

Jobsheet 13 – How to Build API with Laravel Breeze in Laravel 11

Disusun untuk memenuhi Tugas Mata Kuliah Pemrograman Mobile

Dosen Pembimbing : Bapak Ade Ismail, S.Kom., M.T.



Disusun oleh

Liya Novitasari 2241760006

Kelas 3E

Jurusan Teknologi Informasi

Program Studi D-4 Sistem Informasi Bisnis

POLITEKNIK NEGERI MALANG

MALANG

2024

Praktikum 1: Membangun API dengan Laravel Breeze di Laravel 11

Panduan langkah demi langkah dalam membangun API sederhana dengan otentikasi menggunakan Laravel Breeze di Laravel 11.

Langkah 1:

Pertama, buat proyek Laravel baru menggunakan installer Laravel atau Composer menggunakan perintah `laravel new api-breeze` atau melalui Composer dengan perintah `composer create-project laravel/laravel api-breeze`.

```
PS C:\Mobile> composer create-project laravel/laravel api-breeze
Creating a "laravel/laravel" project at "./api-breeze"
Installing laravel/laravel (v11.3.3)
- Downloading laravel/laravel (v11.3.3)
- Installing laravel/laravel (v11.3.3): Extracting archive
Created project in C:\Mobile\api-breeze
> @php -r "file_exists('.env') || copy('.env.example', '.env');"
Loading composer repositories with package information
Updating dependencies
Lock file operations: 107 installs, 0 updates, 0 removals
- Locking brick/math (0.12.1)
- Locking carbonphp/carbon-doctrine-types (3.2.0)
- Locking dflydev/dot-access-data (v3.0.3)
- Locking doctrine/inflector (2.0.10)
- Locking doctrine/lexer (3.0.1)
- Locking dragonmantank/cron-expression (v3.4.0)
- Locking egulias/email-validator (4.0.2)
- Locking fakerphp/faker (v1.24.1)
- Locking filp/whoops (2.16.0)
- Locking fruitcake/php-cors (v1.3.0)
- Locking graham-campbell/result-type (v1.1.3)
- Locking guzzlehttp/guzzle (7.9.2)
- Locking guzzlehttp/promises (2.0.4)
- Locking guzzlehttp/psr7 (2.7.0)
- Locking guzzlehttp/uri-template (v1.0.3)
- Locking hamcrest/hamcrest-php (v2.0.1)
- Locking laravel/framework (v11.33.2)
- Locking laravel/pail (v1.2.1)
- Locking laravel/pint (v1.18.2)
- Locking laravel/prompts (v0.3.2)
- Locking laravel/sail (v1.38.0)
- Locking laravel/serializable-closure (v2.0.0)
- Locking laravel/tinker (v2.10.0)
- Locking league/commonmark (2.5.3)
- Locking league/config (v1.2.0)
- Locking league/flysystem (3.29.1)
- Locking league/flysystem-local (3.29.0)
```

```

- Installing sebastian/code-unit-reverse-lookup (4.0.1): Extracting archive
- Installing phpunit/php-code-coverage (11.0.7): Extracting archive
- Installing phar-io/version (3.2.1): Extracting archive
- Installing phar-io/manifest (2.0.4): Extracting archive
- Installing myclabs/deep-copy (1.12.1): Extracting archive
- Installing phpunit/phpunit (11.4.3): Extracting archive
51 package suggestions were added by new dependencies, use `composer suggest` to see details.
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi

  INFO  Discovering packages.

laravel/pail ..... DONE
laravel/sail ..... DONE
laravel/tinker ..... DONE
nesbot/carbon ..... DONE
nunomaduro/collision ..... DONE
nunomaduro/termwind ..... DONE

78 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

  INFO  No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
> @php artisan key:generate --ansi

  INFO  Application key set successfully.

> @php -r "file_exists('database/database.sqlite') || touch('database/database.sqlite');"
> @php artisan migrate --graceful --ansi

  WARN  could not find driver (Connection: sqlite, SQL: PRAGMA foreign_keys = ON;).

PS C:\Mobile>

```

Lanjutkan dengan masuk ke folder proyek cd api-breeze

```

PS C:\Mobile> cd api-breeze
PS C:\Mobile\api-breeze>

```

Langkah 2 :

Selanjutnya, instal Laravel Breeze dan dependensinya menggunakan perintah `composer require laravel/breeze --dev` php artisan breeze:install api. Perintah ini akan menginstal Breeze dan menyiapkan scaffolding yang diperlukan untuk otentikasi API.

composer require laravel/breeze --dev

```
PS C:\Mobile> cd api-breeze
ze : The term 'ze' is not recognized as the
name of a cmdlet, function, script file, or
operable program. Check the spelling of the
name, or if a path was included, verify
that the path is correct and try again.
At line:1 char:1
+ ze
+ ~~
+ CategoryInfo          : ObjectNotFound: (ze:String) [], CommandNotFoundException
    removals
    - Locking laravel/breeze (v2.2.5)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 1 install, 0 updates, 0 removals
    - Downloading laravel/breeze (v2.2.5)
    - Installing laravel/breeze (v2.2.5): Extracting archive
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi

 INFO  Discovering packages.

laravel/breeze ..... DONE
laravel/pail ..... DONE
laravel/sail ..... DONE
laravel/tinker ..... DONE
nesbot/carbon ..... DONE
nunomaduro/collision ..... DONE
nunomaduro/termwind ..... DONE

78 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force
```

```
78 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

 INFO  No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
Using version ^2.2 for laravel/breeze
PS C:\Mobile\api-breeze> 
```

