WEB DEVELOPMENT

| BARIAS, LAIZA MAE B. | BSIT-3C | 08-26-2024 |

LAB 1: Identify and document the purpose of key directories and files in the laravel project.

app/
- ➢ **Purpose:** Contains the core application code. This includes the models, controllers, and other classes that make up the application.

Sub-directories:
Http/- Handles the incoming web requests and responses.
Models/- Contains the application's data models, which represent the structure and relationships of the data in the database.
Providers/- Contains service providers that are used to configure and bootstrap the various components of the application.

bootstrap/
- ➢ **Purpose:** Contains files for bootstrapping the Laravel framework.

Sub-directories:
cache/- Used to store framework-generated files that improve performance by reducing the need to recompile or regenerate them every time the application runs.

config/
- ➢ **Purpose:** Contains configuration files for various services and application settings.

database/
- ➢ **Purpose:** Contains files related to database management.

Sub-directories:
factories/- Houses factory classes used to generate fake data/model instances in tests.
migrations/- Contains migration files that define the structure of the database.
seeders/- Contains seed classes to populate the database with initial data.

File:
database.sqlqite- SQLite database file used for local development or testing, allowing the Laravel application to store and retrieve data without needing a full database server.

🔸 public/
  ➢ **Purpose:** The entry point for web requests. It contains the index.php file, which initializes the Laravel application and serves static assets like CSS, JavaScript, and images.

🔸 resources/
  ➢ **Purpose:** Houses all views, raw assets (CSS, JS), and language files.

  Sub-directories:
  views/- Blade template files for rendering HTML.
  js/- JavaScript files.
  css/- CSS files.

🔸 routes/
  ➢ **Purpose:** Defines all routes for the application. Laravel automatically loads these files.

  Files:
  web.php- Contains routes for web interfaces.
  console.php- Defines console-based routes.

🔸 storage/
  ➢ **Purpose:** Stores logs, compiled Blade templates, file-based sessions, and other files generated by the application.

  Sub-directories:
  app/- Stores application-specific files/ files uploaded by the user.
  framework/- Stores framework-generated files, including sessions and cache.
  logs/- Contains application logs.

🔸 tests/
  ➢ **Purpose:** Contains automated tests for the application.

  Sub-directories:
  Feature/- Feature tests for testing HTTP requests and responses.
  Unit/- Unit tests for testing individual components.

🔸 vendor/
  ➢ **Purpose:** Contains third-party packages and dependencies managed by Composer. Laravel itself is included here.
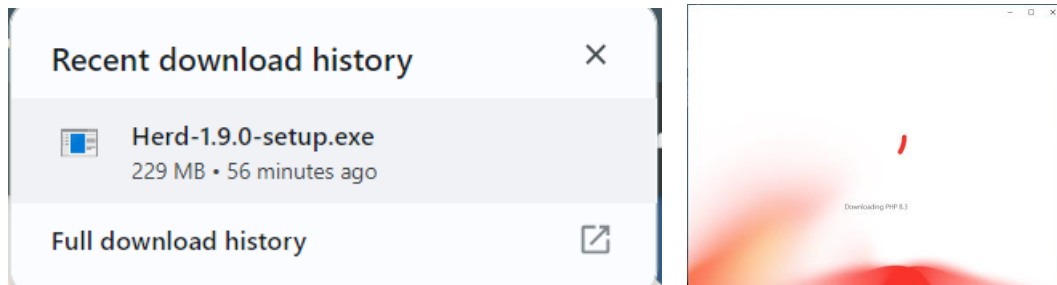
  Key File:
  autoload.php- Autoloader for project dependencies.
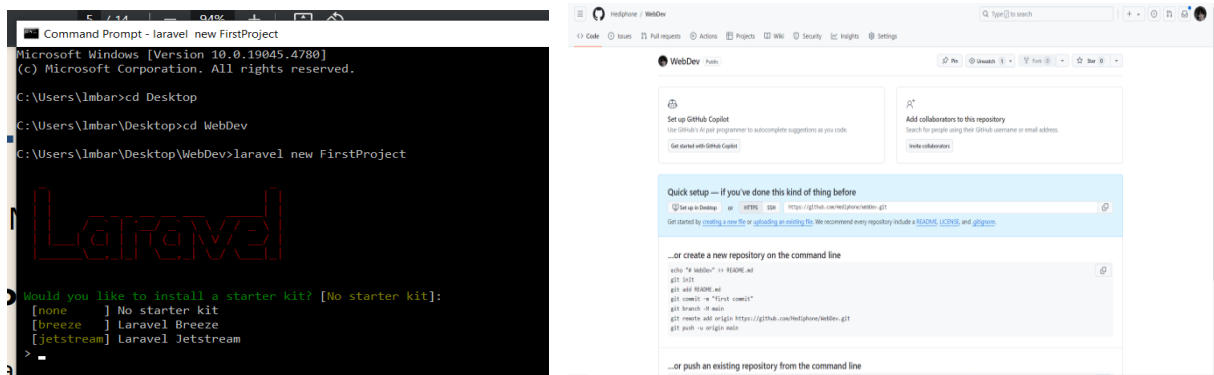
Key Files in the Root Directory:

