

BINUS University

Academic Career: <i>Undergraduate / Master / Doctoral *)</i>		Class Program: <i>International / Regular / Smart Program / Global Class / BINUS Online Learning *)</i>
<input checked="" type="checkbox"/> Mid Exam <input type="checkbox"/> Compact Term Exam <input type="checkbox"/> Final Exam <input type="checkbox"/> Others Exam : _____		Term : Odd / Even / Compact *) Period (Only for BOL) : 4 / 2 *)
<input checked="" type="checkbox"/> Kemanggisan <input type="checkbox"/> Senayan <input type="checkbox"/> Semarang <input checked="" type="checkbox"/> Alam Sutera <input type="checkbox"/> Bandung <input checked="" type="checkbox"/> Bekasi <input type="checkbox"/> Malang		Academic Year : 2022 / 2023
Exam Type* : <input type="checkbox"/> Onsite / <input type="checkbox"/> Online	Faculty / Dept. : School of Computer Science	
Day / Date** : Sabtu / 6 Mei 2023	Code - Course : COMP6051016 – Web Programming COMP6051049 – Web Programming	
Time** : 13:00	Code - Lecturer : Team Teaching	
Exam Specification*** : <input type="checkbox"/> Open Book <input type="checkbox"/> Open Notes <input type="checkbox"/> Close Book <input type="checkbox"/> Submit Project <input type="checkbox"/> Open E-Book <input type="checkbox"/> Oral Test	BULC (Only for BOL) : - Class : All Classes	
Equipment*** : <input type="checkbox"/> Exam Booklet <input type="checkbox"/> Laptop <input type="checkbox"/> Drawing Paper – A3 <input type="checkbox"/> Calculator <input type="checkbox"/> Tablet <input type="checkbox"/> Drawing Paper – A2 <input type="checkbox"/> Dictionary <input type="checkbox"/> Smartphone <input type="checkbox"/> Notes	Student ID *** : Name *** : Signature *** :	
*) <i>Strikethrough the unnecessary items</i> **) <i>For Online Exam, this is the due date</i> ***) <i>Only for Onsite Exam</i>		
<i>Please insert the test paper into the exam booklet and submit both papers after the test.</i> <i>The penalty for CHEATING is DROP OUT!</i>		

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Kelas: LA05

Link File Kodingan:

https://binusian.org-my.sharepoint.com/personal/daniel_chandra001_binus_ac_id/_layouts/15/guestaccess.aspx?docId=0066107550ae6441a8cf58f21c99d1d6b&authkey=AXIJvghey-tRDNGdiLZcVFl&e=1okUpE

1. Konsep MVC

MVC merupakan sebuah code program design arsitektur dimana tujuannya untuk membagi code program menjadi 3 komponen dengan tasksnya masing masing:

- Model, bagian akses database.
- View, bagian desain tampilan (user interface)
- Controller, bagian aturan logika dari program

Aplikasinya sesuai prototype:

Model

Untuk mengatur database yang akan digunakan seperti data apa tidak boleh diisi(biasa mengacu kepada id) dan relationship masing-masing databasenya yaitu dimana database *product* akan memiliki hubungan “*belongsTo*” dengan database *brand* dan *category* dikarenakan setiap product pasti mempunyai brand dan category nya masing-masing sedangkan database *brand* dan *category* memiliki relationship “*hasMany*” dengan *product* dimana setiap satu brand/category bisa memiliki berbagai product didalamnya.

View

Digunakan untuk mengatur tampilan UI setiap halaman beserta data yang diperlukan untuk dimunculkan dalam sebuah halaman.

View yang digunakan:

- Home: tampilan default home
- Products: tampilan utama menampilkan seluruh item product
- Product: tampilan untuk single product ketika button detail diklik
- Categories: tampilan buat semua categories
- Category: tampilan buat single category beserta product yang berkaitan
- Brands: tampilan buat semua brand
- Brand: tampilan buat single brand ketika salah satu diklik beserta product yang berkaitan
- About: tampilan buat halaman About Us

Controller

Controller disini digunakan untuk mengatasi semua request handling logic dari closure pada bagian routing, dimana dengan controller maka memungkinkan untuk mengabunggkan/mengelompokkan request yang serupa yang saling terkait untuk menangani logic pada satu class controller. Yaitu dimana ketika menangani halaman yang menampilkan semua product dan single product, disinilah kita bisa mengatasi request tersebut menjadi satu buah controller “ProductController”, hal ini juga berlaku pada category dan brand.

2. Routing

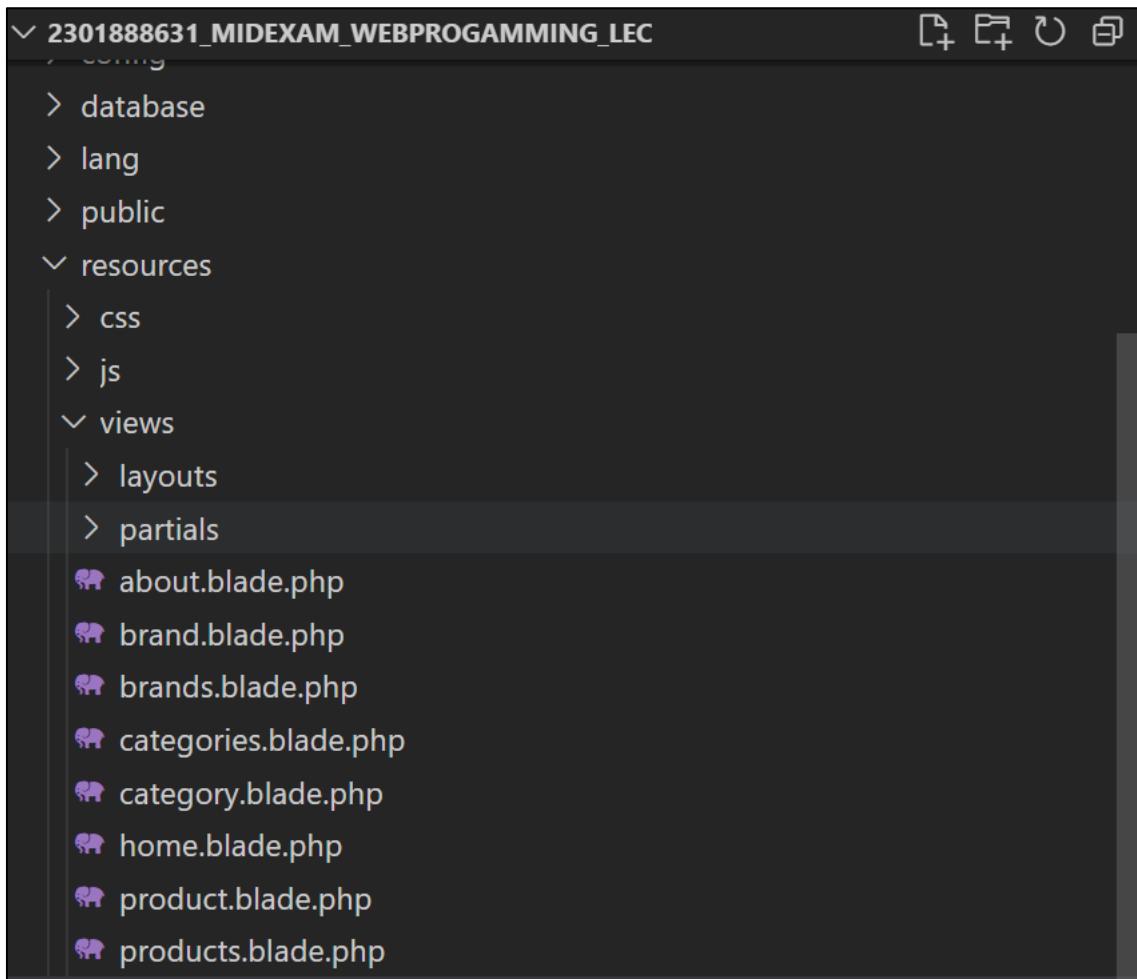
The screenshot shows a code editor interface with a dark theme. The top bar includes standard menu items: File, Edit, Selection, View, Go, Run, Terminal, Help, and a file navigation section. The title bar displays the file path: 2301888631_MidExam_WebProgramming_Lec. The left sidebar contains various icons for file operations like copy, paste, search, and refresh. The main editor area contains the following PHP routing code:

```
routes > web.php
1  <?php
2
3  use App\Models\Product;
4  use Illuminate\Support\Facades\Route;
5  use App\Http\Controllers\ProductController;
6
7
8  use App\Models\Category;
9  use App\Models\Brand;
10 use App\Http\Controllers\BrandController;
11 use App\Http\Controllers\CategoryController;
12 use App\Http\Controllers\AboutController;
13
14 // Default Home
15 Route::get('/', [ProductController::class, 'index']);
16
17 // Product
18 // Semua Product
19 Route::get('/products', [ProductController::class, 'index']);
20 //Buat Single Product
21 Route::get('products/{product}', [ProductController::class, 'show']);
22
23
24 // Category
25 Route::get('/categories', [CategoryController::class, 'index']);
26 // Single Category
27 Route::get('/categories/{category:category_slug}', [CategoryController::class, 'show']);
28
29 // Brand
30 Route::get('/brands', [BrandController::class, 'index']);
31 // Single Brand
32 Route::get('/brands/{brand:brand_slug}', [BrandController::class, 'show']);
33
34 // About
35 Route::get('/about', [AboutController::class, 'index']);
36
```