php artisan breeze:install api

```
PS C:\Mobile\api-breeze> php artisan breeze:install api
./composer.json has been updated
Running composer update laravel/sanctum
Loading composer repositories with package information
Updating dependencies
Lock file operations: 1 install, 0 updates, 0 removals
- Locking laravel/sanctum (v4.0.4)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 1 install, 0 updates, 0 removals
- Downloading laravel/sanctum (v4.0.4)
- Installing laravel/sanctum (v4.0.4): Extracting archive
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi
INFO Discovering packages.

laravel/breeze ..... DONE
laravel/pail ..... DONE
laravel/sail ..... DONE
laravel/sanctum ..... DONE
laravel/tinker ..... DONE
nesbot/carbon ..... DONE
nunomaduro/collision ..... DONE
nunomaduro/termwind ..... DONE
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

INFO No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
INFO Published API routes file.

One new database migration has been published. Would you like to run all pending database migrations? (yes/no) [yes]:
>
Illuminate\Database\QueryException
```

```
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

INFO No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
INFO Published API routes file.

One new database migration has been published. Would you like to run all pending database migrations? (yes/no) [yes]:
>
Illuminate\Database\QueryException

could not find driver (Connection: sqlite, SQL: PRAGMA foreign_keys = ON;)

at vendor\laravel\framework\src\Illuminate\Database\Connection.php:825
 821 |         $this->getName(), $query, $this->prepareBindings($bindings), $e
 822 |     );
 823 | }
 824 |
-> 825 |     throw new QueryException(
 826 |         $this->getName(), $query, $this->prepareBindings($bindings), $e
 827 |     );
 828 | }
 829 | }

1 vendor\laravel\framework\src\Illuminate\Database\Connectors\Connector.php:66
PDOException: ("could not find driver")

2 vendor\laravel\framework\src\Illuminate\Database\Connectors\Connector.php:66
PDO::__construct("sqlite:C:\Mobile\api-breeze\database\database.sqlite", Object(SensitiveParameterValue), [])

INFO Breeze scaffolding installed successfully.

PS C:\Mobile\api-breeze> █
```

Langkah 3 :

Konfigurasi Database dan Jalankan Migrasi dengan perbarui file .env dengan kredensial database.

```
api-breeze > .env
1 APP_NAME=Laravel
2 APP_ENV=local
3 APP_KEY=base64:zMkMDGgSgNGMIj5StgGn9NkxsN4Eia2HeolqbVz36TE=
4 APP_DEBUG=true
5 APP_TIMEZONE=UTC
6 APP_URL=http://localhost:8000
7 FRONTEND_URL=http://localhost:3000
8
9 APP_LOCALE=en
10 APP_FALLBACK_LOCALE=en
11 APP_FAKER_LOCALE=en_US
12
13 APP_MAINTENANCE_DRIVER=file
14 # APP_MAINTENANCE_STORE=database
15
16 PHP_CLI_SERVER_WORKERS=4
17
18 BCRYPT_ROUNDS=12
19
20 LOG_CHANNEL=stack
21 LOG_STACK=single
22 LOG_DEPRECATED_CHANNEL=null
23 LOG_LEVEL=debug
24
25 DB_CONNECTION=mysql
26 DB_HOST=127.0.0.1
27 DB_PORT=3306
28 DB_DATABASE=laravel11_api
29 DB_USERNAME=root
30 DB_PASSWORD=
31
32 SESSION_DRIVER=database
33 SESSION_LIFETIME=120
34 SESSION_ENCRYPT=false
```

Jalankan migrasi dengan perintah berikut di terminal php artisan migrate

```
PS C:\Mobile\api-breeze> php artisan migrate

[WARN] The database 'laravel11_api' does not exist on the 'mysql' connection.

Would you like to create it? (yes/no) [yes]
> yes

[INFO] Preparing database.

Creating migration table ..... 25.48ms DONE

[INFO] Running migrations.

0001_01_01_000000_create_users_table ..... 92.48ms DONE
0001_01_01_000001_create_cache_table ..... 21.93ms DONE
0001_01_01_000002_create_jobs_table ..... 79.68ms DONE
2024_11_26_145753_create_personal_access_tokens_table ..... 53.06ms DONE

PS C:\Mobile\api-breeze>
```

