

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

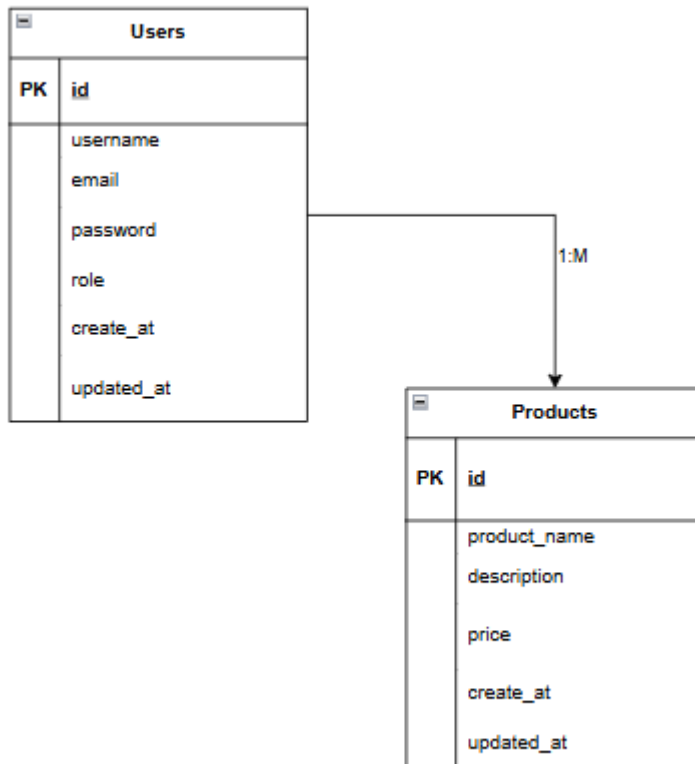


Table Structure

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:
 - 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!”

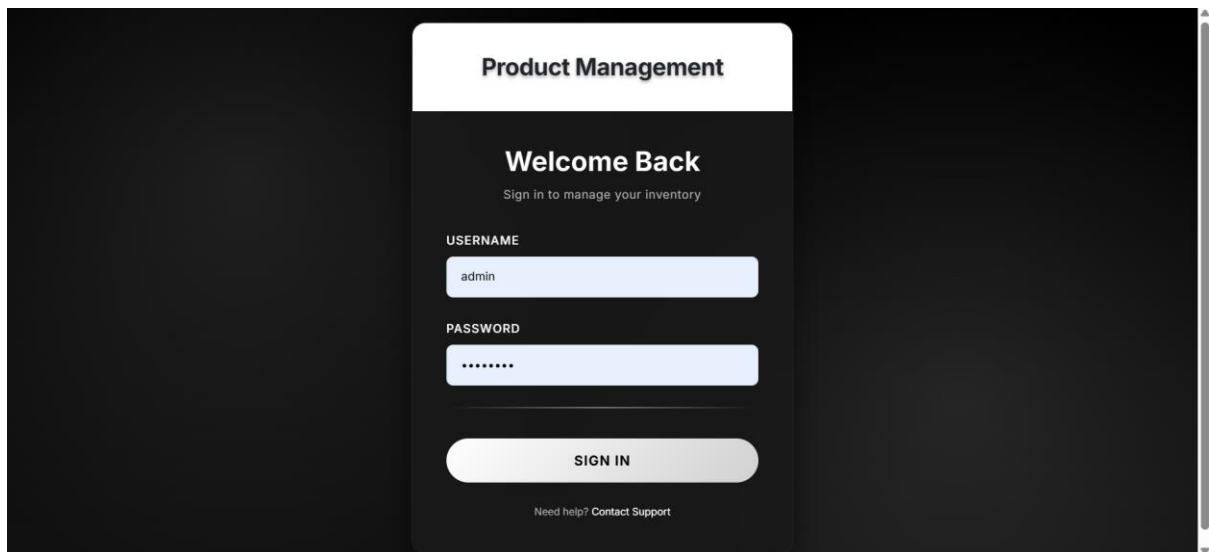
7. Security Implementation – password hashing and CSRF protection

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()`).