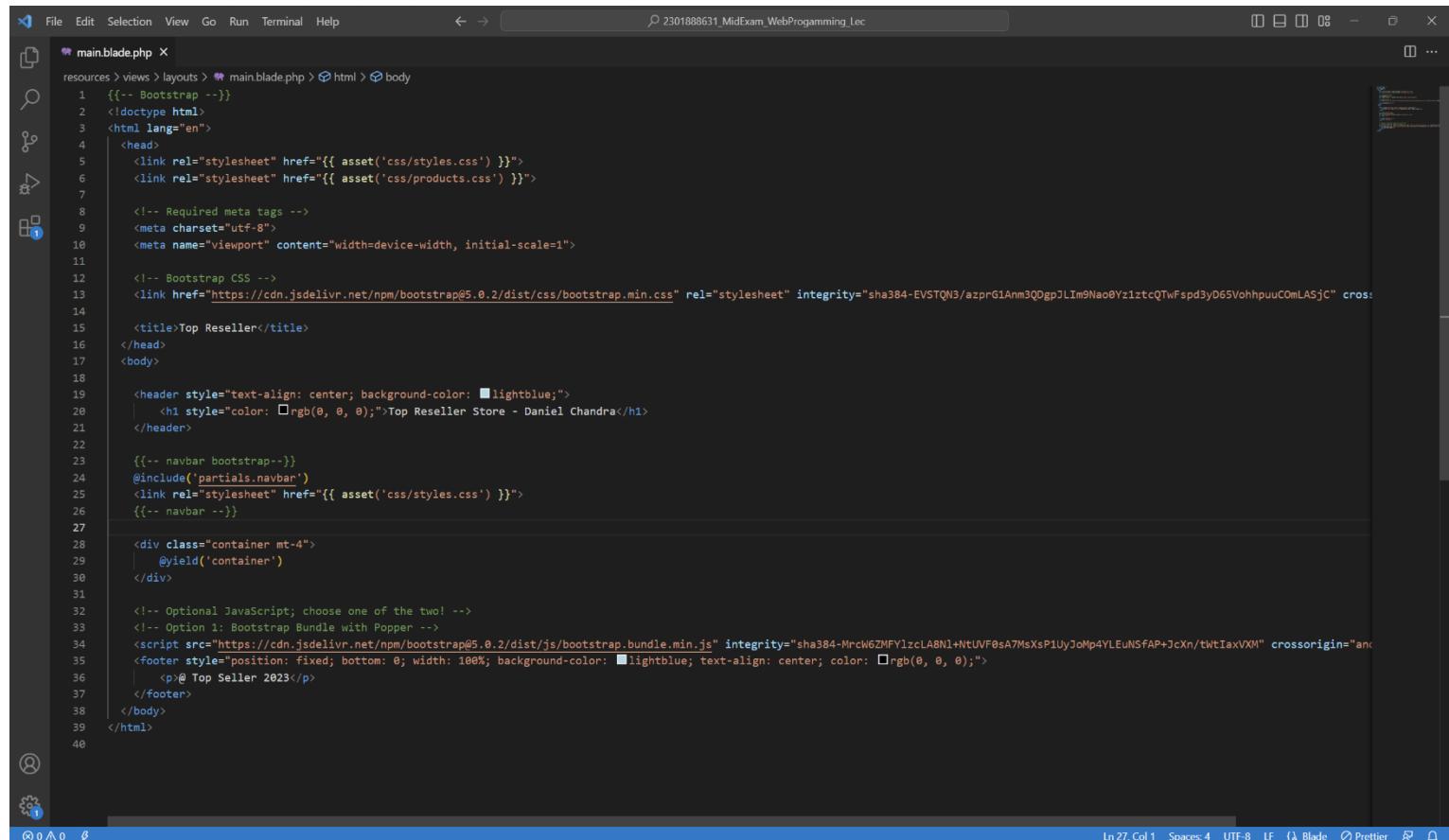
The status bar at the bottom right shows: Ln 14, Col 16, Spaces: 4, UTF-8, LF, PHP, Ø Prettier.

3. View

View yang digunakan:

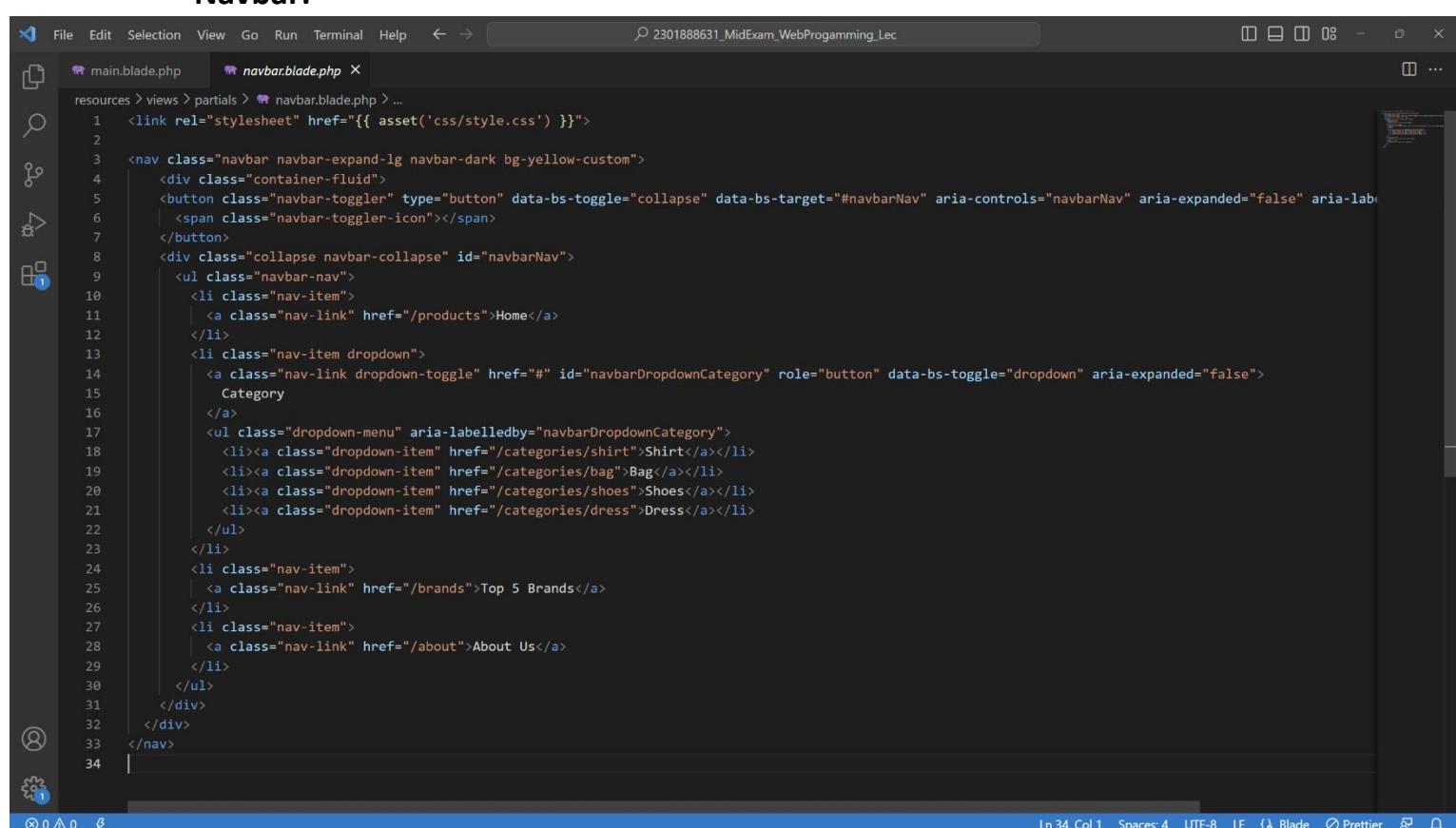


Layout yang digunakan:



```
File Edit Selection View Go Run Terminal Help 230188631.MidExam.WebProgramming.Lec
main.blade.php X
resources > views > layouts > main.blade.php > html > body
1  {{-- Bootstrap --}}
2  <!doctype html>
3  <html lang="en">
4    <head>
5      <link rel="stylesheet" href="{{ asset('css/styles.css') }}">
6      <link rel="stylesheet" href="{{ asset('css/products.css') }}">
7
8      <!-- Required meta tags -->
9      <meta charset="utf-8">
10     <meta name="viewport" content="width=device-width, initial-scale=1">
11
12     <!-- Bootstrap CSS -->
13     <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-EVSTQN3+azprG1Anm3QDgpJLIm9Nao0Yz1ztQQtWfpd3yD65VohppuComLASjC" crossorigin="anonymous">
14
15     <title>Top Reseller</title>
16   </head>
17   <body>
18
19     <header style="text-align: center; background-color: #lightblue;">
20       <h1 style="color: #rgb(0, 0, 0);>Top Reseller Store - Daniel Chandra</h1>
21     </header>
22
23     {{-- navbar bootstrap--}}
24     @include('partials.navbar')
25     <link rel="stylesheet" href="{{ asset('css/styles.css') }}">
26     {{-- navbar --}}
27
28     <div class="container mt-4">
29       @yield('container')
30     </div>
31
32     <!-- Optional JavaScript; choose one of the two! -->
33     <!-- Option 1: Bootstrap Bundle with Popper -->
34     <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js" integrity="sha384-MrcW6ZMFYlzcLA8Nl+A7MsXsP1UYjoMp4YLEuNSfAP+JcXn/tWtIaxXVM" crossorigin="anonymous"></script>
35     <footer style="position: fixed; bottom: 0; width: 100%; background-color: #lightblue; text-align: center; color: #rgb(0, 0, 0);>
36       <p>@ Top Seller 2023</p>
37     </footer>
38   </body>
39 </html>
```

Navbar:



```
File Edit Selection View Go Run Terminal Help 230188631.MidExam.WebProgramming.Lec
main.blade.php X navbar.blade.php X
resources > views > partials > navbar.blade.php > ...
1   <link rel="stylesheet" href="{{ asset('css/style.css') }}">
2
3   <nav class="navbar navbar-expand-lg navbar-dark bg-yellow-custom">
4     <div class="container-fluid">
5       <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
6         <span class="navbar-toggler-icon"></span>
7       </button>
8       <div class="collapse navbar-collapse" id="navbarNav">
9         <ul class="navbar-nav">
10           <li class="nav-item">
11             <a class="nav-link" href="/products">Home</a>
12           </li>
13           <li class="nav-item dropdown">
14             <a class="nav-link dropdown-toggle" href="#" id="navbarDropdownCategory" role="button" data-bs-toggle="dropdown" aria-expanded="false">
15               Category
16             </a>
17             <ul class="dropdown-menu" aria-labelledby="navbarDropdownCategory">
18               <li><a class="dropdown-item" href="/categories/shirt">Shirt</a></li>
19               <li><a class="dropdown-item" href="/categories/bag">Bag</a></li>
20               <li><a class="dropdown-item" href="/categories/shoes">Shoes</a></li>
21               <li><a class="dropdown-item" href="/categories/dress">Dress</a></li>
22             </ul>
23           </li>
24           <li class="nav-item">
25             <a class="nav-link" href="/brands">Top 5 Brands</a>
26           </li>
27           <li class="nav-item">
28             <a class="nav-link" href="/about">About Us</a>
29           </li>
30         </ul>
31       </div>
32     </nav>
```

Products.blade.php

```
File Edit Selection View Go ... ↵ → 🔍 2301888631_MidExam_WebProgammung_Lec ⏷ ...  
main.blade.php products.blade.php  
resources > views > products.blade.php > ...  
1 @extends('layouts.main')  
2 @section('container')  
3 <div class="banner">  
4 |     
5 </div>  
6 <div class="header" style="background-color: #orange;">  
7 |   <h1>All Items</h1>  
8 </div>  
9 <div class="container">  
10 |   <div class="card-deck">  
11 |       @foreach ($products as $product)  
12 |           <div class="card">  
13 |               item_name }}"/>  
14 |               <div class="card-body">  
15 |                   <h5 class="card-title">{{ $product->item_name }}</h5>  
16 |                   {{-- <p>Category: <a href="/categories/{{ $product->category->category_slug }}"/> class="text-decoration-none" style="color: #orange;">  
17 |                   <p><a href="/brands/{{ $product->brand->brand_slug }}"/> class="text-decoration-none" style="color: #orange;">  
18 |                       {{ $product->brand->brand_name }}</a></p>  
19 |                   <p>Rp. {{ $product->item_price }},-</p>  
20 |                   <a href="/products/{{ $product["id"] }}?image={{ $product->image_path }}" class="btn btn-primary">Detail</a>  
21 |               </div>  
22 |           </div>  
23 |       @endforeach  
24 |   </div>  
25 | </div>  
26 @endsection  
27
```

Ln 26, Col 12 Spaces: 4 UTF-8 LF { Blade ⚡ Prettier ⚡ }

Product.blade.php

```
File Edit Selection View Go ... ↵ → 🔍 2301888631_MidExam_WebProgammung_Lec ⏷ ...  
main.blade.php products.blade.php product.blade.php  
resources > views > product.blade.php > article.mb-5 > div.row > div.col-md-4 > img.border.border-dark  
1 @extends('layouts.main')  
2 @section('container')  
3 <article class="mb-5">  
4     <div class="row">  
5         <div class="col-md-4">  
6             item_name }}" style="width: 100%; max-width: 400px;"  
7                 class="border border-dark">  
8         </div>  
9         <div class="col-md-8">  
10            <h1>{{ $product->item_name }}</h1>  
11            {{-- <p>Category: <a href="/categories/{{ $product->category->category_slug }}"/> class="text-decoration-none" style="color: #ffa500; text-decoration: none;">  
12            |   {{ $product->category->category_name }}</a></p> --}}  
13            </a></p>  
14            <h3><a href="/brands/{{ $product->brand->brand_slug }}"/> style="color: #ffa500; text-decoration: none;">  
15            |   {{ str_replace('_', ' ', $product->brand->brand_name) }}</a></h3>  
16            </p>  
17            <h5 class="card-text">Rp. {{ $product->item_price }}/piece</h5>  
18            <p>Description:</p>  
19            <p class="card-text">{{ $product->item_desc }}</p>  
20            <button class="btn btn-primary" onclick="location.href='/products'">Back to Products</button>  
21        </div>  
22    </div>  
23 </article>  
24 <style>  
25     .border-dark {  
26         border: 10px solid #black;  
27     }  
28 </style>  
29 @endsection  
30
```

Ln 7, Col 13 Spaces: 4 UTF-8 LF { Blade ⚡ Prettier ⚡ }

Categories.blade.php

```
resources > views > categories.blade.php > ...
1  @extends('layouts.main')
2  @section('container')
3  <h1 class="mb-5"> Product Category</h1>
4  @foreach ($categories as $category)
5      <ul>
6          <li>
7              <h2>
8                  <a href="/categories/{{ $category->category_slug }}">
9                      {{ $category->category_name }}</a>
10                 </h2>
11             </li>
12         </ul>
13     @endforeach
14 @endsection
15
16
```

Category.blade.php

```
resources > views > category.blade.php > div.container > div.card-deck > div.card > div.card-body
1  @extends('layouts.main')
2  @section('container')
3  <div class="banner">
4  </div>
5  <h1 class="mb-5" style="background-color: orange; color: black;">Category : {{ $category }}</h1>
6  <div class="container">
7      <div class="card-deck">
8          @foreach ($products as $product)
9              <div class="card">
10                  
11                  <div class="card-body">
12                      <h5 class="card-title">{{ $product->item_name }}</h5>
13                      <p><a href="/brands/{{ $product->brand->brand_slug }}"/>{{ $product->brand->brand_name }}</a></p>
14                      <p>Rp.{{ $product->item_price }}</p>
15                      <a href="/products/{{ $product["id"] }}?image={{ $product->image_path }}" class="btn btn-primary">Detail</a>
16                  </div>
17              </div>
18          @endforeach
19      </div>
20  </div>
21 @endsection
22
23 @section('styles')
24     <style>
25         .card-deck .card img {
26             width: 100%;
27             height: 200px;
28             object-fit: cover;
29         }
30     </style>
31 @endsection
32
```