Cek pada database

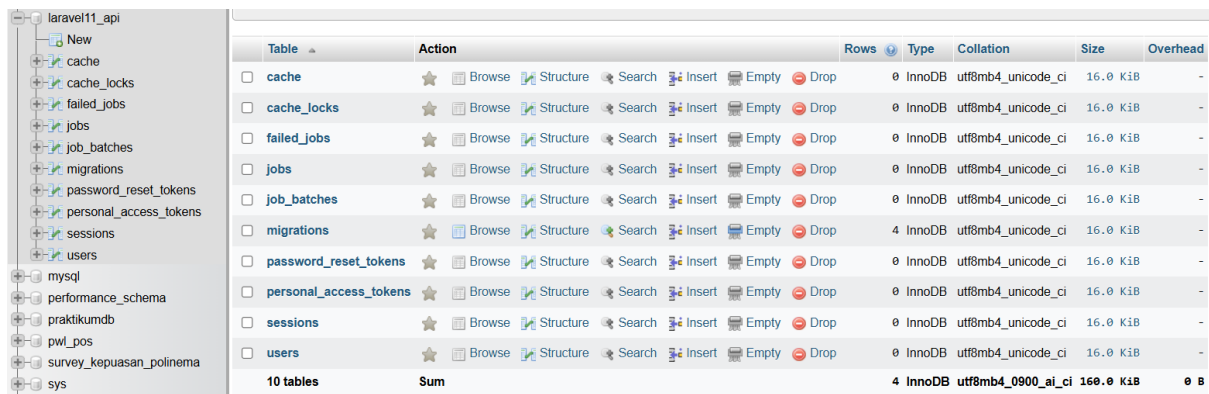


Table	Action	Rows	Type	Collation	Size	Overhead
cache	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
cache_locks	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
failed_jobs	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
jobs	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
job_batches	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
migrations	★ Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
password_reset_tokens	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
personal_access_tokens	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
sessions	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
users	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 KiB	-
10 tables	Sum	4	InnoDB	utf8mb4_0900_ai_ci	160.0 KiB	0 B

Langkah 4 :

Buat Endpoint Autentikasi dengan menambahkan rute di routes/api.php seperti Berikut

```
api-breeze > routes > api.php > ...
1  <?php
2
3  use App\Http\Controllers\Auth\AuthenticatedSessionController;
4  use App\Http\Controllers\Auth\RegisteredUserController;
5  use Illuminate\Http\Request;
6  use Illuminate\Support\Facades\Route;
7
8  Route::middleware(['auth:sanctum'])->get('/user', function (Request $request) {
9      return $request->user();
10 });
11
12 //Tambahkan route autentikasi
13 Route::post('/register', [RegisteredUserController::class, 'store']);
14 Route::post('/login', [AuthenticatedSessionController::class, 'store']);
15 Route::post('/logout', [AuthenticatedSessionController::class, 'destroy'])->middleware('auth:sanctum');
```

Langkah 5 :

Perbarui Controller dengan sesuaikan RegisteredUserController dan AuthenticatedSessionController agar mengembalikan respons JSON.

```
api-breeze > app > Http > Controllers > Auth > RegisteredUserController.php > RegisteredUserController > store
1  <?php
2
3  namespace App\Http\Controllers\Auth;
4
5  use App\Http\Controllers\Controller;
6  use App\Models\User;
7  use Illuminate\Auth\Events\Registered;
8  use Illuminate\Http\Request;
9  use Illuminate\Http\Response;
10 use Illuminate\Support\Facades\Auth;
11 use Illuminate\Support\Facades\Hash;
12 use Illuminate\Validation\Rules;
13
14 class RegisteredUserController extends Controller
15 {
16     /**
17      * Handle an incoming registration request.
18      *
19      * @throws \Illuminate\Validation\ValidationException
20      */
21     public function store(Request $request)
22     {
23         $request->validate([
24             'name' => ['required', 'string', 'max:255'],
25             'email' => ['required', 'string', 'email', 'max:255', 'unique:users'],
26             'password' => ['required', 'confirmed', Rules\Password::defaults()],
27         ]);
28
29         $user = User::create([
30             'name' => $request->name,
31             'email' => $request->email,
32             'password' => Hash::make($request->password),
33         ]);
34
35         event(new Registered($user));
36
37         $token = $user->createToken('auth_token')->plainTextToken;
38
39         return response()->json([
40             'access_token' => $token,
41             'token_type' => 'Bearer',
42             'user' => $user
43         ]);
44     }
45 }
```



```

PS C:\Mobile\api-breeze> composer require laravel/sanctum
./composer.json has been updated
Running composer update laravel/sanctum
Loading composer repositories with package information
Updating dependencies
Nothing to modify in lock file
Writing lock file
Installing dependencies from lock file (including require-dev)
Nothing to install, update or remove
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi

  INFO  Discovering packages.

laravel/breeze ..... DONE
laravel/pail ..... DONE
laravel/sail ..... DONE
laravel/sanctum ..... DONE
laravel/tinker ..... DONE
nesbot/carbon ..... DONE
nunomaduro/collision ..... DONE
nunomaduro/termwind ..... DONE

78 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
> @php artisan vendor:publish --tag=laravel-assets --ansi --force

  INFO  No publishable resources for tag [laravel-assets].

No security vulnerability advisories found.
Using version ^4.0 for laravel/sanctum
PS C:\Mobile\api-breeze>

```

```

PS C:\Mobile\api-breeze> php artisan vendor:publish --provider="Laravel\Sanctum\SanctumServiceProvider"

  INFO  Publishing assets.

Copying directory [C:\Mobile\api-breeze\vendor\laravel\sanctum\database\migrations] to [C:\Mobile\api-breeze\database\migrations] DONE
File [C:\Mobile\api-breeze\config\sanctum.php] already exists ..... SKIPPED

PS C:\Mobile\api-breeze>

```

```

api-breeze > app > Http > Controllers > Auth > AuthenticatedSessionController.php > AuthenticatedSessionController > store
1  <?php
2
3  namespace App\Http\Controllers\Auth;
4
5  use App\Http\Controllers\Controller;
6  use App\Http\Requests\Auth\LoginRequest;
7  use Illuminate\Http\Request;
8  use Illuminate\Http\Response;
9  use Illuminate\Support\Facades\Auth;
10
11 class AuthenticatedSessionController extends Controller
12 {
13     /**
14      * Handle an incoming authentication request.
15      */
16     public function store(Request $request)
17     {
18         $request->validate([
19             'email' => ['required', 'string', 'email'],
20             'password' => ['required', 'string'],
21         ]);
22
23         if (!Auth::attempt($request->only('email', 'password'))) {
24             return response()->json(['message' => 'Invalid login credentials'], 401);
25         }
26
27         $user = Auth::user(); |
28         $token = $user->createToken('auth_token')->plainTextToken;
29
30         return response()->json([
31             'access_token' => $token,
32             'token_type' => 'Bearer',
33             'user' => $user,
34             'status' => 'Login successful',
35         ]);
36     }
37
38     public function destroy(Request $request)
39     {
40         $request->user()->currentAccessToken()->delete();
41
42         return response()->json(['message' => 'Logout successful']);
43     }
44 }
45