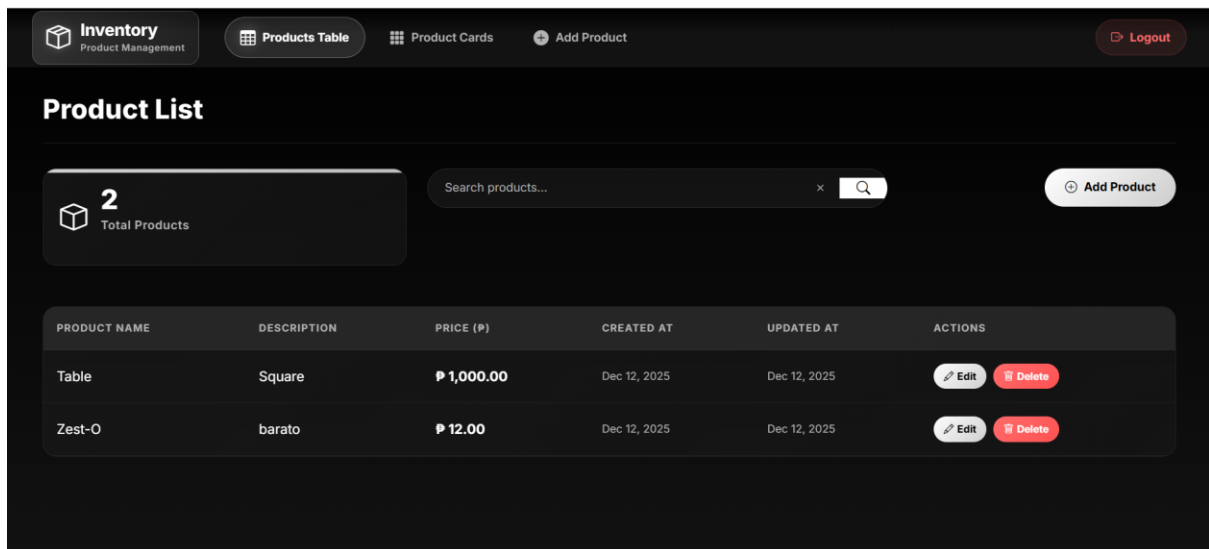
(Optional improvement: protect routes like /dashboard with CI4 Filters to block access when not logged in.)

8. Testing and Validation



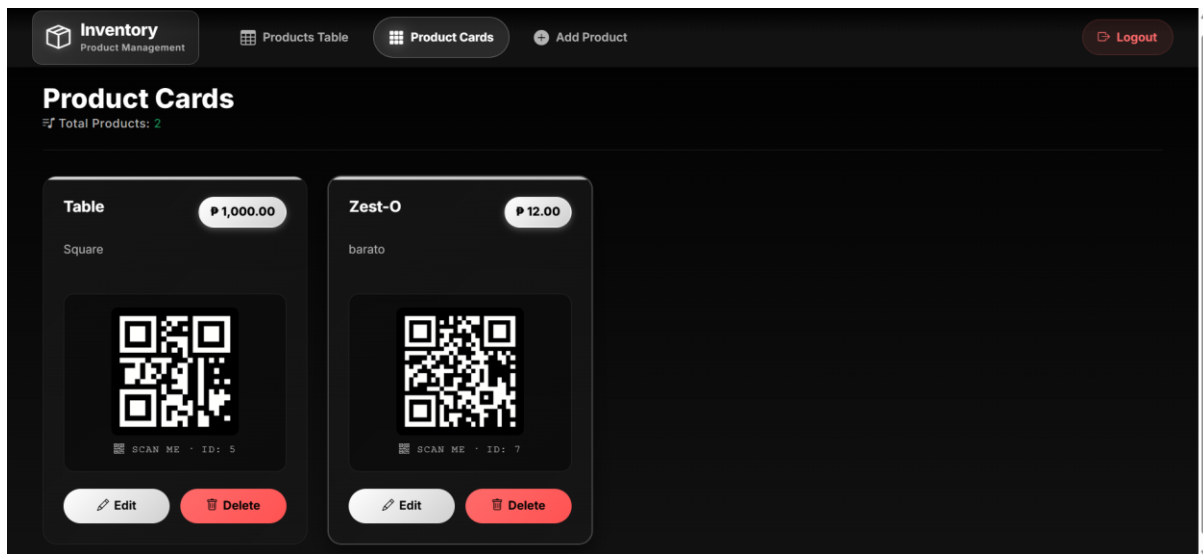
The login page lets users enter their username and password, then submits the form to **/login** where the system validates the credentials, creates a user session, and redirects the user to the dashboard upon successful authentication.