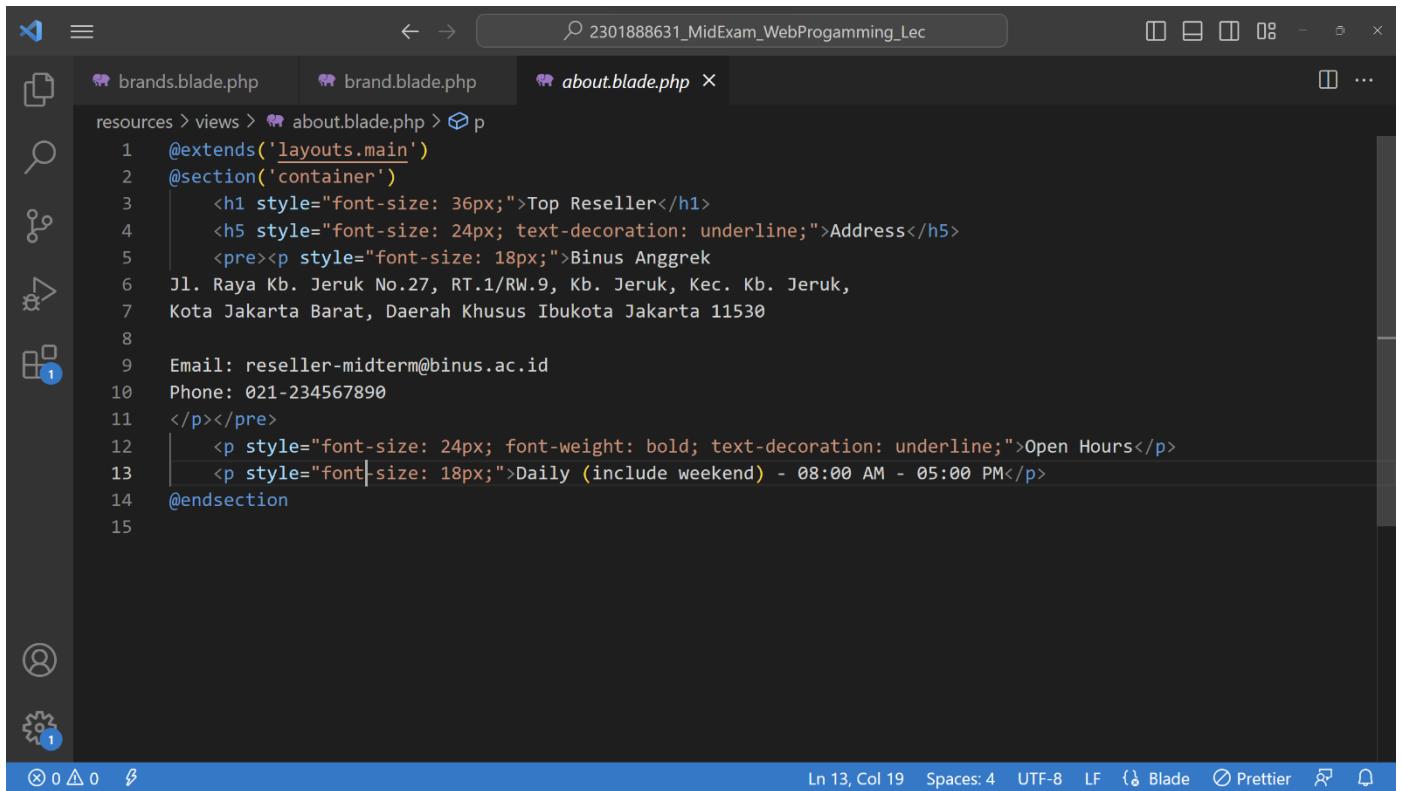
Brands.blade.php

```
<?php  
@extends('layouts.main')  
  
@section('container')  
    <h1 class="mb-5">Top 5 Brands</h1>  
  
    <div class="container mx-auto">  
        <div class="row justify-content-center">  
            @foreach ($brands as $brand)  
                <div class="col-md-2 mb-4">  
                    <a href="/brands/{{ $brand->brand_slug }}>  
                        <div class="card bg-dark text-white" style="width: 100%; height: 5cm;  
                            border: 2px solid black; overflow: hidden;">  
                            brand_name }}" style="width: 100%; height: 100%; object-fit: contain;">  
                            <div class="card-img-overlay d-flex align-items-center justify-content-center p-0">  
                                <h5 class="card-title text-center flex-fill fs-3" style="background-color: rgba(0, 0, 0, 0.7)">{{ $brand->brand_name }}</h5>  
                            </div>  
                        </div>  
                    </a>  
                </div>  
            @endforeach  
        </div>  
    @endsection
```

Brand.blade.php

```
<?php  
@extends('layouts.main')  
  
@section('container')  
    @foreach ($products as $product)  
        @if ($loop->first || $product->brand->id !== $previousBrandId)  
            @if (!$loop->first)  
                </div>  
            @endif  
            <div class="row mb-5">  
                <div class="col-md-3">  
                    brand->brand_name }}" style="width: 100%; height: 9cm; border: 2px solid black;">  
                </div>  
                <div class="col-md-9">  
                    <h1 style="color: #rgb(158, 103, 0); font-size: 45px;">{{ $product->brand->brand_name }}</h1>  
                    <p>Address: Palmerah - Indonesia</p>  
                    <p>Email: {{ $product->brand->brand_email }}</p>  
                    <p>Description:</p>  
                    <p>{{ $product->brand->brand_desc }}</p>  
                </div>  
            </div>  
            <h3 style="color: #rgb(196, 128, 3)">{{ $product->brand->brand_name }} Items</h3>  
        <div class="row">  
        @endif  
        <div class="col-md-3 mb-4">  
            <div class="card" style="border: 2px solid black;">  
                  
                <div class="card-body">  
                    <h5 class="card-title">{{ $product->item_name }}</h5>  
                    <p><a href="/brands/{{ $product->brand->brand_slug }}>{{ $product->brand->brand_name }}</a></p>  
                    <p>Rp.{{ $product->item_price }}</p>  
                    <a href="/products/{{ $product['id'] }}?image={{ $product->image_path }}" class="btn btn-primary">Detail</a>  
                </div>  
            </div>  
        </div>  
        @php  
            $previousBrandId = $product->brand->id;  
        @endphp  
    @endforeach  
    </div>  
    @endsection  
    @section('styles')  
        <style>  
            .card-img-top {  
                height: 200px;  
                object-fit: cover;  
            }</style>  
    @endsection
```