```

```

PS C:\Mobile\api-breeze> php artisan serve
forking is not supported on this platform

INFO Server running on [http://127.0.0.1:8000].

Press Ctrl+C to stop the server

```

Langkah 6 :

Jalankan Laravel dengan menggunakan perintah php artisan serve dan lakukan tes cek API melalui Thunder Client, namun sebelum itu perlu install Thunder Client dahulu

No security vulnerability advisories found.

```
PS C:\Mobile\api-breeze> php artisan make:seeder UserSeeder
```

INFO Seeder [C:\Mobile\api-breeze\database\seeders\UserSeeder.php] created successfully.

```
PS C:\Mobile\api-breeze> php artisan db:seed --class=UserSeeder
```

The "--class=UserSeeder" option does not exist.

```
PS C:\Mobile\api-breeze> ^C
PS C:\Mobile\api-breeze> php artisan db:seed --class=UserSeeder
```

INFO Seeding database.

```
PS C:\Mobile\api-breeze>
```

```
api-breeze > database > seeders > 🐞 UserSeeder.php > ...
1  <?php
2
3  namespace Database\Seeders;
4
5  use Illuminate\Database\Console\Seeds\WithoutModelEvents;
6  use Illuminate\Database\Seeder;
7
8  class UserSeeder extends Seeder
9  {
10     /**
11      * Run the database seeds.
12      */
13     public function run(): void
14     {
15         \App\Models\User::create([
16             'name' => 'Test User',
17             'email' => 'test@example.com',
18             'password' => bcrypt('password123'),
19         ]);
20     }
21 }
22
```

POST ▼ http://127.0.0.1:8000/api/register

Query Headers² Auth Body¹ Tests Pre Run

JSON XML Text Form Form-encode GraphQL Binary

JSON Content

```
1  {
2    "name": "john maths9",
3    "email": "johnmaths9@example.com",
4    "password": "password123",
5    "password_confirmation": "password123"
6  }
```

Status: 200 OK Size: 247 Bytes Time: 900 ms

Response Headers⁸ Cookies Results Docs

```
1  {
2    "access_token": "1|B8iw6SHsU4DyEdzFaIOMYmqeo9S0rnUzJEkLi3mj86174887",
3    "token_type": "Bearer",
4    "user": {
5      "name": "john maths9",
6      "email": "johnmaths9@example.com",
7      "updated_at": "2024-11-26T19:43:04.000000Z",
8      "created_at": "2024-11-26T19:43:04.000000Z",
9      "id": 1
10   }
11 }
```

POST ▼ http://127.0.0.1:8000/api/login

Query Headers² Auth **Body¹** Tests Pre Run

JSON XML Text Form Form-encode GraphQL Binary

JSON Content

```
1  {
2    "email": "johnmaths9@example.com",
3    "password": "password123"
4  }
```

Status: 200 OK Size: 300 Bytes Time: 912 ms

Response Headers⁸ Cookies Results Docs

```
1  {
2    "access_token": "2|qcYcA0kAYL1mkL94YVduoJWGheqrsfy3i6JQgxf6f261eaf",
3    "token_type": "Bearer",
4    "user": {
5      "id": 1,
6      "name": "john maths9",
7      "email": "johnmaths9@example.com",
8      "email_verified_at": null,
9      "created_at": "2024-11-26T19:43:04.000000Z",
10     "updated_at": "2024-11-26T19:43:04.000000Z"
11   },
12   "status": "Login successful"
13 }
```

```
PS C:\Mobile\api-breeze> php artisan serve
forking is not supported on this platform

INFO Server running on [http://127.0.0.1:8000].

Press Ctrl+C to stop the server

2024-11-27 02:42:33 /api/login ..... ~ 1s
2024-11-27 02:43:04 /api/register ..... ~ 1s
2024-11-27 02:44:40 /api/login ..... ~ 1s
```

Praktikum 2: Membuat Aplikasi Mobile Flutter

Langkah 1:

Persiapan Proyek Flutter dengan membuat proyek Flutter baru menggunakan perintah flutter create my_flutter_app cd my_flutter_app

```
PS C:\Mobile> flutter create my_flutter_api2
Creating project my_flutter_api2...
Resolving dependencies in `my_flutter_api2`... (2.0s)
Downloading packages...
Got dependencies in `my_flutter_api2`.
Wrote 129 files.

All done!
You can find general documentation for Flutter at:
https://docs.flutter.dev/
Detailed API documentation is available at: https://api.flutter.dev/
If you prefer video documentation, consider:
https://www.youtube.com/c/flutterdev

In order to run your application, type:

$ cd my_flutter_api2
$ flutter run

Your application code is in my_flutter_api2\lib\main.dart.

PS C:\Mobile> cd my_flutter_api2
PS C:\Mobile\my_flutter_api2>
```

