

<div>

<div style="line-height:1;">Inventory</div>

<div class="small" style="font-weight:600; opacity:.85;">Product
Management</div>

</div>

</div>

<nav class="sidebar-nav">

<a class="sidebar-link " href="#"><?= base_url('/dashboard') ?>

<i class="bi bi-box-seam"></i>

<span>Products (Table)</span>

</a>
```

```
<a class="sidebar-link" href="= base_url('products/cards') ?&gt;"&gt;
    &lt;i class="bi bi-grid-3x3-gap"&gt;&lt;/i&gt;
    &lt;span&gt;Product Cards&lt;/span&gt;
&lt;/a&gt;

&lt;a class="sidebar-link active" href="<?= base_url('product/productForm') ?&gt;"&gt;
    &lt;i class="bi bi-plus-circle"&gt;&lt;/i&gt;&lt;span&gt;Add Product&lt;/span&gt;
&lt;/a&gt;
&lt;/nav&gt;

&lt;div class="sidebar-spacer"&gt;&lt;/div&gt;

&lt;div class="sidebar-logout"&gt;  &lt;a
    href="<?= base_url('/logout')?&gt;"&gt;
    class="logout-link"
    onclick="return confirm('Are you
sure you want to logout?');"&gt;  &lt;i
    class="bi bi-box-arrow-right"&gt;&lt;/i&gt;
    &lt;span&gt;Logout&lt;/span&gt;
&lt;/a&gt;
&lt;/div&gt;
&lt;/aside&gt;

&lt;!-- Main Content --&gt;
&lt;main class="content"&gt;
    &lt;div class="container mt-3 mt-lg-5"&gt;
        &lt;div class="form-container"&gt;</pre
```

```
<div class="card shadow-sm">
  <div class="card-header">
    <h4 class="mb-0"><i class="fas fa-plus-circle me-2"></i>Add
    Product</h4>
  </div>
  <div class="card-body">
    <form action=<?= site_url('products/store') ?>" method="post">
      <?= csrf_field() ?>

      <div class="mb-3">
        <label for="product_name" class="form-label"><i class="bi bi-tag
        me-2"></i>Product Name</label>
        <input type="text" name="product_name" id="product_name"
        class="form-control" required>
      </div>

      <div class="mb-3">
        <label for="description" class="form-label"><i class="bi bi-file-text
        me-2"></i>Description</label>
        <textarea name="description" id="description" class="form-control"
        rows="3"></textarea>
      </div>

      <div class="mb-3">
        <label for="price" class="form-label"><i class="bi bi-currency-dollar
        me-2"></i>Price (₱)</label>
        <input type="number" step="0.01" name="price" id="price"
        class="form-control" required>
      </div>
```

```
<div class="d-flex justify-content-between">
    <a href="= site_url('/dashboard') ?&gt;" class="btn btn-outline-secondary"&gt;
        &lt;i class="bi bi-arrow-left me-2"&gt;&lt;/i&gt;Back
    &lt;/a&gt;
    &lt;button type="submit" class="btn btn-green"&gt;
        &lt;i class="bi bi-check-circle me-2"&gt;&lt;/i&gt;Save Product
    &lt;/button&gt;
&lt;/div&gt;
&lt;/form&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/main&gt;

&lt;script&gt;
document.addEventListener('DOMContentLoaded'
oaded', function () {
    const sidebar =
document.getElementById('sidebar');

const toggle =
document.getElementById('sidebarToggle');

if (toggle) toggle.addEventListener('click', ()
=&gt; sidebar.classList.toggle('show'));

});
&lt;/script&gt;</pre
```

```
<script  
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/js/bootstrap.bundle.  
min.js"></script>  
  
</body>  
  
</html>
```

Models:

UserMod

el.php

<?php

namespac

e

App\Mod

els;

use CodeIgniter\Model;

class UserModel extends Model

{

protected \$table

= 'users';

protected

\$primaryKey =

'id';

protected \$allowedFields = ['username', 'password'];

// Method to check

user credentials

public function

```
checkUser($username  
e)  
{  
return $this->where('username', $username)->first();  
}  
  
// Hash password  
using bcrypt public  
function  
hashPassword($pass  
word)  
{  
return password_hash($password, PASSWORD_BCRYPT);  
}  
}
```

ProductModel.php: <?php

```
namespace App\Models; use  
CodeIgniter\Model; class  
ProductModel extends Model {  
protected $table = 'products';  
protected $primaryKey = 'id';  
protected $allowedFields =
```

```
['product_name', 'description',
```

```
'price');
```

```
// Createa public
```

```
function
```

```
createProduct($d
```

```
ata) { return
```

```
$this-
```

```
>insert($data);
```

```
}
```

```
// Read public
```

```
function
```

```
getProduct($id
```

```
) { return
```

```
$this-
```

```
>find($id);
```

```
}
```

```
// Update public
```

```
function
```

```
updateProduct($id,
```

```
$data) { return $this-
```

```
>update($id, $data);
```

```
}
```

```
// Delete public  
  
function  
  
deleteProduct($i  
d) { return $this->  
delete($id);  
  
}  
}
```

ProductController.php:

```
<?php  
  
namespace App\Controllers;  
  
use App\Models\ProductModel;  
  
class ProductController extends BaseController  
{  
    public function index()  
    {  
        $model = new ProductModel();  
  
        // Get the current page from the URL (default to 1 if not specified)  
        $page = $this->request->getGet('page') ?? 1;  
        $perPage = 5; // 5 items per page  
  
        // Calculate offset
```

```
$offset = ($page - 1) * $perPage;

// Get products with pagination
$data['products'] = $model->findAll($perPage, $offset);