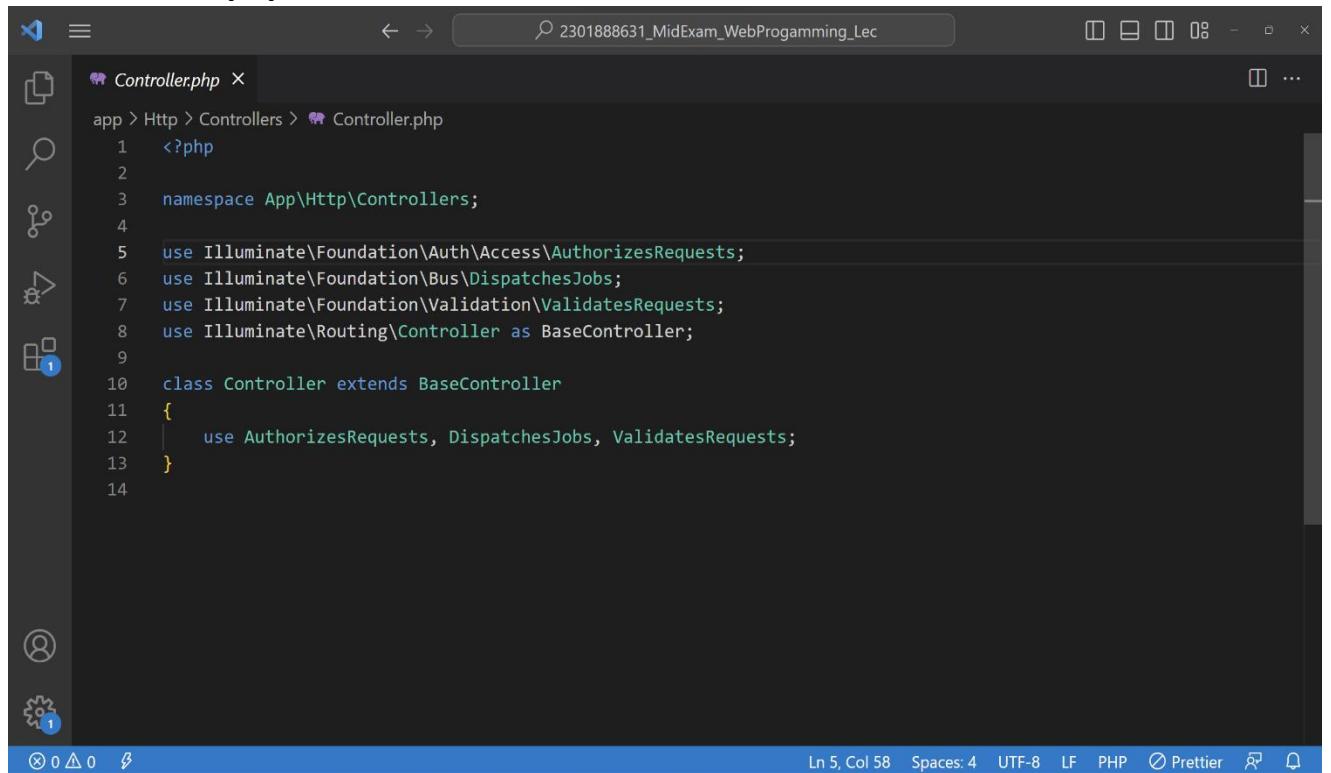
About.blade.php



```
brands.blade.php brand.blade.php about.blade.php X
resources > views > about.blade.php > p
1 @extends('layouts.main')
2 @section('container')
3     <h1 style="font-size: 36px;">Top Reseller</h1>
4     <h5 style="font-size: 24px; text-decoration: underline;">Address</h5>
5     <pre><p style="font-size: 18px;">Binus Anggrek
6 Jl. Raya Kb. Jeruk No.27, RT.1/RW.9, Kb. Jeruk, Kec. Kb. Jeruk,
7 Kota Jakarta Barat, Daerah Khusus Ibukota Jakarta 11530
8
9 Email: reseller-midterm@binus.ac.id
10 Phone: 021-234567890
11 </p></pre>
12     <p style="font-size: 24px; font-weight: bold; text-decoration: underline;">Open Hours</p>
13     <p style="font-size: 18px;">Daily (include weekend) - 08:00 AM - 05:00 PM</p>
14 @endsection
15
```

4. Controller

Controller.php



```
Controller.php X
app > Http > Controllers > Controller.php
1 <?php
2
3 namespace App\Http\Controllers;
4
5 use Illuminate\Foundation\Auth\Access\AuthorizesRequests;
6 use Illuminate\Foundation\Bus\DispatchesJobs;
7 use Illuminate\Foundation\Validation\ValidatesRequests;
8 use Illuminate\Routing\Controller as BaseController;
9
10 class Controller extends BaseController
11 {
12     use AuthorizesRequests, DispatchesJobs, ValidatesRequests;
13 }
14
```

ProductController

A screenshot of a code editor showing the `ProductController.php` file. The file is located at `app > Http > Controllers > ProductController.php`. The code defines a `ProductController` class that extends `Controller`. It contains two methods: `index()` and `show(Product $product)`. The `index()` method returns a view named `'products'` with data for the title and a list of products. The `show()` method returns a view named `'product'` with data for the title, product, and image path.

```
<?php  
namespace App\Http\Controllers;  
use Illuminate\Http\Request;  
use App\Models\Product;  
  
class ProductController extends Controller  
{  
    //  
    public function index()  
    {  
        return view('products',[  
            "title" => "Products",  
            "products" => Product::all()  
        ]);  
    }  
  
    public function show(Product $product){  
        return view('product',[  
            "title" => "Single Product",  
            "product" => $product,  
            "imagePath" => asset($product->image_path),  
        ]);  
    }  
}
```

Ln 10, Col 7 Spaces: 4 UTF-8 LF PHP ⚙️ Prettier ⚙️

CategoryController

A screenshot of a code editor showing the `CategoryController.php` file. The file is located at `app > Http > Controllers > CategoryController.php`. The code defines a `CategoryController` class that extends `Controller`. It contains two methods: `index()` and `show(Category $category)`. The `index()` method returns a view named `'categories'` with data for the category name and a list of categories. The `show()` method returns a view named `'category'` with data for the category name, products, and category name.

```
<?php  
namespace App\Http\Controllers;  
use App\Models\Category;  
use Illuminate\Http\Request;  
  
class CategoryController extends Controller  
{  
    public function index()  
    {  
        return view('categories',[  
            'category_name' => 'Product Categories',  
            'categories' => Category::all(),  
        ]);  
    }  
  
    public function show(Category $category)  
    {  
        return view('category',[  
            'category_name' => $category->category_name,  
            'products' => $category->products,  
            'category' => $category->category_name,  
        ]);  
    }  
}
```

Ln 9, Col 2 Spaces: 4 UTF-8 LF PHP ⚙️ Prettier ⚙️

BrandController

A screenshot of a code editor showing the `BrandController.php` file. The file is located at `app > Http > Controllers > BrandController.php`. The code defines two methods: `index()` and `show($brand)`. The `index()` method returns a view named `'brands'` with data for a brand name and all brands. The `show()` method returns a view named `'brand'` with data for a specific brand, its products, and its brand name.

```
<?php  
namespace App\Http\Controllers;  
  
use App\Models\Brand;  
use Illuminate\Http\Request;  
  
class BrandController extends Controller  
{  
    public function index()  
    {  
        return view('brands',[  
            'brand_name' => 'Product Brands',  
            'brands' => Brand::all(),  
        ]);  
    }  
  
    public function show($brand)  
    {  
        return view('brand',[  
            'brand_name' => $brand->brand_name,  
            'products' => $brand->products,  
            'brand' => $brand->brand_name,  
        ]);  
    }  
}
```

Ln 18, Col 39 Spaces: 4 UTF-8 LF PHP ⚙️ Prettier ⚙️ 🔍

About Controller

A screenshot of a code editor showing the `AboutController.php` file. The file is located at `app > Http > Controllers > AboutController.php`. The code defines one method, `index()`, which returns a view named `'about'` with a title of "About".

```
<?php  
namespace App\Http\Controllers;  
  
use Illuminate\Http\Request;  
  
class AboutController extends Controller  
{  
    public function index()  
    {  
        return view('about',[  
            "title" => "About"  
        ]);  
    }  
}
```

Ln 16, Col 1 Spaces: 4 UTF-8 LF PHP ⚙️ Prettier ⚙️ 🔍

5. Model

Product

The screenshot shows a code editor with the Product.php file open. The file is located at app > Models > Product.php. The code defines a Product model that extends the Illuminate\Database\Eloquent\Model class and uses the HasFactory trait. It has protected attributes and methods for category and brand.

```
<?php  
namespace App\Models;  
use App\Models\Brand;  
use App\Models\Category;  
use Illuminate\Database\Eloquent\Model;  
use Illuminate\Database\Eloquent\Factories\HasFactory;  
  
class Product extends Model  
{  
    use HasFactory;  
  
    protected $guarded = ['id'];  
  
    public function category(){  
        return $this->belongsTo(Category::class);  
    }  
  
    public function brand(){  
        return $this->belongsTo(Brand::class);  
    }  
}
```

Ln 14, Col 33 Spaces: 4 UTF-8 LF PHP ⚙ Prettier ⌂ ⌂

Category

The screenshot shows a code editor with the Category.php file open. The file is located at app > Models > Category.php. The code defines a Category model that extends the Illuminate\Database\Eloquent\Model class and uses the HasFactory trait. It has protected attributes and a products method that returns ahasMany relationship to the Product model.

```
<?php  
namespace App\Models;  
use Illuminate\Database\Eloquent\Factories\HasFactory;  
use Illuminate\Database\Eloquent\Model;  
  
class Category extends Model  
{  
    use HasFactory;  
  
    protected $guarded = ['id'];  
  
    public function products(){  
        return $this->hasMany(Product::class);  
    }  
}
```