Tambahkan dependencies di pubspec.yaml

```
my_flutter_api2 > ! pubspec.yaml
1  name: my_flutter_api2
2  description: "A new Flutter project."
3  # The following line prevents the package from being accidentally published
4  # to pub.dev using `flutter pub publish`. This is preferred for private packages.
5  publish_to: 'none' # Remove this line if you wish to publish to pub.dev
6
7  # The following defines the version and build number for your application.
8  # A version number is three numbers separated by dots, like 1.2.43
9  # followed by an optional build number separated by a +.
10 # Both the version and the build number may be overridden in flutter
11 # build by specifying --build-name and --build-number, respectively.
12 # In Android, build-name is used as versionName while build-number is used
13 # as versionCode. Read more about Android versioning at
14 # https://developer.android.com/studio/publish/versioning
15 # In iOS, build-name is used as CFBundleShortVersionString while build-number
16 # is used as CFBundleVersion. Read more about iOS versioning at
17 # https://developer.apple.com/library/archive/documentation/General/Reference/InfoPlistKeyReference/Articles/CoreFoundationKeys.html
18 # In Windows, build-name is used as the major, minor, and patch parts
19 # of the product and file versions while build-number is used as the build
20 # number.
21 version: 1.0.0+1
22
23 environment:
24   sdk: ^3.5.4
25
26 # Dependencies specify other packages that your package needs in order to
27 # run. To automatically upgrade your package dependencies to the latest
28 # version, consider running `flutter pub upgrade --major-versions`. Alternative
29 # to dependencies can be manually updated by changing the version numbers
30 # to the latest version available on pub.dev. To see which dependencies have
31 # newer versions available, run `flutter pub outdated`.
32 dependencies:
33   flutter:
34     sdk: flutter
35   http: ^0.13.3
36   shared_preferences: ^2.0.6
37   provider: ^6.0.0
38   flutter_secure_storage: ^5.0.2
39   lottie: ^2.2.0
```

Tambahkan dependencies di flutter pub get

```
PS C:\Mobile\my_flutter_api2> flutter pub get
Resolving dependencies...
Downloading packages...
  async 2.11.0 (2.12.0 available)
  boolean_selector 2.1.1 (2.1.2 available)
  characters 1.3.0 (1.3.1 available)
  clock 1.1.1 (1.1.2 available)
  collection 1.18.0 (1.19.1 available)
  fake_async 1.3.1 (1.3.2 available)
  flutter_lints 4.0.0 (5.0.0 available)
  flutter_secure_storage 5.1.2 (9.2.2 available)
  flutter_secure_storage_macos 1.1.2 (3.1.2 available)
  flutter_secure_storage_windows 1.1.3 (3.1.2 available)
  http 0.13.6 (1.2.2 available)
  http_parser 4.0.2 (4.1.1 available)
  js 0.6.7 (0.7.1 available)
  leak_tracker 10.0.5 (10.0.8 available)
  leak_tracker_flutter_testing 3.0.5 (3.0.9 available)
  lints 4.0.0 (5.1.0 available)
  matcher 0.12.16+1 (0.12.17 available)
  material_color_utilities 0.11.1 (0.12.0 available)
  meta 1.15.0 (1.16.0 available)
  path 1.9.0 (1.9.1 available)
  stack_trace 1.11.1 (1.12.0 available)
  string_scanner 1.2.0 (1.4.0 available)
  test_api 0.7.2 (0.7.4 available)
  vm_service 14.2.5 (14.3.1 available)
Got dependencies!
24 packages have newer versions incompatible with dependency constraints.
Try `flutter pub outdated` for more information.
PS C:\Mobile\my_flutter_api2>
```



```
[my_flutter_api2] dart pub get --no-example
Error on line 41, column 3 of pubspec.yaml: Expected a key while
parsing a block mapping.

41 |   cupertino_icons: ^1.0.8
    |   ^
exit code 65

--

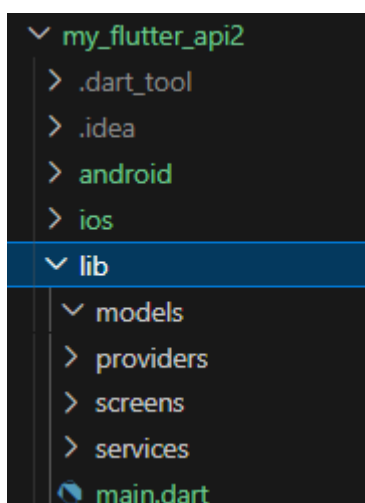
[my_flutter_api2] dart pub get --no-example
Error on line 41, column 3 of pubspec.yaml: Expected a key while
parsing a block mapping.

41 |   cupertino_icons: ^1.0.8
    |   ^
exit code 65
```

Langkah 2:

Buat Splashscreen dengan animasi dari Lottie File. Buat folder berikut untuk mengatur kode Anda dengan lebih baik:

- lib/screens/ untuk layar UI.
- lib/services/ untuk layanan HTTP dan manajemen API.
- lib/models/ untuk model data.
- lib/providers/ untuk manajemen state menggunakan Provider.