// Get total count for pagination calculation
$data['totalProducts'] = $model->countAll();
$data['currentPage'] = $page;
$data['perPage'] = $perPage;
$data['totalPages'] = ceil($data['totalProducts'] / $perPage);

return view('product_view', $data);
}

public function cards(){
    $model = new ProductModel();

    // "all the cards" = show all products
    $data['products'] = $model->findAll();
    $data['totalProducts'] = $model->countAll();

    return view('product_card', $data);
}

public function add()
{
    return view('add_product');
}

public function editForm($id)
```

```
{  
    $model = new  
    ProductModel();  
  
    $data['product'] =  
    $model->  
    getProduct($id);  
  
    return  
    view('edit_product',  
    $data);  
}  
  
  
public function create()  
{  
    $model = new ProductModel();  
  
    $data = [  
        'product_name' => $this->request->getPost('product_name'),  
        'description' => $this->request->getPost('description'),  
        'price' => $this->request->getPost('price')  
    ];  
  
    $model->createProduct($data);  
  
    session()->set_flashdata('message',  
    'Product created successfully!');  
  
    return redirect()->to('/dashboard');
```

```
    } public

function

edit($id)

{

$model = new

ProductModel();

$data['product'] =


$model-

>getProduct($id);

return

view('edit_product',


$data);

}

public function update($id)

{

$model = new ProductModel();

$data = [


'product_name' => $this->request->getPost('product_name'),


'description' => $this->request->getPost('description'),


'price' => $this->request->getPost('price')


];

$model->updateProduct($id,


$data); session()->setflashdata('message', 'Product
```

```
updated successfully!');      return  
  
redirect()->to('/dashboard');  
  
}  
  
public function delete($id)  
  
{  
  
    $model = new ProductModel();  
  
    $model->deleteProduct($id);  
  
    session()->setflashdata('message',  
        'Product deleted successfully!');  
  
    return redirect()->to('/dashboard');  
  
}  
  
}
```

Home.php

```
<?php  
  
namespace App\Controllers;  
  
class Home extends BaseController  
  
{ public  
  
    function  
  
    index():  
  
        string  
  
    {
```

```
        return view('welcome_message');

    }

}
```

BaseController.php

```
<?php

namespace App\Controllers;

use

CodeIgniter\Control

ler; use

CodeIgniter\HTTP\C

LIRequest; use

CodeIgniter\HTTP\I

ncomingRequest;

use

CodeIgniter\HTTP\R

equestInterface; use

CodeIgniter\HTTP\R

esponseInterface;

use

Psr\Log\LoggerInter

face;
```

```
/**  
 * Class BaseController  
 *  
 * BaseController provides a convenient place for loading components  
 * and performing functions that are needed by all your controllers.  
 * Extend this class in any new controllers:  
 * class Home extends BaseController  
 *  
 * For security be sure to declare any new methods as protected or private.  
 */ abstract class
```

BaseController extends

Controller

```
{  
/**  
 * Instance of the main Request object.  
 *  
 * @var CLIRequest|IncomingRequest  
 */  
protected $request;
```

```
/**  
 * An array of helpers to be loaded automatically upon  
 * class instantiation. These helpers will be available  
 * to all other controllers that extend BaseController.  
 *  
 * @var list<string>
```

```
 */  
  
protected $helpers = [];  
  
/**  
 * Be sure to declare properties for any property fetch you initialized.  
 * The creation of dynamic property is deprecated in PHP 8.2.  
 */  
  
// protected $session;  
  
/**  
 * @return void  
 */  
  
public function initController(RequestInterface $request,  
ResponseInterface $response, LoggerInterface $logger)  
{  
    // Do Not Edit This Line  
  
    parent::initController($request  
, $response, $logger);  
  
    // Preload any models, libraries, etc, here.  
  
    // E.g.: $this->session = service('session');  
}  
}  
  
AuthController.php  
<?php
```

```
namespace App\Controllers;

use
App\Models\U
serModel; use
CodeIgniter\Co
ntroller;

class AuthController extends Controller
{
    // Show login page
    (optional if you have a view)

    public function loginView()
    {
        return view('login');
    }
    //
    Handle
    login
    public
    function
    login()
    {
        $userModel = new UserModel();
```

```
$username = $this->request->getPost('username');
$password = $this->request->getPost('password');

// Check if username exists
$user = $userModel->checkUser($username);

if ($user && password_verify($password, $user['password'])) {
    // Set
    session data
    session()->set([
        'isLoggedIn' => true,
        'user_id'   => $user['id'],
        'username'  => $user['username']
    ]);

    return redirect()->to('/dashboard'); // redirect to dashboard after login
}

return redirect()->back()->with('error', 'Invalid username or password.');
}

// Logout
user
public
```

```
function

logout()

{
    session()->destroy();

return redirect()->to('/?logout=1');

;

}

}
```

Routes:

```
<?php

use CodeIgniter\Router\RouteCollection;

/** @var RouteCollection $routes

 */
$routes->get('/', 'AuthController::loginView');

$routes->post('/login', 'AuthController::login');

$routes->get('/logout', 'AuthController::logout');

$routes->get('/products/cards', 'ProductController::cards');

$routes->get('/dashboard', 'ProductController::index');

$routes->get('product/productForm', 'ProductController::add');
```

```
$routes->post('products/store', 'ProductController::create');

$routes->get('products/edit/(:num)', 'ProductController::editForm/$1');

$routes->post('products/update/(:num)', 'ProductController::update/$1');

$routes->get('products/delete/(:num)', 'ProductController::delete/$1');
```

Video Link:

<https://www.facebook.com/jhomel.natividad.2024/videos/1179391254319764/?fs=e&mibextid=wwXlfr&rdid=bljBLJntNpwNPRIq#>