Ln 14, Col 29 Spaces: 4 UTF-8 LF PHP ⚙ Prettier ⌂ ⌂

Brand

The screenshot shows a code editor with the Brand.php file open. The file is located at app > Models > Brand.php. The code defines a Brand model that extends the Illuminate\Database\Eloquent\Model class and uses the HasFactory trait. It has protected attributes and a products method that returns ahasMany relationship to the Product model.

```
<?php  
namespace App\Models;  
use Illuminate\Database\Eloquent\Factories\HasFactory;  
use Illuminate\Database\Eloquent\Model;  
  
class Brand extends Model  
{  
    use HasFactory;  
  
    protected $guarded = ['id'];  
  
    public function products(){  
        return $this->hasMany(Product::class);  
    }  
}
```

Ln 12, Col 33 Spaces: 4 UTF-8 LF PHP ⚙ Prettier ⌂ ⌂

6. Seeder & Migration

DatabaseSeeder

```

File Edit Selection View Go Run Terminal Help ↵ → 230188631_MidExam.WebProgramming_Lec
Database > seeders > DatabaseSeeder.php
1  <?php
2
3  namespace Database\Seeders;
4
5  use Illuminate\Database\Console\Seeds\WithoutModelEvents;
6  use Illuminate\Database\Seeder;
7  use App\Models\Product;
8  use App\Models\Category;
9  use App\Models\Brand;
10
11 class DatabaseSeeder extends Seeder
12 {
13
14     /**
15      * Seed the application's database.
16      *
17      * @return void
18     */
19     public function run()
20     {
21         // \App\Models\User::factory(10)->create();
22         // 4 Category
23         Category::create([
24             'category_name' => 'Shirt',
25             'category_slug' => 'shirt'
26         ]);
27         Category::create([
28             'category_name' => 'Bag',
29             'category_slug' => 'bag'
30         ]);
31         Category::create([
32             'category_name' => 'Shoes',
33             'category_slug' => 'shoes'
34         ]);
35         Category::create([
36             'category_name' => 'Dress',
37             'category_slug' => 'dress'
38         ]);
39
40         // 5 Brand
41         Brand::create([
42             'brand_name' => 'HoshHosh',
43             'brand_image_path' => 'images/brand/HoshHosh.jpg',
44             'brand_slug' => 'hoshhosh',
45             'brand_email' => 'hoshhosh@gmail.com',
46             'brand_desc' => 'HoshHosh was founded in 2023 exclusively only for Binus - Mid Term Exam
47         ]);
48         Brand::create([
49             'brand_name' => 'Maximal',
50             'brand_image_path' => 'images/brand/Maximal.jpg',
51             'brand_slug' => 'maximal',
52             'brand_email' => 'maximal@gmail.com',
53             'brand_desc' => 'Maximal was founded in 2023 exclusively only for Binus - Mid Term Exam
54             2022/2023 Even Semester purposes. Although its a imaginary brand, hopefully this shop will remembered as the part of scoring!', 
55         ]);
56         Brand::create([
57             'brand_name' => 'Pulu',
58             'brand_image_path' => 'images/brand/Pulu.jpg',
59             'brand_slug' => 'pulu',
60             'brand_email' => 'pulu@gmail.com',
61             'brand_desc' => 'Pulu was founded in 2023 exclusively only for Binus - Mid Term Exam
62             2022/2023 Even Semester purposes. Although its a imaginary brand, hopefully this shop will remembered as the part of scoring!', 
63         ]);
64         Brand::create([
65             'brand_name' => 'Adadah',
66             'brand_image_path' => 'images/brand/Adadah.jpg',
67             'brand_slug' => 'adadah',
68             'brand_email' => 'adadah@gmail.com',
69             'brand_desc' => 'Adadah was founded in 2023 exclusively only for Binus - Mid Term Exam
70             2022/2023 Even Semester purposes. Although its a imaginary brand, hopefully this shop will remembered as the part of scoring!', 
71         ]);
72         Brand::create([
73             'brand_name' => 'Hawee',
74             'brand_image_path' => 'images/brand/Hawee.jpg',
75             'brand_slug' => 'hawee',
76             'brand_email' => 'hawee@gmail.com',
77             'brand_desc' => 'Hawee was founded in 2023 exclusively only for Binus - Mid Term Exam
78             2022/2023 Even Semester purposes. Although its a imaginary brand, hopefully this shop will remembered as the part of scoring!', 
79         ]);
80
81         // Product
82         // Shirt
83         Product::create([
84             'item_name' => 'Blue Shirt',
85             'image_path' => 'images/product/blueshirt.jpg',
86             'item_price' => 100000,
87             'item_desc' => 'HoshHosh blue shirt is the best-imported shirt on "Top Reseller.
88             This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
Ln 17, Col 8  Spaces:4  UTF-8  LF  PHP  ⚡ Prettier

```

File Edit Selection View Go Run Terminal Help

2301888631_MidExam_WebProgramming_Lec

DatabaseSeeder.php

```
database > seeders > DatabaseSeeder.php
```

```
88     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
89     ,please reach out through our contact (on the About Us page),
90     'category_id' => 1,
91     'brand_id' => 1,
92   ]);
93
94   Product::create([
95     'item_name' => 'Green Shirt',
96     'image_path' => 'images/product/greenshirt.jpg',
97     'item_price' => 200000,
98     'item_desc' => 'green shirt maximal is the best-imported shirt on "Top Reseller'.
99     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
100    ,please reach out through our contact (on the About Us page),
101    'category_id' => 1,
102    'brand_id' => 2,
103  ]);
104
105  Product::create([
106    'item_name' => 'Flower Shirt',
107    'image_path' => 'images/product/flowershirt.jpg',
108    'item_price' => 300000,
109    'item_desc' => 'flower shirt hawee is the best-imported shirt on "Top Reseller'.
110    This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
111    ,please reach out through our contact (on the About Us page),
112    'category_id' => 1,
113    'brand_id' => 5,
114  ]);
115
116  Product::create([
117    'item_name' => 'Blue Shirt pulu',
118    'image_path' => 'images/product/bluepulu.jpg',
119    'item_price' => 20000,
120    'item_desc' => 'blue shirt pulu is the best-imported shirt on "Top Reseller'.
121    This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
122    ,please reach out through our contact (on the About Us page),
123    'category_id' => 1,
124    'brand_id' => 3,
125  ]);
126
127 // Bag
128 Product::create([
129   'item_name' => 'Black Bag HoshHosh',
130   'image_path' => 'images/product/blackbag.jpg',
131   'item_price' => 500000,
```

