

Part E I : Screenshot of git branch showing the new branch name + latest commit.

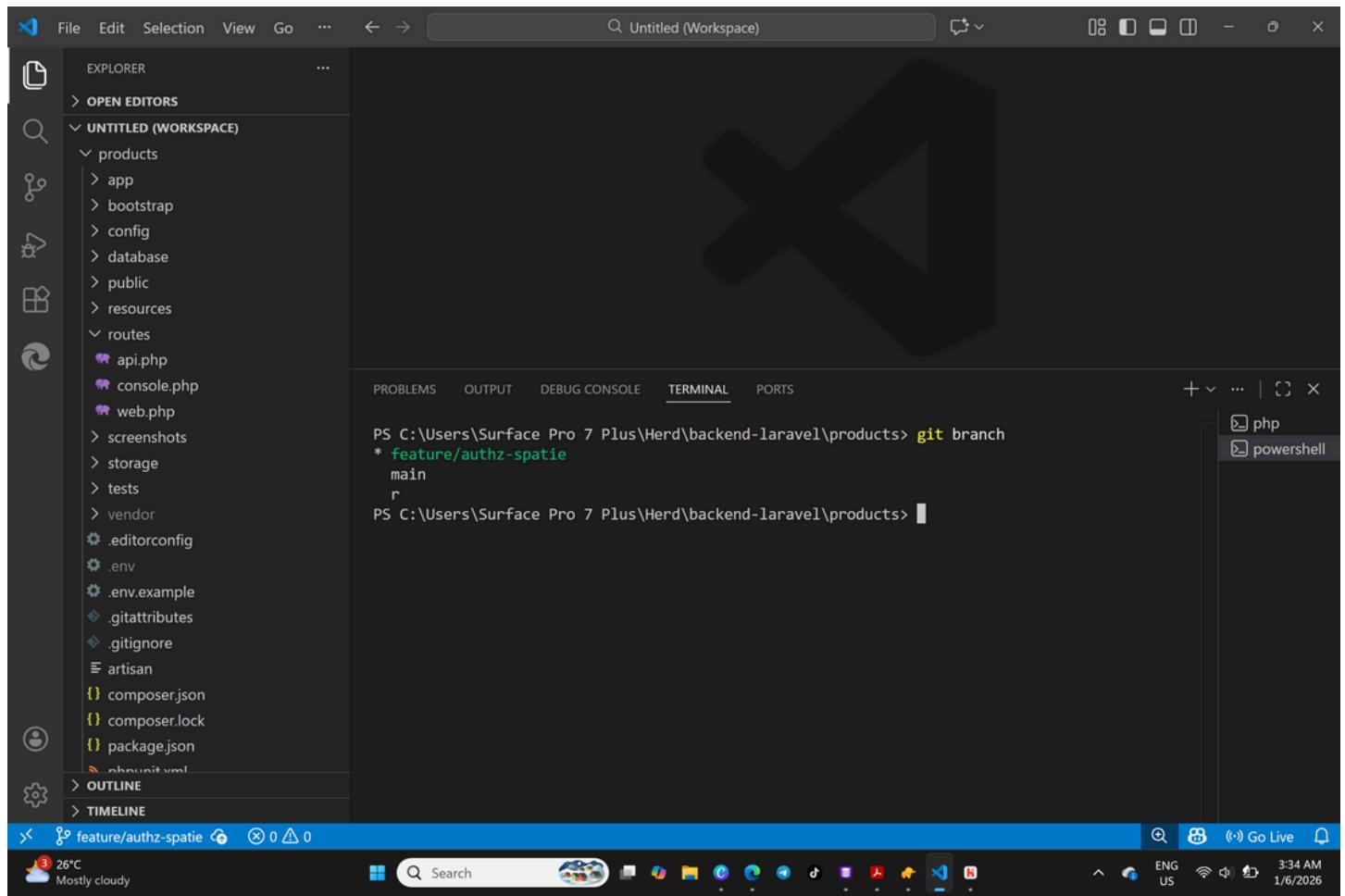
git init Initial Commit

The screenshot shows the Visual Studio Code interface with a dark theme. The Explorer sidebar on the left lists a project structure under 'UNTITLED (WORKSPACE)'. The 'products' folder contains files like 'app', 'bootstrap', 'config', 'database', 'public', 'resources', 'routes', 'api.php', 'console.php', 'web.php', 'screenshots', 'storage', 'tests', 'vendor', '.editorconfig', '.env', '.env.example', '.gitattributes', '.gitignore', 'artisan', 'composer.json', 'composer.lock', 'package.json', and 'phpunit.xml'. The Terminal tab at the bottom is active, showing the command-line session:

```
On branch feature/authz-spatie
nothing to commit, working tree clean
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products> git add .
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products> git commit -m "Initial Commit Part E"
On branch feature/authz-spatie
nothing to commit, working tree clean
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products> git push origin feature/authz-spatie
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/authz-spatie' on GitHub by visiting:
remote:     https://github.com/nurul-th/secbc-week2/pull/new/feature/authz-spatie
remote:
To https://github.com/nurul-th/secbc-week2.git
 * [new branch]      feature/authz-spatie -> feature/authz-spatie
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products> git status
On branch feature/authz-spatie
nothing to commit, working tree clean
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products>
```

The status bar at the bottom shows the current file is 'feature/authz-spatie', the weather is '26°C Mostly cloudy', and the system status includes 'ENG US' and '3:32 AM 1/6/2026'.

New branch created



Part E 3 : Screenshot of successful php artisan migrate / db:seed output.

Succesful migration

The screenshot shows a code editor interface with the following details:

- File Explorer:** Shows a workspace named "products" containing "routes" and "api.php". The "api.php" file is open.
- Code Editor:** The "api.php" file contains the following PHP code:

```
1 <?php
2
3 use App\Http\Controllers\Auth\AuthController;
4 use App\Http\Controllers\ProductsController;
5 use Illuminate\Support\Facades\Route;
6
7 Route::prefix('auth')->group(function () {
8     Route::post('/register', [AuthController::class, 'register']);
9     Route::post('/login', [AuthController::class, 'login']);
10
11     Route::middleware('auth:sanctum')->group(function () {
12         Route::get('/me', [AuthController::class, 'me']);
