1. Create a new project
2. Create a Controller pages

php artisan make:controller PagesController

1. Create a Model Product

php artisan make:model Product -c -m

1. Create a Controller cart

php artisan make:controller CartController

1. Fixt the Rout

Route::get('/', [PagesController::class, 'index'])->name('home');

Route::get('/shop', [ProductController::class, 'index'])->name('shop');

Route::get('/shop/{id}', [ProductController::class, 'show'])->name('product');

Route::get('/cart', [CartController::class, 'cart'])->name('cart');

1. Setting up the database & credentials

create database

1. Setting up the migration & data structure
2. From database > migrations > 2022\_01\_21\_022209\_create\_products\_table (or last file from this group)

 public function up()

    {

        Schema::create('products', function (Blueprint $table) {

            $table->id();

            $table->string('name')->unique()->nullable(false);

            $table->string('details')->nullable(false);

            $table->text('description')->nullable(false);

            $table->text('brand')->nullable(false);

            $table->double('price')->nullable(false);

            $table->double('shipping\_cost');

            $table->string('image\_path')->nullable(false);

            $table->timestamps();

        });

    }

1. Migrate my data to database

php artisan migrate

1. Creating database Seeding
2. php artisan make:seeder ProductSeeder

From database > migrations > Seeder > ProductSeeder

<?php

namespace Database\Seeders;

use App\Models\Product;

use Illuminate\Database\Seeder;

class ProductSeeder extends Seeder

{

    /\*\*

     \* Run the database seeds.

     \*

     \* @return void

     \*/

    public function run()

    {

        $products = [

            [

                'name' => 'Apple Macbook Pro 16',

                'details' => 'Apple M1 Pro, 16 GPU, 16 GB, 512 GB SSD',

                'description' => 'The most powerful MacBook Pro ever is here. With the blazing-fast M1 Pro or M1 Max chip — the first Apple silicon designed for pros — you get groundbreaking performance and amazing battery life. Add to that a stunning Liquid Retina XDR display, the best camera and audio ever in a Mac notebook, and all the ports you need. The first notebook of its kind, this MacBook Pro is a beast.',

                'brand' => 'Apple',

                'price' => 2499,

                'shipping\_cost' => 25,

                'image\_path' => 'storage/product1.png'

            ],

            [

                'name' => 'Samsung Galaxy Book Pro',

                'details' => '13.3 inch, 8GB, DDR4 SDRAM, 256GB',

                'description' => 'PC power thats smartphone thin. Our lightest Galaxy Book yet gives you a powerful Intel® 11th Gen Core™ processor, Intel® Evo™ certification, an advanced AMOLED screen and comes equipped with our latest wi-fi chip. Finish important projects, download huge files fast or watch movies in brilliant color. Discover the perfect mix of portability and productivity.',

                'brand' => 'Samsung',

                'price' => 1400,

                'shipping\_cost' => 25,

                'image\_path' => 'storage/product2.png'

            ],

        ];

        foreach($products as $key => $value) {

            Product::create($value);

        }

    }

}

1. From database > migrations > Seeder > DatabaseSeeder

 public function run()

        {

            $this->call(ProductSeeder::class);

        }

1. php artisan db:seed
2. storing images
3. php artisan storage:link
4. build the frontend statically
5. from resources > views > create new file

layouts > app.blade.php

* PagesController

class PagesController extends Controller

{

    public function index(){

        return view('index');

    }

}

1. from resources > views > create index.blade.php
2. from resources > views > create new file

shop >show.blade.php

index.blade.php

* ProductController

class ProductController extends Controller

{

    public function index(){

        return view('shop.index');

    }

    public function show(){

        return view('shop.show');

    }

}

1. from resources > views > create new file cart>cart.blade.php

* CartController

class CartController extends Controller

{

    public function cart (){

        return view('cart.cart');