- **.editorconfig-** Standardizes coding styles across different editors and IDEs by specifying formatting rules.
- **.env-** Stores environment-specific configuration variables like database credentials and application keys.
- **artisan-** Provides a command-line interface for managing various aspects of a Laravel application.
- **composer.json-** Defines PHP dependencies and project configuration for Composer, the PHP package manager.
- **composer.lock-** Locks the versions of dependencies to ensure consistent installations across environments.
- **package.json-** Manages JavaScript dependencies and scripts for the frontend of the application.
- **phpunit.xml-** Configures PHPUnit settings for running tests in the Laravel application.
- **vite.config.js-** Configures Vite for building and bundling frontend assets like JavaScript and CSS.

DOCUMENTATION

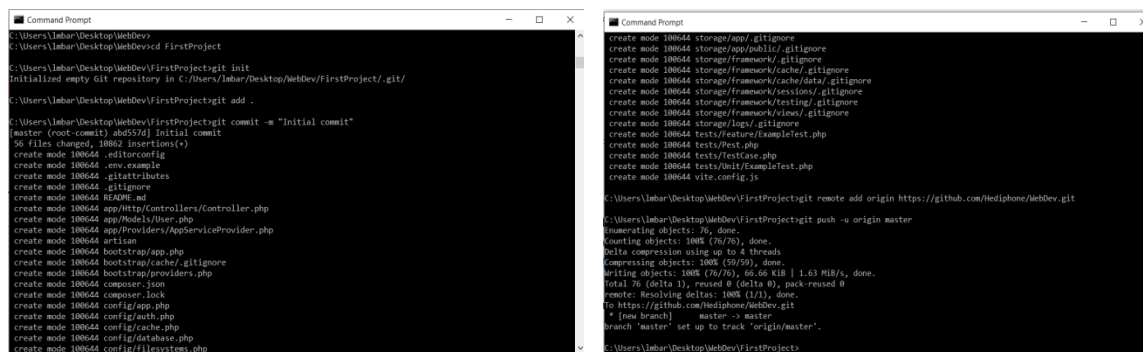## 1. INSTALL LARAVEL ALONG WITH ITS DEPENDENCIES.