13         Route::post('/logout', [AuthController::class, 'logout']);
14     });
15});
```
- Terminal:** The terminal window shows the command "PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products> php artisan migrate" being run, followed by the output:

```
Copying file [C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products\vendor\spatie\laravel-1-permission\config\permission.php] to [C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products\config\permission.php] DONE
Copying file [C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products\vendor\spatie\laravel-1-permission\database\migrations\create_permission_tables.php.stub] to [C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products\database\migrations\2026_01_05_201331_create_permission_tables.php] DONE
PS C:\Users\Surface Pro 7 Plus\Herd\backend-laravel\products>
```
- Bottom Status Bar:** Shows weather (26°C, mostly cloudy), search bar, taskbar icons, and system status (ENG US, 4:13 AM, 1/6/2026).

db:seed output

The screenshot shows a code editor interface with the following details:

- File Path:** products > database > seeders > DatabaseSeeder.php
- Editor View:** DatabaseSeeder.php (M)
- Code Content:** A PHP class definition for `DatabaseSeeder` extending `Seeder`. The `run()` method creates a user with name 'Test User' and email 'test@example.com', and then calls `RolesAndPermissionsSeeder::class`.
- Terminal View:** Shows the command `php artisan db:seed` being run.
- Output:**
 - INFO | Seeding database.
 - Database\Seeders\RolesAndPermissionsSeeder RUNNING
 - Database\Seeders\RolesAndPermissionsSeeder 125 ms DONE
- Bottom Status Bar:** Includes file navigation, search, and system status icons.

Part E 4 : Screenshot of API Testing With Bruno.

Register a user → 201

The screenshot shows the Bruno API testing interface. On the left, the sidebar lists collections: 'Backend Laravel - Pr...' and 'Backend Laravel - Pa...'. The main area shows a POST request titled 'Register' to 'Http://localhost:8000/api/auth/register'. The 'Body' tab displays the JSON payload:

```
1  {
2   "name": "Admin User",
3   "email": "admin@example.com",
4   "password": "password-a",
5   "password_confirmation": "password-a"
6 }
```

The 'Response' tab shows the successful response in JSON format:

```
1  {
2   "user": {
3     "name": "Admin User",
4     "email": "admin@example.com",
5     "updated_at": "2026-01-05T22:27:25.000000Z",
6     "created_at": "2026-01-05T22:27:25.000000Z",
7     "id": 5
8   },
9   "token": "6|1IFxPvqrDPphfUqLBtwzvufaEExrOr2SpPnokXHHc59e5d14"
10 }
```

The status bar at the bottom indicates '2.15.1' and the date '1/6/2026'.

