

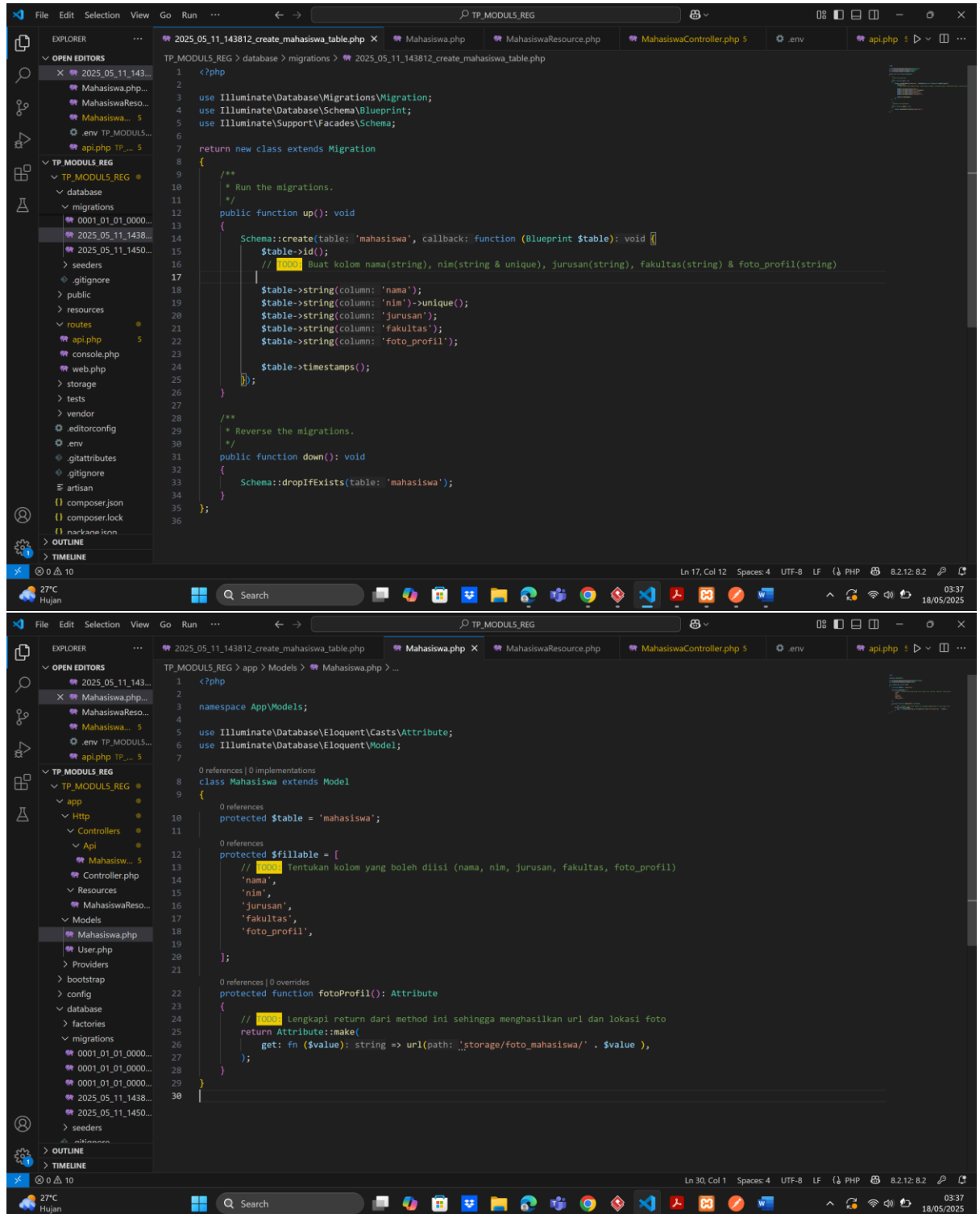
NAMA : RAHMANIA ANGGRAINI

KELAS : SI4708

NIM : 102022300034

TP MODUL 5 WAD

1. CODINGAN



The image displays two screenshots of a code editor, likely Visual Studio Code, showing PHP code for a Laravel application. The top screenshot shows a migration file, and the bottom screenshot shows a model file.