    }

}

1. Making the shop list dynamic.
2. ProductController

* <?php
* namespace App\Http\Controllers;
* use Illuminate\Http\Request;
* use App\Models\Product;
* class ProductController extends Controller
* {
* public function index(){
* $products = Product::all();
* return view('shop.index', compact('products'));
* }
* public function show(){
* return view('shop.show');
* }
* }
* Resources>view>shop>index
* @extends('layouts.app')
* @section('content')
* <div class="mx-auto w-4/5">
* <h1 class="text-5xl text-gray-800 font-bold pt-12 mb-8">
* Shop
* </h1>
* <hr class="border-1 border-gray-300">
* </div>
* <div class="grid sm:grid-cols-4 gap-8 pt-20 mx-auto w-4/5">
* @foreach ($products as $product)
* <div class="mx-auto">
* <img
* src="{{ asset($product->image\_path) }}"
* alt="{{ $product->name }}"
* style="height:200px !important;">
* <h2 class="text-xl text-gray-600 font-bold pb-8">
* {{ $product->name }}
* </h2>
* <p class="font-thin text-xs text-black pb-8">
* {{ $product->details }}
* </p>
* <p class="font-bold text-l text-black pb-8">
* Price: <span class="text-red-500">$ {{ $product->price }} </span>
* </p>
* <a  href="/shop/{{ $product->id }}"
* class="px-6 py-2 text-l uppercase text-white font-bold bg-blue-600 rounded-full w-full">
* Read more...
* </a>
* </div>
* @endforeach
* </div>
* @endsection

1. ProductController

<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;

use App\Models\Product;

class ProductController extends Controller

{

    public function index(){

        $products = Product::all();

        return view('shop.index', compact('products'));

    }

    public function show($id){

        $product = Product::FindOrFail($id);

        return view('shop.show', compact('product'));

    }

}

* Show.blade.php

@extends('layouts.app')

@section('content')

    <div class="grid sm:grid-cols-2 gap-2 pt-12 sm:pt-20 mx-auto w-4/5">

        <div class="mx-auto">

            <img

                src="{{ asset($product->image\_path) }}"

                alt="{{ $product->name }}">

        </div>

        <div>

            <h1 class="text-4xl text-gray-600 font-bold pb-8">

                {{ $product->name }}

            </h1>

            <p class="font-bold text-l text-black pb-8">

               Price: <span class="text-red-500">$ {{ $product->price }}</span>

            </p>

            <p class="font-bold text-l text-black pb-8">

                Shipping: <span class="text-red-500">$ {{ $product->shipping\_cost }}</span>

            </p>

            <p class="font-thin text-s text-black pb-8">

                {{ $product->details }}

            </p>

            <p class="text-gray-800 text-thin text-l leading-6 pb-12">

                {{ $product->description }}

            </p>

            <a

                class="px-10 py-6 text-l uppercase text-white font-bold bg-blue-600 rounded-full w-full"

                role="button"

                aria-pressed="true">

                Add To Cart

            </a>

        </div>

@endsection

1. Saving products to session

* Routes>web

Route::get('/add-to-cart/{id}', [CartController::class, 'addToCart'])->name('add.to.cart');

* from resources > views >shop>show

@extends('layouts.app')

@section('content')

    <div class="grid sm:grid-cols-2 gap-2 pt-12 sm:pt-20 mx-auto w-4/5">

        <div class="mx-auto">

            <img

                src="{{ asset($product->image\_path) }}"

                alt="{{ $product->name }}">

        </div>

        <div>

            <h1 class="text-4xl text-gray-600 font-bold pb-8">

                {{ $product->name }}

            </h1>

            <p class="font-bold text-l text-black pb-8">

               Price: <span class="text-red-500">$ {{ $product->price }}</span>

            </p>

            <p class="font-bold text-l text-black pb-8">

                Shipping: <span class="text-red-500">$ {{ $product->shipping\_cost }}</span>

            </p>

            <p class="font-thin text-s text-black pb-8">

                {{ $product->details }}

            </p>

            <p class="text-gray-800 text-thin text-l leading-6 pb-12">

                {{ $product->description }}

            </p>

            <a href="{{ route('add.to.cart',$product->id) }}"

                class="px-10 py-6 text-l uppercase text-white font-bold bg-blue-600 rounded-full w-full"

                role="button"

                aria-pressed="true">

                Add To Cart

            </a>

        </div>

@endsection

* CartController

<?php

namespace App\Http\Controllers;

use App\Models\Product;

use Illuminate\Http\Request;

class CartController extends Controller

{

    public function cart (){

        return view('cart.cart');

    }

    public function addToCart($id)

    {

        $product = Product::findOrFail($id);

        $cartItems = session()->get('cartItems', []);

        if(isset($cartItems[$id])) {

            $cartItems[$id]['quantity']++;

        } else {

            $cartItems[$id] = [

                "image\_path" => $product->image\_path,

                "name" => $product->name,

                "brand" => $product->brand,

                "details" => $product->details,

                "price" => $product->price,

                "quantity" => 1

            ];