Login and obtain token → 200

The screenshot shows the Bruno API testing tool interface. The top navigation bar includes 'Collection' (Bruno), 'Edit', 'View', 'Window', and 'Help'. A 'Developer Mode' button is also present. The main window title is 'Backend Laravel - Part E'. A search bar at the top right says 'Local Backe... | local'. Below the title, there's a 'POST Login' tab and a '+' button. The main area shows a 'POST' request to 'http://localhost:8000/api/auth/login'. The 'Body' tab is selected, showing the following JSON payload:

```
1 {  
2   "email": "admin@example.com",  
3   "password": "password-a"  
4 }  
5
```

The 'Response' tab shows the JSON response from the server:

```
1 {  
2   "user": {  
3     "id": 5,  
4     "name": "Admin User",  
5     "email": "admin@example.com",  
6     "email_verified_at": null,  
7     "created_at": "2026-01-05T22:27:25.000000Z",  
8     "updated_at": "2026-01-05T22:27:25.000000Z"  
9   },  
10  "token": "7|BvloDzugHfoIOECuQS8cJoJ4CFeLlGN0GDmmhObs78161a9d  
11 }
```

The status bar at the bottom indicates '200 OK' with a response time of '1.41s' and a size of '237B'. The bottom of the screen shows a Windows taskbar with various pinned icons and the date/time '1/6/2026 6:29 AM'.

Access `GET /api/auth/me` without token → 401

The screenshot shows the Bruno API testing tool interface. On the left, the sidebar lists collections: 'Backend Laravel - Pr...' and 'Backend Laravel - Pa...'. Under 'Backend Laravel - Pa...', there are three items: 'POST Register', 'POST Login', and 'GET Get'. The 'GET Get' item is selected, showing a 'GET' request to 'http://localhost:8000/api/auth/me'. The 'Body' tab is active, showing an empty JSON object. The 'Response' tab shows the JSON response: { "message": "Unauthenticated." }. The status bar at the bottom indicates 'v2.15.1'.

Bruno

Collection Edit View Window Help

bruno ...

Backend Laravel - Part E

Developer Mode | Local Back... | local

Collections

Q Search requests ...

> Backend Laravel - Pr...

Backend Laravel - Pa...

POST Register

POST Login

GET Get

GET http://localhost:8000/api/auth/me

Params Body * Headers¹ Auth * Vars Script Assert

Tests Docs Settings

JSON Prettify

Response Headers⁷ Timeline Tests

1 {
2 "message": "Unauthenticated."
3 }

401 Unauthorized 92ms 30B

Try Bruno Ultimate

Search Cookies Dev Tools v2.15.1*

26°C Mostly cloudy

Search

6:31 AM 1/6/2026

Access `GET /api/auth/me` with token → 200

The screenshot shows the Bruno API testing tool interface. On the left, there's a sidebar with collections like 'Backend Laravel - Pr...' and 'Backend Laravel - Pa...'. A 'GET' request is selected in the main area, targeting `http://localhost:8000/api/auth/me`. The 'Auth' tab is active, showing a 'Bearer Token' input field containing a long token. The 'Response' tab displays the JSON response:

```
1 {  
2   "id": 5,  
3   "name": "Admin User",  
4   "email": "admin@example.com",  
5   "email_verified_at": null,  
6   "created_at": "2026-01-05T22:27:25.000000Z",  
7   "updated_at": "2026-01-05T22:27:25.000000Z"  
8 }
```

At the bottom, the system tray shows weather (25°C), a search bar, and system icons.

Access `POST /api/products` as viewer → 403

** failed to work to get output 403

The screenshot shows the Bruno API testing tool interface. On the left, there's a sidebar with 'My Workspace' and a 'Collections' section containing items like 'Backend Laravel - Products' and 'Backend Laravel - Part E'. The main area is titled 'Backend Laravel - Part E' and shows a 'POST Post Product' request. The URL is `http://localhost:8000/api/products`. The 'Body' tab is selected, displaying the following JSON payload:

```
1 v {  
2   "name": "Viewer Product",  
3   "description": "Fifth Test by viewer",  
4   "price": 10,  
5   "stock": 5  
6 }  
7
```

The 'Response' tab shows the JSON response:

```
1 v {  
2   "success": true,  
3   "data": {  
4     "name": "Viewer Product",  
5     "description": "Fifth Test by viewer",  
6     "price": 10,  
7     "stock": 5,  
8     "updated_at": "2026-01-05T23:26:05.000000Z",  
9     "created_at": "2026-01-05T23:26:05.000000Z",  
10    "id": 6  
11  }  
12 }
```

The status bar at the bottom shows the weather as '25°C Mostly cloudy', a search bar, and system icons.