Product_View.php



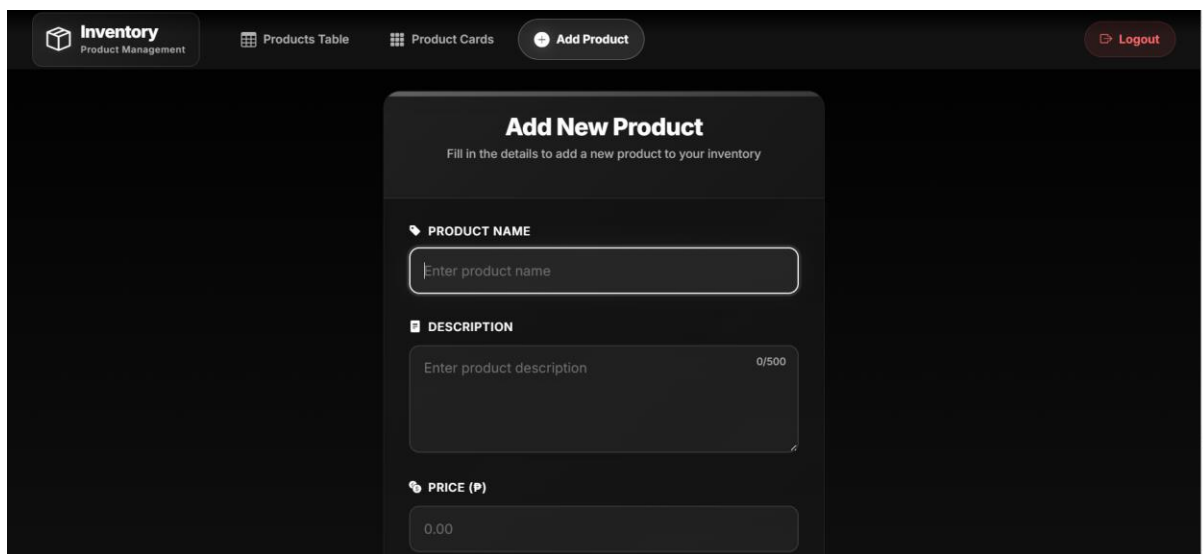
The product view presents all records in a tabular format, providing options to view, edit, and delete entries, allowing users to efficiently manage and maintain the stored data.

Product_Cards.php



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

Add_Product.php



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 web application interface for editing a product. At the top, there is a navigation bar with the following elements: a logo for 'Inventory Product Management', a 'Products Table' link, a 'Product Cards' link, an 'Add Product' button, and a 'Logout' button. The main content area is a dark modal titled 'Edit Product' with a sub-header 'Update the details for Table' and a product ID of 'ID: 5'. The form contains three sections: 'PRODUCT NAME' with a text input field containing 'Table'; 'DESCRIPTION' with a text area containing 'Square' and a character count '6/500'; and 'PRICE (P)' with a text input field containing '1000.00'.

Inventory
Product Management

Products Table Product Cards Add Product Logout

Edit Product

ID: 5
Update the details for Table

PRODUCT NAME

Table

DESCRIPTION

Square 6/500

PRICE (P)

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 -->

<?php if(isset($validation) && $validation->hasError('username')): ?>

    <div class="alert alert-danger">

        <?= $validation->getError('username') ?>

    </div>

<?php endif; ?>

<?php if(isset($validation) && $validation->hasError('password')): ?>

    <div class="alert alert-danger">

        <?= $validation->getError('password') ?>

    </div>

<?php endif; ?>


<form action="<?= base_url('/login') ?>" method="post">

    <div class="mb-3">

        <label for="username" class="form-label">Username</label>

        <input type="text" name="username" id="username" class="form-
control" required>

    </div>


    <div class="mb-3">

        <label for="password" class="form-label">Password</label>
```

```
        <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://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:#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>

</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']) ?>"
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 -->

```

```

<?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)) ?>" aria-label="Previous">

<span aria-hidden="true">&laquo;</span>

</a>

</li>

<?php else: ?>

<li class="page-item disabled">

<span class="page-link" aria-label="Previous"><span aria-
hidden="true">&laquo;</span></span>

</li>

<?php endif; ?>

<?php for ($i = 1; $i <= $totalPages; $i++): ?>

<?php if ($i == $currentPage): ?>

<li class="page-item active"><span class="page-link"><?= $i
?></span></li>

<?php else: ?>

<li class="page-item"><a class="page-link" href="<?=
base_url('?page=' . $i) ?>"><?= $i ?></a></li>

<?php endif; ?>

<?php endfor; ?>

<?php if ($currentPage < $totalPages): ?>

<li class="page-item">

```

```
        <a class="page-link" href="<?= base_url('?page=' . ($currentPage +
1)) ?>" aria-label="Next">
```

```
        <span aria-hidden="true">&raquo;</span>
```

```
    </a>
```

```
</li>
```

```
<?php else: ?>
```

```
<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.toLowerCas
e();    const description =
row.cells[1].textContent.toLowerCas
e();    const price =
row.cells[2].textContent.toLowerCas
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.addEventListene
```

```
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']) ?>" 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>
```

```
</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
```

```
loaded', 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-  
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

!important

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']) ?>"
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"

```



```
<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);

backgroun

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') ?>">
    <i class="bi bi-grid-3x3-gap"></i>
    <span>Product Cards</span>
</a>
<a class="sidebar-link active" 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 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') ?>" 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') ?>" class="btn btn-outline-
secondary">
    <i class="bi bi-arrow-left me-2"></i>Back
  </a>
  <button type="submit" class="btn btn-green">
    <i class="bi bi-check-circle me-2"></i>Save Product
  </button>
</div>
</form>
</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:

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($password)

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()->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\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\User
```

```
Model; 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=wwXIfr&rdid=bljBLJntNpwNPRIq#>