

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

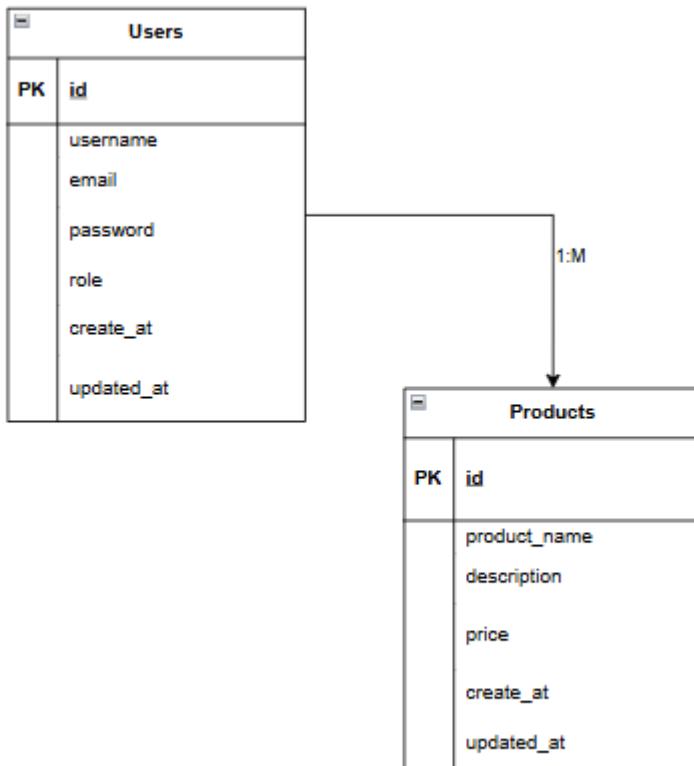


Table Structure

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: Barcode Generator (External API)

In the **Product Cards** view, barcodes are generated using the **bwig-js barcode API**.

Purpose:

To display a **Code128 barcode** based on the product id for easier product identification.

Sample Endpoint Format:

- https://bwipjs-api.metafloor.com/?bcid=code128&text={PRODUCT_ID}&scale=3&height=8&includeText&textsize=10...

Implementation:

The system constructs a barcode URL per product and shows it using an tag in the card layout.