        }

        session()->put('cartItems', $cartItems);

        return redirect()->back()->with('success', 'Product added to cart!');

    }

}

1. Making the cart dynamic
2. from resources > views >cart

@extends('layouts.app')

@section('content')

<div class="mx-auto w-4/5">

    <h1 class="text-5xl text-gray-800 font-bold pt-12 mb-8">

        Shopping Cart

    </h1>

    <hr class="border-1 border-gray-300">

</div>

<div class="flex flex-col mx-auto w-4/5">

    <div class="-my-2 overflow-x-auto sm:-mx-6 lg:-mx-8">

        <div class="py-2 align-middle inline-block min-w-full sm:px-6 lg:px-8">

            <div class="shadow overflow-hidden border-b border-gray-200 sm:rounded-lg">

                <table class="min-w-full divide-y divide-gray-200">

                    <thead class="bg-gray-50">

                    <tr>

                        <th

                            scope="col"

                            class="px-6 py-3 text-left text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Name

                        </th>

                        <th

                            scope="col"

                            class="px-6 py-3 text-left text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Details

                        </th>

                        <th

                            scope="col"

                            class="px-6 py-3 text-left text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Price

                        </th>

                        <th

                            scope="col"

                            class="px-6 py-3 text-left text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Quantity

                        </th>

                        <th

                            scope="col"

                            class="px-6 py-3 text-left text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Total

                        </th>

                        <th

                            scope="col"

                            class="px-6 py-3 text-right text-xs font-medium text-gray-500 uppercase tracking-wider">

                            Delete

                        </th>

                    </tr>

                </thead>

                    @if (session('cartItems'))

                    @foreach (session('cartItems') as $key => $value )

                                            <tbody class="bg-white divide-y divide-gray-200">

                        <tr>

                            <td class="px-6 py-4 whitespace-nowrap">

                                <div class="flex items-center">

                                    <div class="flex-shrink-0 h-10 w-10">

                                        <img

                                            class="h-10 w-10 rounded-full"

                                            src="{{asset($value['image\_path'])  }}"

                                            alt="{{ $value['name'] }}">

                                    </div>

                                    <div class="ml-4">

                                        <div class="text-sm font-medium text-gray-900">

                                            {{ $value['name'] }}

                                        </div>

                                        <div class="text-sm font-medium text-gray-400">

                                            {{ $value['brand'] }}

                                        </div>

                                    </div>

                                </div>

                            </td>

                            <td class="px-6 py-4 whitespace-nowrap">

                                <div class="text-sm text-gray-900">

                                    {{ $value['details'] }}

                                </div>

                            </td>

                            <td class="px-6 py-4 whitespace-nowrap">

                                <span

                                    class="px-2 inline-flex text-xs leading-5 font-semibold rounded-full bg-green-100 text-green-800">

                                    $ {{ $value['price'] }}

                                </span>

                            </td>

                            <td class="px-6 py-4 whitespace-nowrap text-sm text-gray-500">

                                <select name="quantity" id="quantity" value = "{{ $value['quantity'] }}">

                                    @for ($i = 1; $i <= 10; $i++)

                                        <option value="{{ $i }}">

                                            {{ $i }}

                                        </option>

                                    @endfor

                                </select>

                            </td>

                            <td class="px-6 py-4 whitespace-nowrap">

                               <div class="text-sm text-gray-900"> $ {{ $value['quantity'] \* $value['price'] }} </div>

                            </td>

                            <td class="px-6 whitespace-nowrap text-right text-sm font-medium">

                                <a href="#" role="button" class="text-red-600 hover:text-red-900">Delete</a>

                            </td>

                        </tr>

                    </tbody>

                    @endforeach

                    @else

                        <td align="left" colspan="3">

                            <p class="font-bold text-l text-black py-6 px-4">

                                Shopping cart is empty.

                            </p>

                        </td>

                    @endif

                </table>

            </div>

        </div>

    </div>

</div>

@endsection

1. Deleting product from cart

* Routes>web

Route::get('/delete-from-cart/{id}', [CartController::class, 'delete'])->name('delete.from.cart');

* CartController

    public function delete(Request $request)

    {

        if($request->id) {

            $cartItems = session()->get('cartItems');

            if(isset($cartItems[$request->id])) {

                unset($cartItems[$request->id]);

                session()->put('cartItems', $cartItems);

            }

            return redirect()->back()->with('success', 'Product deleted successfully');

        }

    }