Access `GET /api/products` as viewer → 200

The screenshot shows the Bruno API testing tool interface. On the left, the sidebar lists collections: 'Backend Laravel - Products' and 'Backend Laravel - Part E'. Under 'Backend Laravel - Part E', 'GET Get Product' is selected. The main area shows a request for 'GET http://localhost:8000/api/products'. The 'Auth' tab is selected, showing a token input field containing a long string of asterisks. The 'Response' tab displays the JSON response:

```
1  [
2    {
3     "id": 1,
4     "name": "Test Product Viewer",
5     "description": "Try create product",
6     "price": "10.00",
7     "stock": 5,
8     "created_at": "2026-01-05T22:05:40.000000Z",
9     "updated_at": "2026-01-05T22:05:40.000000Z"
10    },
11    {
12      "id": 2,
13      "name": "Test Product Viewer",
14      "description": "Try create product",
15      "price": "10.00",
16      "stock": 5,
17      "created_at": "2026-01-05T22:06:14.000000Z",
18      "updated_at": "2026-01-05T22:06:14.000000Z"
19    },
20    {
21      "id": 3,
22      "name": "Admin Product",
23      "description": "Created by admin",
24      "price": "25.50",
25      "stock": 10,
26      "created_at": "2026-01-05T22:40:57.000000Z",
27      "updated_at": "2026-01-05T22:40:57.000000Z"
28    },
29    {
30      "id": 4,
31      "name": "Minimal Product"
32    }
33  ]
```

The status bar at the bottom shows the weather as '25°C Mostly cloudy', a search bar, and system icons.

Access POST /api/products as admin (or staff) → 201

The screenshot shows the Bruno API testing tool interface. On the left, a sidebar lists collections: 'Backend Laravel - Pr...' and 'Backend Laravel - Pa...'. Under 'Backend Laravel - Pa...', there are two items: 'POST Register' and 'POST Login'. The 'POST Login' item is selected, indicated by a grey background. In the main area, a request is being made to 'http://localhost:8000/api/products'. The 'Body' tab is selected, showing the following JSON payload:

```
1+ {
2   "name": "Admin Product",
3   "description": "Created by admin",
4   "price": 25.5,
5   "stock": 10
6 }
```

The 'Response' tab is selected, displaying the JSON response received from the server. The status code is 201 Created, and the response body is:

```
1+ {
2   "success": true,
3   "data": {
4     "name": "Admin Product",
5     "description": "Created by admin",
6     "price": 25.5,
7     "stock": 10,
8     "updated_at": "2026-01-05T22:40:57.000000Z",
9     "created_at": "2026-01-05T22:40:57.000000Z",
10    "id": 3
11  }
12 }
```

At the bottom of the screen, the Windows taskbar is visible, showing the weather (25°C, Mostly cloudy), a search bar, and various pinned application icons.

Logout → 200

The screenshot shows the Bruno API testing tool interface. At the top, there's a navigation bar with 'Collection' (Bruno), 'Edit', 'View', 'Window', and 'Help'. Below the navigation is a header bar with tabs for 'Collections' (highlighted), 'POST Logout' (selected), 'GET Get', and a '+' button. To the right of the tabs are 'Developer Mode' and other developer tools like 'Local Back...', 'local', and 'Timeline'.

The main area has a search bar 'Q Search requests ...' and a sidebar with collections: 'Backend Laravel - Pr...' and 'Backend Laravel - Pa...'. Under 'Backend Laravel - Pa...', 'POST Logout' is selected. The main panel shows a POST request to 'http://localhost:8000/api/auth/logout'. The 'Body' tab is active, showing a JSON response:

```
1 {  
2   "message": "Logged out"  
3 }
```

The 'Response' tab shows the status as '200 OK' with a response time of '410ms' and a size of '24B'. Below the response, there are tabs for 'Headers' (7), 'Timeline', 'Tests', and icons for copy, download, and refresh. At the bottom of the window, there's a toolbar with various icons and a status bar showing 'v2.15.1*', 'Try Bruno Ultimate', 'Search', 'Cookies', 'Dev Tools', 'ENG US', '642 AM', and '1/6/2026'.