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

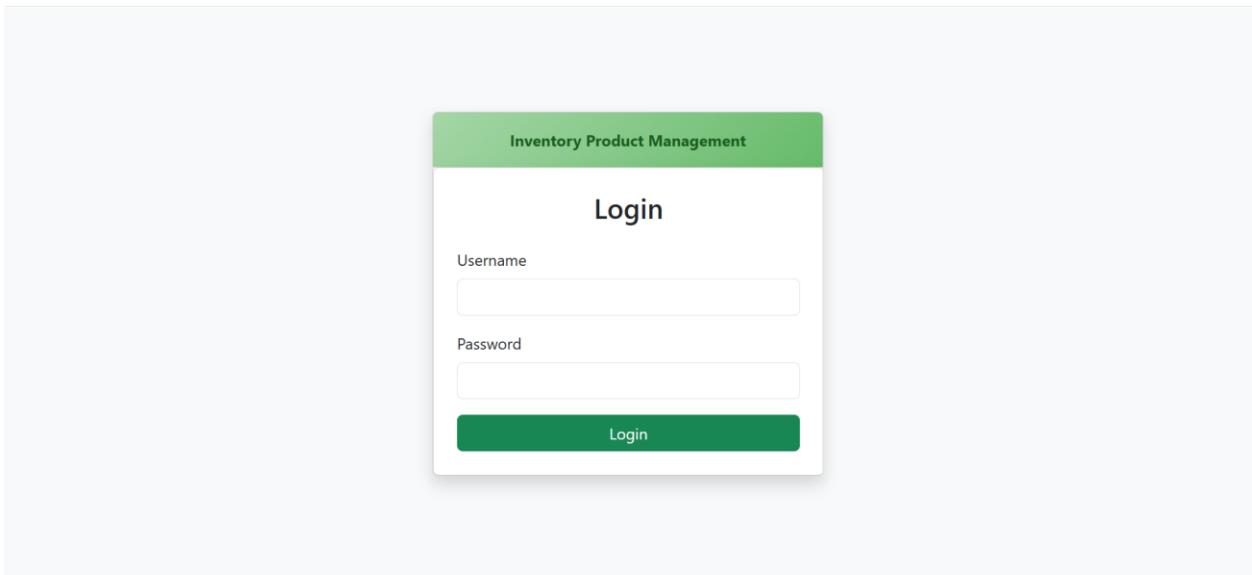
Implemented Security Measures

- **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 allows the user to enter a username and password, then submits to /login to verify credentials and start a session before redirecting to the dashboard.

Product_View.php

A screenshot of the "Product View" page. On the left, there's a sidebar with buttons for "Inventory Product Management", "Products (Table)", "Product Cards", and "+ Add Product". At the bottom of the sidebar is a "Logout" button. The main area is titled "Product List". It shows a summary box with a "Total Products" count of 4. Below it is a search bar with a magnifying glass icon and a clear button. A table lists four products with columns for Product Name, Description, Price (₱), Created At, Updated At, and Actions (Edit and Delete buttons).

Product Name	Description	Price (₱)	Created At	Updated At	Actions
Polvoronsssss	Masarap	10.00	Dec, 09 2025	Dec, 10 2025	<button>Edit</button> <button>Delete</button>
USB Keyboard		100.00	Dec, 10 2025	Dec, 10 2025	<button>Edit</button> <button>Delete</button>
dasdas	sadasda	100.00	Dec, 10 2025	Dec, 10 2025	<button>Edit</button> <button>Delete</button>
asas	dads	23,123.00	Dec, 10 2025	Dec, 10 2025	<button>Edit</button> <button>Delete</button>

The product view displays all products in a table with search, pagination, and edit/delete actions for managing inventory records.

Product_Cards.php

The screenshot shows a dashboard titled "Inventory Product Management". On the left, there's a sidebar with links: "Products (Table)", "Product Cards" (which is highlighted in green), and "+ Add Product". Below the sidebar is a "Logout" button. The main area is titled "Product Cards" and shows a total of 4 items. Each item is presented in a card format with a barcode and its ID (1, 2, or 3). The items listed are:

- Polvoronssss (ID: 1, Price: ₱ 10.00)
- USB Keyboard (ID: 2, Price: ₱ 100.00)
- dasdas (ID: 3, Price: ₱ 100.00)
- asas (ID: 4, Price: ₱ 23,123.00)

Each card has "Edit" and "Delete" buttons at the bottom.

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

Add_Product.php

The screenshot shows a dashboard with a sidebar containing "Products (Table)", "Product Cards", and "+ Add Product" (highlighted in green). A "Logout" button is also present. The main content area is a modal titled "+ ADD PRODUCT" with fields for "PRODUCT NAME", "DESCRIPTION", and "\$ PRICE (₱)". It includes a "BACK" button and a "SAVE PRODUCT" button with a checkmark icon.

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 mobile-style application interface titled "EDIT PRODUCT". The form contains the following fields:

- PRODUCT NAME:** A text input field containing "USB Keyboard".
- DESCRIPTION:** An empty text input field.
- PRICE (\$):** A text input field containing "100.00".

At the bottom of the form are two buttons: "BACK" and "UPDATE PRODUCT".

The edit product page loads an existing product's data into a form so the user can update it and save changes 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

Codes:

Views:

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) --&gt;
&lt;?php if (isset($_GET['logout']) &amp;&amp; $_GET['logout'] == '1'): ?&gt;
&lt;script&gt;
    window.alert("Successfully Logged Out");
&lt;/script&gt;
&lt;?php endif; ?&gt;

<!-- 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;
        &lt;input type="password" name="password" id="password" class="form-control" required&gt;
    &lt;/div&gt;

    &lt;button type="submit" class="btn btn-success w-100"&gt;Login&lt;/button&gt;
&lt;/form&gt;
&lt;/div&gt;
&lt;?php