File Edit Selection View Go Run Terminal Help

2301888631_MidExam_WebProgramming_Lec

DatabaseSeeder.php

```
database > seeders > DatabaseSeeder.php
```

```
131   'item_price' => 500000,
132   'item_desc' => 'Black bag is the best-imported bag on "Top Reseller'.
133   This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
134   ,please reach out through our contact (on the About Us page),
135   'category_id' => 2,
136   'brand_id' => 1,
137 ]);
138
139 Product::create([
140   'item_name' => 'Orange Bag',
141   'image_path' => 'images/product/orangebag.jpg',
142   'item_price' => 700000,
143   'item_desc' => 'Maximal orange is the best-imported bag on "Top Reseller'.
144   This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
145   ,please reach out through our contact (on the About Us page),
146   'category_id' => 2,
147   'brand_id' => 2,
148 ]);
149
150 Product::create([
151   'item_name' => 'Yellow Bag',
152   'image_path' => 'images/product/yellowbag.jpg',
153   'item_price' => 600000,
154   'item_desc' => 'Maximal yellow bag is the best-imported bag on "Top Reseller'.
155   This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
156   ,please reach out through our contact (on the About Us page),
157   'category_id' => 2,
158   'brand_id' => 2,
159 ]);
160
161 Product::create([
162   'item_name' => 'Flower bag',
163   'image_path' => 'images/product/flowerbag.jpg',
164   'item_price' => 500000,
165   'item_desc' => 'Flower Bag Hawee is the best-imported bag on "Top Reseller'.
166   This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
167   ,please reach out through our contact (on the About Us page),
168   'category_id' => 2,
169   'brand_id' => 5,
170 ]);
171
172 // Shoes
173 Product::create([
174   'item_name' => 'Running Shoes',
175   'image_path' => 'images/product/blueshoes.jpg',
176   'item_price' => 300000,
177   'item_desc' => 'Adidas Running Shoes is the best-imported shoes on "Top Reseller.
```

```

File Edit Selection View Go Run Terminal Help 2301888631_MidExam.WebProgramming_Lec
DatabaseSeeder.php
175     'item_desc' => 'Adidas Running Shoes is the best-imported shoes on "Top Reseller.
176     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
177     ,please reach out through our contact (on the About Us page)',
178     'category_id' => 3,
179     'brand_id' => 4,
180   ]);
181 Product::create([
182     'item_name' => 'Black Shoes HoshHosh',
183     'image_path' => 'images/product/blackshoes.jpg',
184     'item_price' => 300000,
185     'item_desc' => 'Black Shoes HoshHosh is the best-imported shoes on "Top Reseller.
186     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
187     ,please reach out through our contact (on the About Us page)',
188     'category_id' => 3,
189     'brand_id' => 1,
190   ]);
191 Product::create([
192     'item_name' => 'Adadah NMD',
193     'image_path' => 'images/product/nmd.jpg',
194     'item_price' => 3000000,
195     'item_desc' => 'NMD Running Shoes is the best-imported shoes on "Top Reseller.
196     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
197     ,please reach out through our contact (on the About Us page)',
198     'category_id' => 3,
199     'brand_id' => 4,
200   ]);
201 Product::create([
202     'item_name' => 'Adadah Yeezy',
203     'image_path' => 'images/product/yeezy.jpg',
204     'item_price' => 4000000,
205     'item_desc' => 'Yeezy Running Shoes is the best-imported shoes on "Top Reseller.
206     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
207     ,please reach out through our contact (on the About Us page)',
208     'category_id' => 3,
209     'brand_id' => 4,
210   ]);
211
212
213 // Dress
214 Product::create([
215   'item_name' => 'Red Dress',
216   'image_path' => 'images/product/redress.jpg',
217   'item_price' => 500000,
218   'item_desc' => 'Maximal Red Dress is the best-imported dress on "Top Reseller.
Ln 17, Col 8 Spaces: 4 UTF-8 LF PHP Prettier R
File Edit Selection View Go Run Terminal Help 2301888631_MidExam.WebProgramming_Lec
DatabaseSeeder.php
219     'item_desc' => 'Maximal Red Dress is the best-imported dress on "Top Reseller.
220     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
221     ,please reach out through our contact (on the About Us page)',
222     'category_id' => 4,
223     'brand_id' => 2,
224   ]);
225 Product::create([
226   'item_name' => 'Blue Dress Hawee',
227   'image_path' => 'images/product/bluedress.jpg',
228   'item_price' => 50000,
229   'item_desc' => 'blue dress hawee is the best-imported dress on "Top Reseller.
230     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
231     ,please reach out through our contact (on the About Us page)',
232     'category_id' => 4,
233     'brand_id' => 5,
234   ]);
235 Product::create([
236   'item_name' => 'Black Dress',
237   'image_path' => 'images/product/blackdress.jpg',
238   'item_price' => 800000,
239   'item_desc' => 'Black Dress is the best-imported dress on "Top Reseller.
240     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
241     ,please reach out through our contact (on the About Us page)',
242     'category_id' => 4,
243     'brand_id' => 1,
244   ]);
245
246 Product::create([
247   'item_name' => 'Pulu Dress',
248   'image_path' => 'images/product/puludress.jpg',
249   'item_price' => 500000,
250   'item_desc' => 'Pulu dress is the best-imported dress on "Top Reseller.
251     This item can be ordered with minimum order > 5 pieces. If you want to order more than 10 pieces,
252     ,please reach out through our contact (on the About Us page)',
253     'category_id' => 4,
254     'brand_id' => 3,
255   ]);
256
257
258
259
}
Ln 17, Col 8 Spaces: 4 UTF-8 LF PHP Prettier R

```

Migration Products

A screenshot of a code editor showing a PHP migration file. The file is named `2023_05_02_075025_create_products_table.php`. The code defines a migration class that creates a `'products'` table with columns for `id`, `brand_id`, `category_id`, `item_name`, `image_path` (nullable), `item_price`, and `item_desc`. It also includes a `down()` method to drop the table and its columns.

```
<?php  
use Illuminate\Database\Migrations\Migration;  
use Illuminate\Database\Schema\Blueprint;  
use Illuminate\Support\Facades\Schema;  
return new class extends Migration {  
    public function up()  
    {  
        Schema::create('products', function (Blueprint $table) {  
            $table->id();  
            $table->foreignId('brand_id');  
            $table->foreignId('category_id');  
            $table->string('item_name');  
            $table->string('image_path')->nullable();  
            $table->integer('item_price');  
            $table->text('item_desc');  
            $table->timestamps();  
        });  
    }  
    public function down()  
    {  
        Schema::dropIfExists('products');  
        $table->dropColumn('image_path');  
    }  
};
```

Ln 11, Col 8 Spaces: 4 UTF-8 LF PHP Prettier

Categories

A screenshot of a code editor showing a PHP migration file. The file is named `2023_05_02_081904_create_categories_table.php`. The code defines a migration class that creates a `'categories'` table with columns for `id`, `category_name` (unique), `category_slug` (unique), and `timestamps`.

```
<?php  
use Illuminate\Database\Migrations\Migration;  
use Illuminate\Database\Schema\Blueprint;  
use Illuminate\Support\Facades\Schema;  
return new class extends Migration {  
    public function up()  
    {  
        Schema::create('categories', function (Blueprint $table) {  
            $table->id();  
            $table->string('category_name')->unique();  
            $table->string('category_slug')->unique();  
            $table->timestamps();  
        });  
    }  
    public function down()  
    {  
        Schema::dropIfExists('categories');  
    }  
};
```

Ln 23, Col 1 Spaces: 4 UTF-8 LF PHP Prettier

Brands

The screenshot shows a code editor interface with a dark theme. The top bar includes standard menu items like File, Edit, Selection, View, Go, Run, Terminal, Help, and a search bar. Below the menu is a tab bar with three tabs: 'DatabaseSeeder.php', '2023_05_02_075025_create_products_table.php', and '2023_05_02_081919_create_brands_table.php'. The right side of the interface has various icons for file operations and navigation.

```
database > migrations > 2023_05_02_081919_create_brands_table.php
1  <?php
2  use Illuminate\Database\Migrations\Migration;
3  use Illuminate\Database\Schema\Blueprint;
4  use Illuminate\Support\Facades\Schema;
5  return new class extends Migration
6  {
7      /**
8       * Run the migrations.
9       *
10      * @return void
11     */
12    public function up()
13    {
14        Schema::create('brands', function (Blueprint $table) {
15            $table->id();
16            $table->string('brand_name')->unique();
17            $table->string('brand_image_path')->nullable();
18            $table->string('brand_slug')->unique();
19            $table->string('brand_email')->unique();
20            $table->string('brand_desc');
21            $table->timestamps();
22        });
23    }
24    /**
25     * Reverse the migrations.
26     *
27     * @return void
28     */
29    public function down()
30    {
31        Schema::dropIfExists('brands');
32        $table->dropColumn('brand_image_path');
33        Schema::table('brands', function (Blueprint $table) {
34            $table->dropColumn('brand_image_path');
35        });
36    }
}
```

At the bottom of the editor, there are status indicators: Ln 25, Col 31, Spaces: 4, UTF-8, LF, PHP, and a Prettier button.

Hasil Run Kodingan

Halaman Utama (products.blade.php)

Screenshot of the main page (products.blade.php) showing a top seller banner and a grid of items.