Top Screenshot: Migration File

```
1 <?php
2
3 use Illuminate\Database\Migrations\Migration;
4 use Illuminate\Database\Schema\Blueprint;
5 use Illuminate\Support\Facades\Schema;
6
7 return new class extends Migration
8 {
9     /**
10      * Run the migrations.
11      */
12     public function up(): void
13     {
14         Schema::create(table: 'mahasiswa', callback: function (Blueprint $table): void {
15             // Buat kolom nama(string), nim(string & unique), jurusan(string), fakultas(string) & foto_profil(string)
16
17             $table->string(column: 'nama');
18             $table->string(column: 'nim')->unique();
19             $table->string(column: 'jurusan');
20             $table->string(column: 'fakultas');
21             $table->string(column: 'foto_profil');
22
23             $table->timestamps();
24         });
25     }
26
27     /**
28      * Reverse the migrations.
29      */
30     public function down(): void
31     {
32         Schema::dropIfExists(table: 'mahasiswa');
33     }
34 };
35
36
```

Bottom Screenshot: Model File

```
1 <?php
2
3 namespace App\Models;
4
5 use Illuminate\Database\Eloquent\Casts\Attribute;
6 use Illuminate\Database\Eloquent\Model;
7
8 class Mahasiswa extends Model
9 {
10     protected $table = 'mahasiswa';
11
12     protected $fillable = [
13         // Tentukan kolom yang boleh diisi (nama, nim, jurusan, fakultas, foto_profil)
14         'nama',
15         'nim',
16         'jurusan',
17         'fakultas',
18         'foto_profil',
19     ];
20
21     protected function fotoProfil(): Attribute
22     {
23         // Lengkapi return dari method ini sehingga menghasilkan url dan lokasi foto
24         return Attribute::make(
25             get: fn ($value) => url(path: 'storage/foto_mahasiswa/' . $value ),
26         );
27     }
28 }
29
30
```

File Edit Selection View Go Run ... TP_MODULES_REG

EXPLORER

OPEN EDITORS

2025_05_11_143...
Mahasiswa.php...
MahasiswaReso...
Mahasiswa... 5
env TP_MODULES...
api.php TP... 5

TP_MODULES_REG

app
Http
Controllers
Api
Mahasiswa... 5
Controller.php
Resources
MahasiswaReso...
Models
Mahasiswa.php
User.php
Providers
bootstrap
config
database
factories
migrations
0001_01_01_0000...
0001_01_01_0000...
0001_01_01_0000...
2025_05_11_1438...
2025_05_11_1450...
seeders
OUTLINE
TIMELINE

TP_MODULES_REG > app > Http > Resources > MahasiswaResource.php > MahasiswaResource > toArray()

```
1 <?php
2
3 namespace App\Http\Resources;
4
5 use Illuminate\Http\Request;
6 use Illuminate\Http\Resources\Json\JsonResource;
7
8 class MahasiswaResource extends JsonResource
9 {
10     // TODO: Deklarasikan 3 properties (status, message, resource) dengan visibility public
11     public $status;
12     public $message;
13
14     6 references | 0 overrides
15     public function __construct($status, $message, $resource)
16     {
17         parent::__construct(resource: $resource);
18         $this->status = $status;
19         $this->message = $message;
20     }
21
22     0 references | 0 overrides
23     public function toArray(Request $request): array
24     {
25         // TODO: Lengkapi return dengan success mengambil dari property status, message dari property message, dan data dari property
26         return [
27             'success' => $this->status,
28             'message' => $this->message,
29             'data' => $this->resource,
30         ];
31     }
32 }
```

Ln 28, Col 44 Spaces: 4 UTF-8 LF PHP 8.2.12: 8.2

27°C Hujan

03:37 18/05/2025

File Edit Selection View Go Run ... TP_MODULES_REG

EXPLORER

OPEN EDITORS

2025_05_11_143...
Mahasiswa.php...
MahasiswaReso...
Mahasiswa... 5
env TP_MODULES...
api.php TP... 5