?&gt;

&lt;/body&gt;
&lt;/html&gt;
</pre>

```

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://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:#ffffff !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 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(234,246,236,.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);
    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.show{
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>

```

```
</a>

-->

</nav>

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

<!-- Logout moved here -->
<div class="sidebar-logout">
  <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;!-- Header --&gt;
    &lt;div class="mb-4"&gt;
      &lt;h2 class="text-dark mb-3"&gt;Product List&lt;/h2&gt;

      &lt;div class="row align-items-center"&gt;
        &lt;!-- Total Products Card --&gt;
        &lt;div class="col-md-4 mb-3 mb-md-0"&gt;
          &lt;div class="card shadow-sm border-0 card-green"&gt;
            &lt;div class="card-body text-center py-3"&gt;
              &lt;div class="d-flex align-items-center justify-content-center"&gt;
                &lt;div class="me-3"&gt;
                  &lt;i class="fas fa-box" style="font-size: 1.8rem; opacity: 0.8;"&gt;&lt;/i&gt;
                &lt;/div&gt;
                &lt;div&gt;
                  &lt;h4 class="mb-0 fw-bold text-white"&gt;&lt;?= $totalProducts ?&gt;&lt;/h4&gt;
                  &lt;p class="mb-0 small opacity-90 text-white"&gt;Total Products&lt;/p&gt;
                &lt;/div&gt;
              &lt;/div&gt;
            &lt;/div&gt;
          &lt;/div&gt;
        &lt;/div&gt;
      &lt;/div&gt;
    &lt;/div&gt;
  &lt;/div&gt;
&lt;/main&gt;</pre
```

```
<!-- 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') ?>
</div>
```

```

<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']) ?>" class="btn btn-green btn-sm">
<i class="bi bi-pencil"></i> Edit
</a>
<a href=<?= base_url('products/delete/' . $product['id']) ?>" class="btn btn-green btn-sm"
onclick="return confirm('Are you sure you want to delete this product?');">
<i class="bi bi-trash"></i> Delete
</a>

```

```

        </td>
    </tr>
<?php endforeach; ?>
<?php else: ?>
<tr>
    <td colspan="6" class="text-muted">No products found.</td>
</tr>
<?php endif; ?>
</tbody>
</table>

<!-- Pagination --&gt;
&lt;?php if ($totalPages &gt; 1): ?&gt;
&lt;nav aria-label="Product pagination" class="mt-4"&gt;
    &lt;ul class="pagination justify-content-center"&gt;
        &lt;?php if ($currentPage &gt; 1): ?&gt;
            &lt;li class="page-item"&gt;
                &lt;a class="page-link" href=&lt;?= 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=&lt;?= 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; $totalPages): ?&gt;
            &lt;li class="page-item"&gt;
                &lt;a class="page-link" href=&lt;?= base_url('?page=' . ($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;
</pre>

```

```

<li class="page-item disabled">
    <span class="page-link" aria-label="Next"><span aria-hidden="true">&raquo;</span></span>
</li>
<?php endif; ?>
</ul>
</nav>

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

</div>
</main>

<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();
    const description = row.cells[1].textContent.toLowerCase();
    const price = row.cells[2].textContent.toLowerCase();

    if (searchTerm === "" || productName.includes(searchTerm) ||
        description.includes(searchTerm) ||
        price.includes(searchTerm)) {
      row.style.display = "";
      visibleRows++;
    } else {
      row.style.display = 'none';
    }
  });

  if (searchTerm !== "" && visibleRows === 0) {
    if (noProductsRow) {
      noProductsRow.innerHTML = 'No products found matching your search.';
      noProductsRow.parentElement.style.display = "";
    }
  } 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.display = "";
}
```

```

        if (paginationInfo) paginationInfo.style.display = "";
    }

}

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

}

searchBtn.addEventListener('click', performSearch);
clearBtn.addEventListener('click', clearSearch);
searchInput.addEventListener('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://cdn.jsdelivr.net/npm/@fortawesome/fontawesome-free@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') ?&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" 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 class="content"&gt;
&lt;div class="container"&gt;
    &lt;div class="d-flex align-items-center justify-content-between flex-wrap gap-2 mb-3"&gt;
        &lt;div&gt;
            &lt;h2 class="mb-1"&gt;Product Cards&lt;/h2&gt;
            &lt;div class="text-muted small"&gt;Total: &lt;?= esc($totalProducts ?? 0) ?&gt;&lt;/div&gt;
        &lt;/div&gt;
    &lt;/div&gt;
&lt;/div&gt;

&lt;div class="row g-3"&gt;
&lt;?php if (!empty($products) &amp;&amp; is_array($products)): ?&gt;
    &lt;?php foreach ($products as $p): ?&gt;
        &lt;?php
            $barcodeText = (string)($p['id'] ?? "");
            $barcodeUrl = 'https://bwipjs-api.metafloor.com/?bcid=code128'
            . '&amp;text=' . urlencode($barcodeText)
        &lt;/?php
    &lt;/?php endforeach; ?&gt;
&lt;/div&gt;
</pre