Langkah 3:

Buat Model Pengguna dengan nama file `user_model.dart` di folder `models` untuk representasi data pengguna.

```
my_flutter_api2 > lib > models > user_model.dart > User
1 class User {
2   final int id;
3   final String name;
4   final String email;
5
6   User({required this.id, required this.name, required this.email});
7
8   // Fungsi untuk membuat model User dari JSON
9   factory User.fromJson(Map<String, dynamic> json) {
10    return User(
11      id: json['id'],
12      name: json['name'],
13      email: json['email'],
14    );
15  }
16 }
```

Langkah 4:

Buat Layanan API dengan nama file `auth_service.dart` di folder `services` untuk mengelola login, logout, dan profil pengguna.

```
my_flutter_api2 > lib > services > auth_service.dart > ...
1 import 'dart:convert';
2 import 'package:http/http.dart' as http;
3 import 'package:flutter_secure_storage/flutter_secure_storage.dart';
4 import '../models/user_model.dart';
5
6 class AuthService {
7   final String apiUrl = 'http://127.0.0.1:8000/api'; // Ganti dengan URL API Laravel Anda
8   final storage = const FlutterSecureStorage(); // Perbaiki penulisan di sini
9
10  // Fungsi untuk login
11  Future<bool> login(String email, String password) async {
12    final response = await http.post(
13      Uri.parse('$apiUrl/login'),
14      headers: {'Content-Type': 'application/json'},
15      body: jsonEncode({'email': email, 'password': password}),
16    );
17
18    if (response.statusCode == 200) {
19      final data = jsonDecode(response.body);
20      await storage.write(key: 'token', value: data['access_token']);
21      return true;
22    } else {
23      return false;
24    }
25  }
26
27  // Fungsi untuk mengambil profil pengguna
28  Future<User?> getProfile() async {
29    final token = await storage.read(key: 'token');
30    final response = await http.get(
31      Uri.parse('$apiUrl/profile'),
32      headers: {
33        'Content-Type': 'application/json',
34        'Authorization': 'Bearer $token',
35      },
36    );
37
38    if (response.statusCode == 200) {
39      final data = jsonDecode(response.body);
40      return User.fromJson(data['user']);
41    } else {
42      return null;
43    }
44  }
45
46  // Fungsi untuk logout
47  Future<void> logout() async {
48    await storage.delete(key: 'token');
49  }
50 }
```

Langkah 5:

Buat State Management dengan Provider (auth_provider.dart) di folder lib/providers/

```
my_flutter_api2 > lib > providers > auth_provider.dart > AuthProvider
1  import 'package:flutter/material.dart';
2
3  class AuthProvider with ChangeNotifier {
4    String? user; // Menyimpan informasi pengguna (bisa disesuaikan sesuai kebutuhan)
5
6    Future<void> loadUser() async {
7      // Logika untuk memuat data pengguna yang sudah login, misalnya dari SharedPreferences atau API
8      // Ini hanya contoh, sesuaikan dengan logika autentikasi yang Anda gunakan
9      await Future.delayed(const Duration(seconds: 2)); // Simulasi proses loading
10     // Misalnya jika ada data pengguna yang sudah login
11     user = 'user'; // Ganti dengan logika yang lebih sesuai
12     notifyListeners();
13   }
14
15   Future<void> login(String username, String password) async {
16     // Logika login
17     if (username == 'Test User' && password == 'password123') {
18       user = 'Test User'; // Set pengguna yang berhasil login
19       notifyListeners();
20     } else {
21       throw Exception('Invalid credentials'); // Error jika login gagal
22     }
23   }
24
25   Future<void> logout() async {
26     user = null; // Menghapus data pengguna
27     notifyListeners();
28   }
29 }
```

Langkah 6:

Buat Halaman Login (login_screen.dart) di folder lib/screens/

```

my_flutter_api2 > lib > screens > login_screen.dart > _LoginScreenState
1  import 'package:flutter/material.dart';
2  import 'package:provider/provider.dart';
3  import '../providers/auth_provider.dart';
4
5  class LoginScreen extends StatefulWidget {
6    const LoginScreen({super.key});
7
8    @override
9    _LoginScreenState createState() => _LoginScreenState();
10 }
11
12 class _LoginScreenState extends State<LoginScreen> {
13   final TextEditingController _usernameController = TextEditingController();
14   final TextEditingController _passwordController = TextEditingController();
15   String errorMessage = '';
16
17   @override
18   Widget build(BuildContext context) {
19     return Scaffold(
20       appBar: AppBar(
21         title: const Text('Login'),
22       ), // AppBar
23       body: Padding(
24         padding: const EdgeInsets.all(16.0),
25         child: Column(
26           children: [
27             TextField(
28               controller: _usernameController,
29               decoration: const InputDecoration(labelText: 'Username'),
30             ), // TextField
31             TextField(
32               controller: _passwordController,
33               obscureText: true,
34               decoration: const InputDecoration(labelText: 'Password'),
35             ), // TextField
36             const SizedBox(height: 20),
37             ElevatedButton(
38               onPressed: () async {
39                 final username = _usernameController.text;
40                 final password = _passwordController.text;
41                 try {
42                   await Provider.of<AuthProvider>(context, listen: false)
43                     .login(username, password);
44                   Navigator.of(context).pushReplacementNamed('/profile');
45                 } catch (e) {
46                   setState(() {
47                     errorMessage = 'Invalid username or password';
48                   });
49                 }
50               },
51               child: const Text('Login'),
52             ), // ElevatedButton
53             if (errorMessage.isNotEmpty)
54               Padding(
55                 padding: const EdgeInsets.only(top: 10),
56                 child: Text(
57                   errorMessage,
58                   style: const TextStyle(color: Colors.red),
59                 ), // Text
60               ), // Padding
61           ],
62         ), // Column
63       ), // Padding
64     ); // Scaffold
65   }
66 }