Top Reseller - Daniel Chandra

Home Category ▾ Top 5 Brands About Us

TOP SELLER

© CanStockPhoto.com

All Items

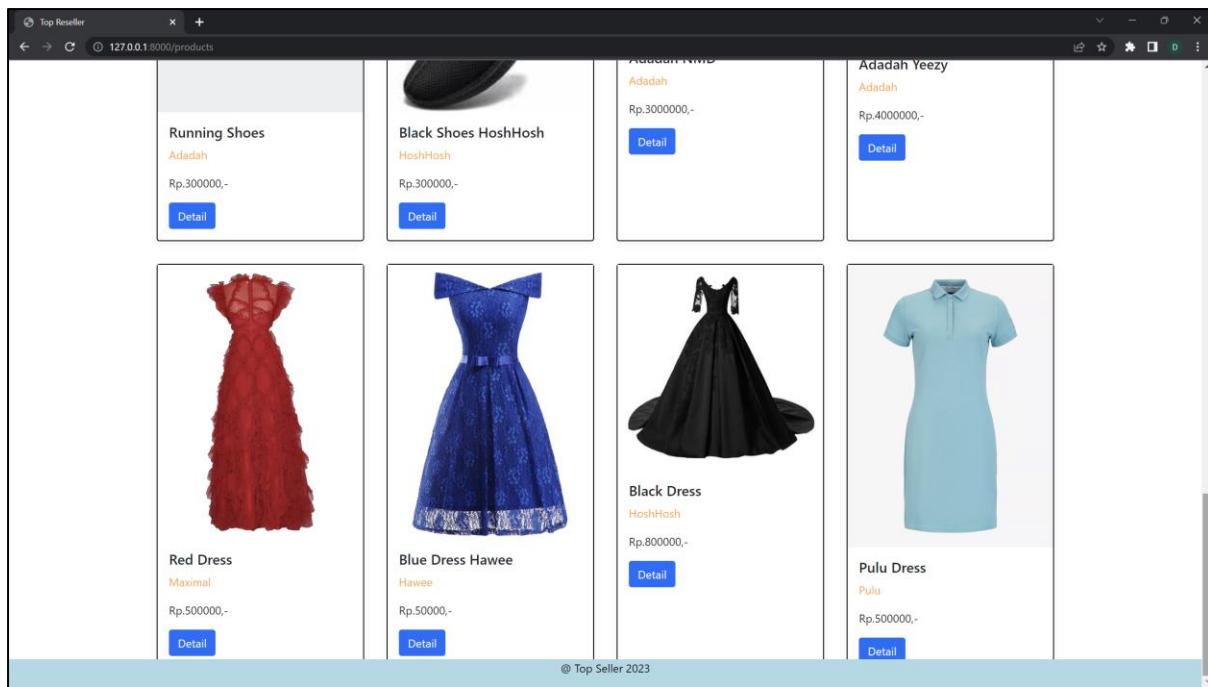
--	--	--	--

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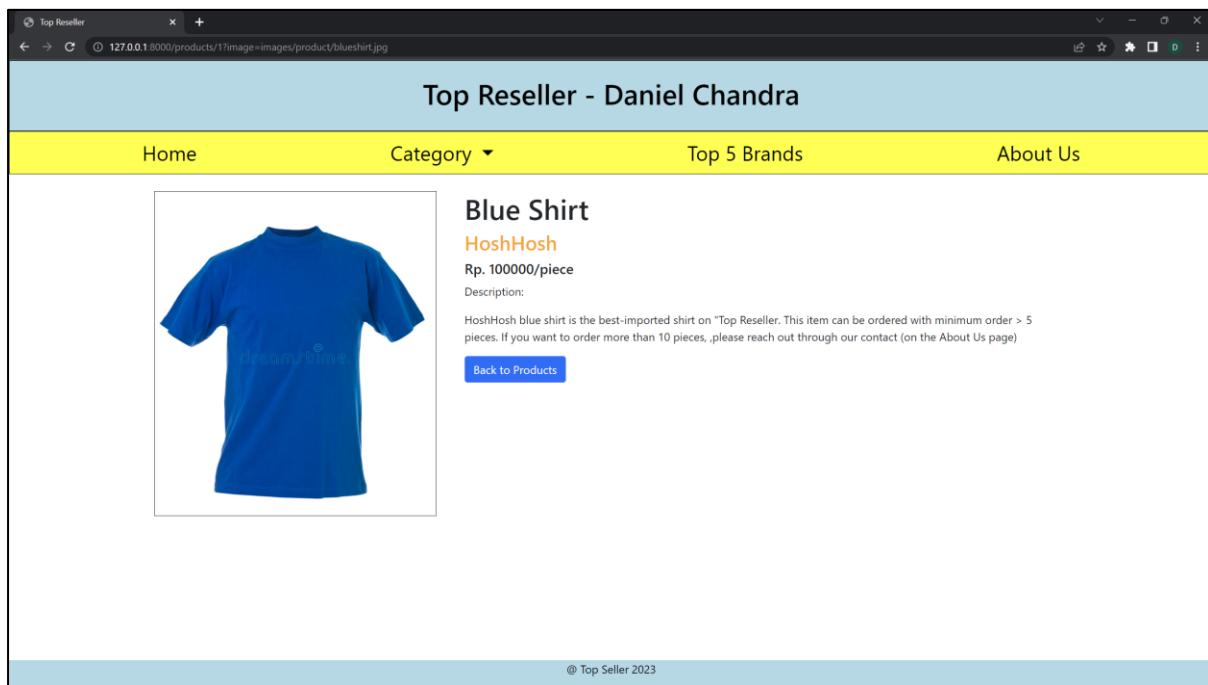
Screenshot of the main page (products.blade.php) showing a grid of products.

HoshHosh Rp.100000,- Detail	Rp.200000,- Detail	Hawee Rp.300000,- Detail	Rp.20000,- Detail
Black Bag HoshHosh HoshHosh Rp.500000,- Detail	Orange Bag Maximal Rp.700000,- Detail	Yellow Bag Maximal Rp.600000,- Detail	Flower bag Hawee Rp.500000,- Detail

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Tombol Detail di click (product.blade.php)



Halaman Category (category.blade.php)

Top Reseller - Daniel Chandra

Home Category ▾ Top 5 Brands About Us

Category : Shirt



Blue Shirt
HoshHosh
Rp.100000

[Detail](#)



Green Shirt
Maximal
Rp.200000

[Detail](#)



Flower Shirt
Hawee
Rp.300000

[Detail](#)



Blue Shirt pulu
Pulu
Rp.20000

[Detail](#)

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Top Reseller - Daniel Chandra

Home Category ▾ Top 5 Brands About Us

Category : Bag



Black Bag HoshHosh
HoshHosh
Rp.500000

[Detail](#)



Orange Bag
Maximal
Rp.700000

[Detail](#)



Yellow Bag
Maximal
Rp.600000

[Detail](#)



Flower bag
Hawee
Rp.500000

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Halaman Brand (brands.blade.php)

The screenshot shows a web browser window titled "Top Reseller - Daniel Chandra". The main content area displays five brand logos in a row: HoshHosh (a crown icon with a large letter H), Maximal (a dark logo with a white 'M'), Pulu (a white logo with a stylized 'P'), Adadah (a blue logo with a white 'A' and 'd'), and Hawee (a white logo with a circle containing a 'H'). Below the logos, the text "@ Top Seller 2023" is visible.

Salah satu brand diklik (brand.blade.php)

The screenshot shows a web browser window titled "Top Reseller - Daniel Chandra" displaying the details for the "HoshHosh" brand. The brand's logo is shown, followed by its name and contact information: Address: Palmerah - Indonesia, Email: hoshhosh@gmail.com. A description states: "HoshHosh was founded in 2023 exclusively only for Binus - Mid Term Exam 2022/2023 Even Semester purposes. Although its a imaginary brand, hopefully this shop will remembered as the part of scoring!". Below this, there is a section titled "HoshHosh Items" featuring four products: "Blue Shirt" (Rp.100000), "Black Bag HoshHosh" (Rp.50000), "Black Shoes HoshHosh" (Rp.300000), and "Black Dress" (Rp.800000). Each item has a "Detail" button. The footer of the page includes the text "@ Top Seller 2023".

Halaman About Us (about.blade.php)

The screenshot shows a web browser window with the title "Top Reseller" and the URL "127.0.0.1:8000/about". The page has a light blue header bar with the text "Top Reseller - Daniel Chandra". Below the header is a yellow navigation bar with four items: "Home", "Category ▾", "Top 5 Brands", and "About Us". The main content area has a white background. It contains a section titled "Top Reseller" followed by "Address" and some text about the company's location. Below that is a section titled "Open Hours" with the text "Daily (include weekend) - 08:00 AM - 05:00 PM". At the bottom of the page is a light blue footer bar with the text "@ Top Seller 2023".

Top Reseller - Daniel Chandra

Home Category ▾ Top 5 Brands About Us

Top Reseller

Address

Binus Anggrek
Jl. Raya Kb. Jeruk No.27, RT.1/RW.9, Kb. Jeruk, Kec. Kb. Jeruk,
Kota Jakarta Barat, Daerah Khusus Ibukota Jakarta 11530

Email: reseller-midterm@binus.ac.id
Phone: 021-234567890

Open Hours

Daily (include weekend) - 08:00 AM - 05:00 PM

@ Top Seller 2023