```

```

. '&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">
<img
src=<?= esc($barcodeUrl) ?>" alt="Barcode for product <?= esc($barcodeText) ?>" 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']) ?>" class="btn btn-success btn-sm w-50">
<i class="bi bi-pencil"></i> Edit
</a>
<a href=<?= base_url('products/delete/' . $p['id']) ?>" class="btn btn-success btn-sm w-50"
onclick="return confirm('Are you sure you want to delete this product?');">
<i class="bi bi-trash"></i> Delete
</a>
</div>
</div>
<?php endforeach; ?>

```

```

<?php else: ?>
<div class="col-12">
    <div class="alert alert-light border">No products found.</div>
</div>
<?php endif; ?>
</div>
</div>
</main>

<script>
document.addEventListener('DOMContentLoaded', function () {
    const sidebar = 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-container {  
    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 0.2rem 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 !important;
    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']) ?" 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"
                            value="= esc($product['product_name']) ?" 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">= esc($product['description']) ?</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"
        value="= esc($product['price']) ?&gt;" required&gt;
    &lt;/div&gt;

    &lt;div class="d-flex justify-content-between"&gt;
        &lt;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-outline-primary"&gt;&lt;i class="bi bi-arrow-repeat me-2"&gt;&lt;/i&gt;Update Product&lt;/button&gt;
    &lt;/div&gt;
&lt;/form&gt;
&lt;/div&gt;
&lt;/div&gt;
&lt;/body&gt;
&lt;/html&gt;
</pre

```

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://cdn.jsdelivr.net/npm/@fortawesome/fontawesome-free@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:#1f2d3d;
            --muted:#6b7280;
        }
    </style>

```

```
--sidebar-w: 270px;
}

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

/* ===== 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 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(234,246,236,.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);  
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.show{  
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:#1b5e20 !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:.75rem 1.5rem;
    border-radius: 8px !important;
    transition: all .3s ease;
}
```

```
.btn-green{
    background:#43a047 !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: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{ 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>
</div>

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

  &lt;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;
</pre
```

```

<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">
<div class="form-container">
<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') ?&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" 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;/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" required&gt;
&lt;/div&gt;

&lt;div class="d-flex justify-content-between"&gt;
&lt;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;
</pre

```

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

<script>
document.addEventListener('DOMContentLoaded', function () {
  const sidebar = 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>
```

Models:

UserModel.php

```
<?php

namespace App\Models;

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)

    {

        return $this->where('username', $username)->first();

    }

    // Hash password using bcrypt

    public function hashPassword($password)

    {

        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($data) {

        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($id) {
    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()->setflashdata('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\Controller;
use CodeIgniter\HTTP\CLIRequest;
use CodeIgniter\HTTP\IncomingRequest;
use CodeIgniter\HTTP\RequestInterface;
use CodeIgniter\HTTP\ResponseInterface;
use Psr\Log\LoggerInterface;
```

```
/**
```

```
* 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\UserModel;
use CodeIgniter\Controller;

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#>