```

Langkah 7:

Buat Halaman Profil (profil_screen.dart) di folder lib/screens/

```
my_flutter_api2 > lib > screens >  profil_screen.dart > {} <unnamed extension>
1  import 'package:flutter/material.dart';
2  import 'package:provider/provider.dart';
3  import '../providers/auth_provider.dart';
4
5  class ProfileScreen extends StatelessWidget {
6    const ProfileScreen({super.key});
7
8    @override
9    Widget build(BuildContext context) {
10     final authProvider = Provider.of<AuthProvider>(context);
11     final user = authProvider.user;
12
13     return Scaffold(
14       appBar: AppBar(
15         title: const Text('Profile'),
16         actions: [
17           IconButton(
18             icon: const Icon(Icons.logout),
19             onPressed: () {
20               authProvider.logout();
21               Navigator.of(context).pushReplacementNamed('/login');
22             },
23           ), // IconButton
24         ],
25       ), // AppBar
26       body: Center(
27         child: user != null
28           ? Column(
29             mainAxisAlignment: MainAxisAlignment.center,
30             children: [
31               Text('Welcome, ${user.name}!'),
32               Text('Email: ${user.email}'),
33             ],
34           ) // Column
35           : const CircularProgressIndicator(),
36       ), // Center
37     ); // Scaffold
38   }
39 }
40
41 extension on String {
42   get email => 'test@example.com';
43
44   get name => 'Test User';
45 }
```

Langkah 8:

Buat Halaman Profil (splash_screen.dart) di folder lib/screens/

```
my_flutter_api2 > lib > screens > splash_screen.dart > _SplashScreenState
1  import 'package:flutter/material.dart';
2  import 'package:provider/provider.dart';
3  import 'package:lottie/lottie.dart'; // Import Lottie package
4  import '../providers/auth_provider.dart';
5
6  class SplashScreen extends StatefulWidget {
7    const SplashScreen({super.key});
8
9    @override
10   _SplashScreenState createState() => _SplashScreenState();
11 }
12
13 class _SplashScreenState extends State<SplashScreen> {
14   @override
15   void initState() {
16     super.initState();
17     _checkLoginStatus();
18   }
19
20   void _checkLoginStatus() async {
21     // Memberikan waktu delay sebelum melakukan pengecekan login
22     await Future.delayed(const Duration(seconds: 3)); // Durasi delay agar splash screen terlihat
23
24     final authProvider = Provider.of<AuthProvider>(context, listen: false);
25     await authProvider.loadUser(); // Pastikan loadUser selesai
26     if (authProvider.user != null) {
27       Navigator.of(context).pushReplacementNamed('/profile');
28     } else {
29       Navigator.of(context).pushReplacementNamed('/login');
30     }
31   }
32
33   @override
34   Widget build(BuildContext context) {
35     return Scaffold(
36       body: Center(
37         child: Column(
38           mainAxisAlignment: MainAxisAlignment.center,
39           children: [
40             // Menambahkan animasi Lottie
41             Lottie.asset(
42               'assets/animation/splash_animation.json', // Path ke file JSON animasi Lottie
43               width: 200,
44               height: 200,
45               fit: BoxFit.cover,
46               onLoaded: (composition) {
47                 print('Lottie animation loaded successfully!');
48               },
49             ),
50             const SizedBox(height: 20),
51             const Text(
52               'Welcome to My Flutter App!',
53               style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold),
54             ), // Text
55           ],
56         ), // Column
57       ), // Center
58     ); // Scaffold
59   }
60 }
```

```
assets:
  - assets/animation/splash_animation.json
```

Mengatur Routing dan Provider di main.dart

my_flutter_api2 > lib > main.dart > MyApp

```
1  import 'package:flutter/material.dart';
2  import 'package:my_flutter_api2/providers/auth_provider.dart';
3  import 'package:my_flutter_api2/screens/login_screen.dart';
4  import 'package:my_flutter_api2/screens/profil_screen.dart';
5  import 'package:my_flutter_api2/screens/splash_screen.dart';
6  import 'package:provider/provider.dart';
7
8  Run | Debug | Profile
9  void main() {
10   runApp(MyApp());
11 }
12
13 class MyApp extends StatelessWidget {
14   const MyApp({super.key});
15
16   @override
17   Widget build(BuildContext context) {
18     return ChangeNotifierProvider(
19       create: (context) => AuthProvider(),
20       child: MaterialApp(
21         title: 'My Flutter App',
22         theme: ThemeData(
23           primarySwatch: Colors.blue,
24         ), // ThemeData
25         home: SplashScreen(),
26         routes: {
27           '/login': (context) => LoginScreen(),
28           '/profile': (context) => ProfileScreen(),
29         },
30       ), // MaterialApp
31     ); // ChangeNotifierProvider
32 }
```


Langkah 10:

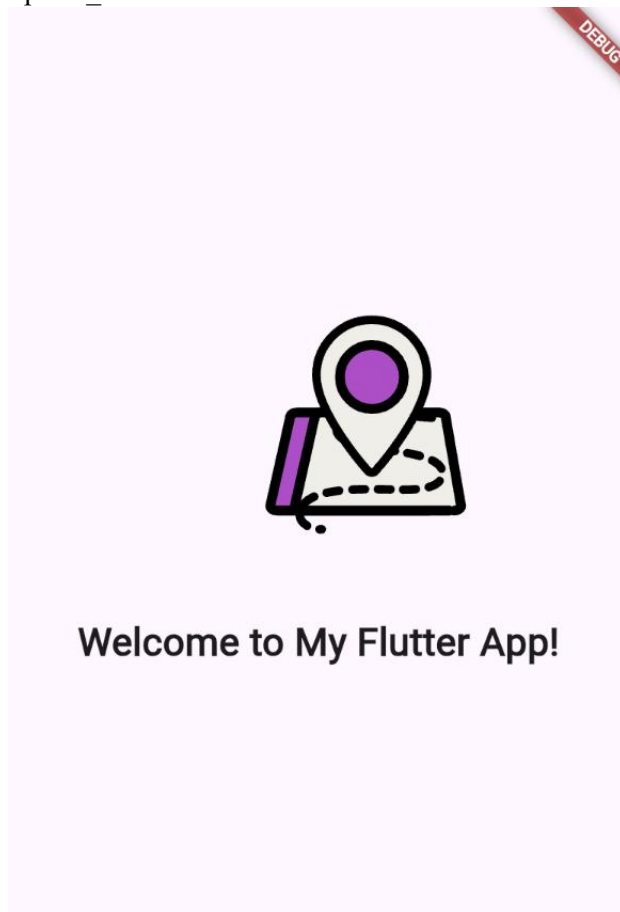
Modifikasi test/widget_test.dart

```
my_flutter_api2 > test > widget_test.dart > ...
1 // test/widget_test.dart
2 import 'package:flutter_test/flutter_test.dart';
3 import 'package:my_flutter_api2/main.dart';
4 import 'package:my_flutter_api2/screens/splash_screen.dart';
5
6 void main() {
7   testWidgets('Initial route loads correctly', (WidgetTester tester) async {
8     // Build the app and trigger a frame.
9     await tester.pumpWidget(MyApp());
10
11     // Verify that the initial route is the SplashScreen
12     expect(find.byType(SplashScreen), findsOneWidget);
13
14     // Tap the button to navigate to the Login screen if necessary (this is just an example)
15     // You can add more actions based on your app's flow.
16     // For example, if you want to test login functionality:
17     // await tester.tap(find.byType(ElevatedButton));
18     // await tester.pump();
19
20     // Verify that the LoginScreen is shown
21     // expect(find.byType(LoginScreen), findsOneWidget);
22   });
23 }
```

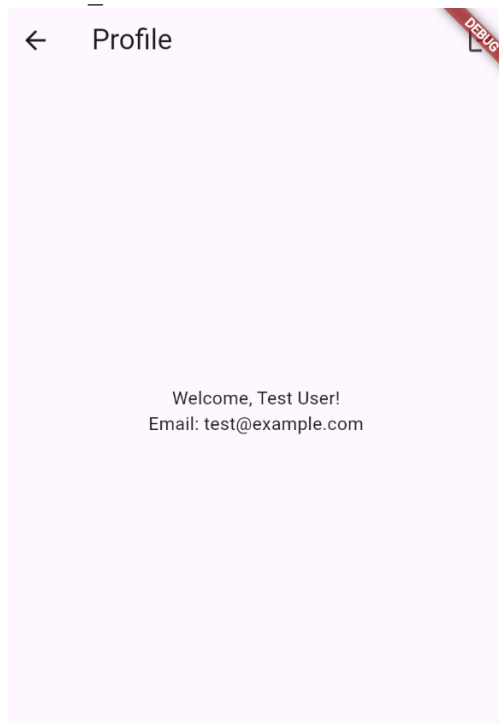
Langkah 11:

Output yang dihasilkan

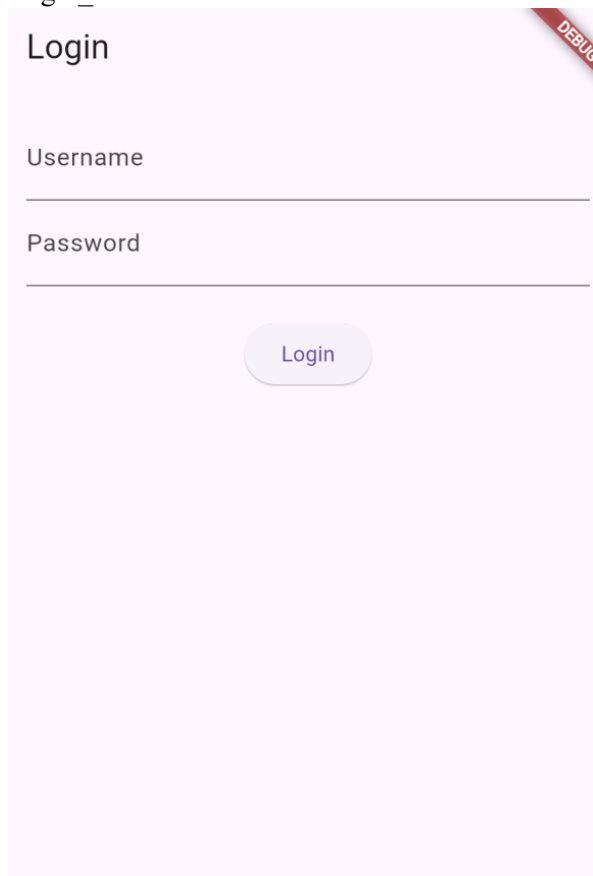
- Splash_screen



- Profile_screen



- Login_screen



Login

DEBUG

Username

Test User

Password

.....

Login

Profile

DEBUG

Welcome, Test User!
Email: test@example.com