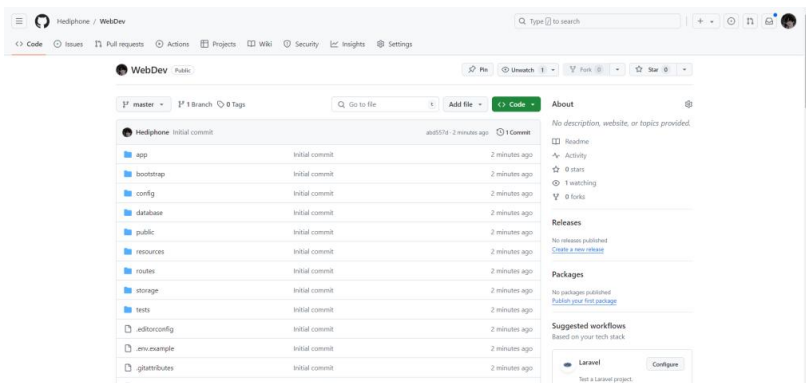## 2. CREATE A LARAVEL PROJECT AND PUT IT IN A GIT REPOSITORY

Create Laravel Project (FirstProject)

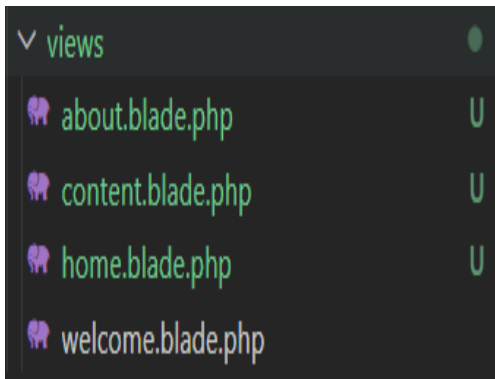Create Repository

Add Project to
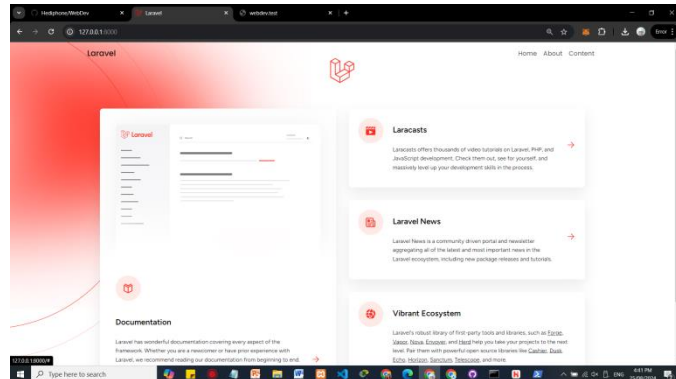Git Repository

3. SET UP THE .ENV FILE TO INCLUDE DATABASE CONNECTION DETAILS


```
21
22    DB_CONNECTION=sqlite
23    DB_DATABASE=C:\Users\lmbar\Desktop\WebDev\FirstProject\database\database.sqlite
24    DB_FOREIGN_KEYS=true
25    # DB_HOST=127.0.0.1
26    # DB_PORT=3306
27    # DB_DATABASE=laravel
28    # DB_USERNAME=root
29    # DB_PASSWORD=
30
```
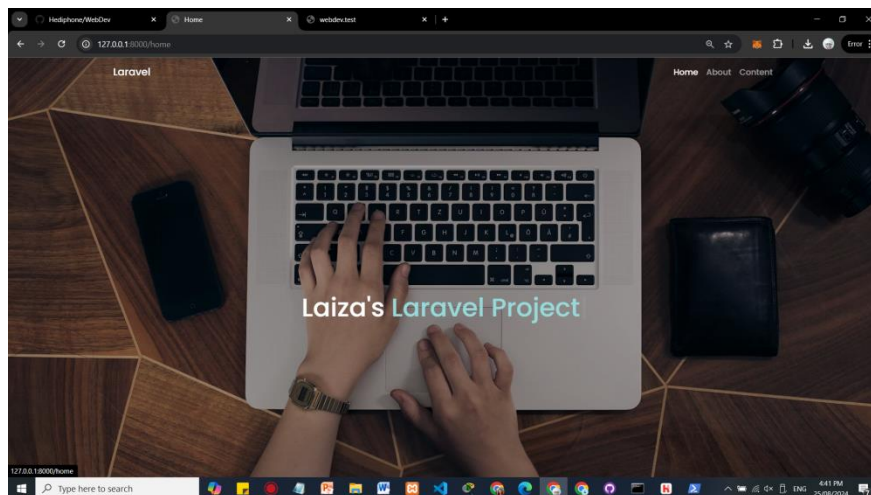
4. CREATE AT LEAST 3 VIEWS (HOMEPAGE, ABOUT, CONTENT)
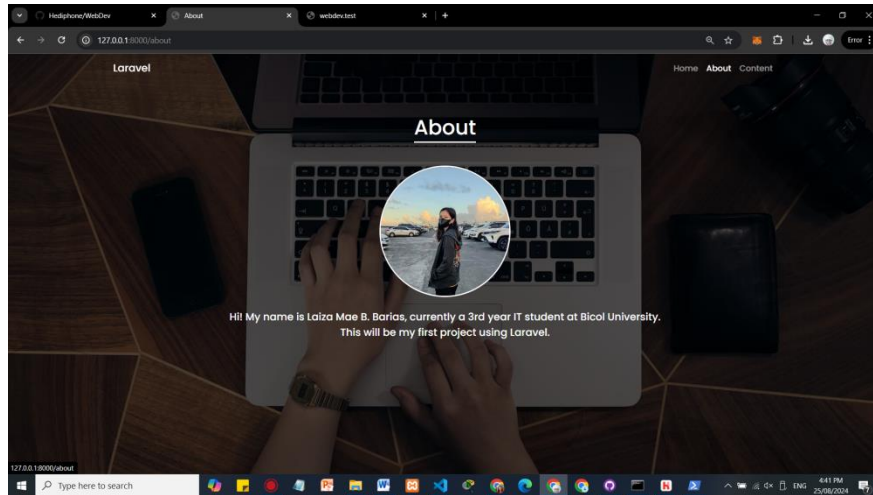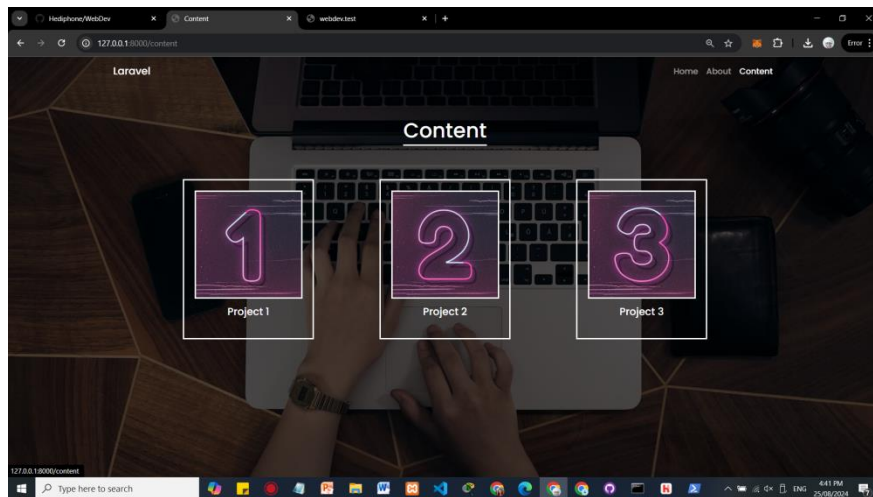

Create Views

Laravel (welcome.blade.php)

Homepage (homepage.blade.php)

About (about.blade.php)

Content (content.blade.php)

5. CREATE AND RUN ROUTES


```php
<?php

use Illuminate\Support\Facades\Route;

Route::get('/', function () {
    return view('welcome');
});

Route::get('/home', function () {
    return view('home');
});

Route::get('/about', function () {
    return view('about');
});

Route::get('/content', function () {
    return view('content');
});
```