TP_MODULES_REG

app
Http
Controllers
Api
Mahasiswa... 5
Controller.php
Resources
MahasiswaReso...
Models
Mahasiswa.php
User.php
Providers
bootstrap
config
database
factories
migrations
0001_01_01_0000...
0001_01_01_0000...
0001_01_01_0000...
2025_05_11_1438...
2025_05_11_1450...
seeders
OUTLINE
TIMELINE

TP_MODULES_REG > app > Http > Controllers > Api > MahasiswaController.php > MahasiswaController

```
14
15 0 references | 0 implementations
16 class MahasiswaController extends Controller
17 {
18     0 references | 0 overrides
19     public function index(): MahasiswaResource
20     {
21         // TODO: Ambil semua data Mahasiswa
22         $mahasiswa = Mahasiswa::all();
23         return new MahasiswaResource(status: true, message: 'List Data Mahasiswa', resource: $mahasiswa);
24     }
25
26     0 references | 0 overrides
27     public function store(Request $request): JsonResponse|MahasiswaResource|mixed
28     {
29         $validator = Validator::make(data: $request->all(), rules: [
30             'nama' => 'required|string',
31             'nim' => 'required|string|unique:mahasiswa,nim',
32             'jurusan' => 'required|string',
33             'fakultas' => 'required|string',
34             'foto_profil' => 'required|image|mimes:jpeg,png,jpg,gif,svg|max:2048',
35         ]);
36
37         if ($validator->fails()) {
38             return response()->json(data: $validator->errors(), status: 422);
39         }
40
41         $foto_profil = $request->file(key: 'foto_profil');
42         $foto_profil->storeAs(path: 'foto_profil', name: $foto_profil->hashName());
43
44         $mahasiswa = Mahasiswa::create([
45             'nama' => $request->nama,
46             'nim' => $request->nim,
47             'jurusan' => $request->jurusan,
48             'fakultas' => $request->fakultas,
49             'foto_profil' => $foto_profil->hashName(),
50         ]);
51     }
52 }
```

Ln 24, Col 5 Spaces: 4 UTF-8 LF PHP 8.2.12: 8.2

27°C Hujan

03:38 18/05/2025

```
TP_MODULES_REG > app > Http > Controllers > Api > MahasiswaController.php > MahasiswaController
class MahasiswaController extends Controller
{
    public function store(Request $request): JsonResponse|MahasiswaResource|mixed
    {
        // TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Ditambahkan!', $mahasiswa)
        return new MahasiswaResource(status: true, message: 'Data Mahasiswa Berhasil Ditambahkan!', resource: $mahasiswa);
    }

    // TODO: Lakukan pencarian data Mahasiswa berdasarkan id
    public function show($id): JsonResponse|MahasiswaResource|mixed
    {
        $mahasiswa = Mahasiswa::find($id);

        if (!$mahasiswa) {
            return response()->json(data: ['message' => 'Mahasiswa tidak ditemukan'], status: 404);
        }

        return new MahasiswaResource(status: true, message: 'Detail Data Mahasiswa!', resource: $mahasiswa);
    }

    // TODO: Buat kondisi jika data mahasiswa tidak ditemukan maka mengembalikan 'Mahasiswa tidak ditemukan' dengan kode 404
    public function update(Request $request, $id): JsonResponse|mixed
    {
        $mahasiswa = Mahasiswa::find($id);

        $validator = Validator::make(data: $request->all(), rules: [
            // TODO: Buat validasi untuk mengupdate data mahasiswa
            'nama' => 'required|string',
            'nim' => 'required|string|unique:mahasiswa,nim,' . $id,
            'jurusan' => 'required|string',
            'fakultas' => 'required|string',
            'foto_profil' => 'nullable|image|mimes:jpeg,png,jpg,gif|max:2048',
        ]);

        // TODO: Buat kondisi jika tidak lulus validasi maka mengembalikan pesan error dengan kode 422
        if ($validator->fails()) {
            return response()->json(data: [
                'data' => $validator->errors()
            ], status: 422);
        }

        if ($request->hasFile('foto_profil')) {
            Storage::delete(paths: 'foto_profil/' . basename(path: $mahasiswa->foto_profil));

            $foto_profil = $request->file('foto_profil');
            $foto_profil->storeAs(path: 'foto_profil', name: $foto_profil->hashName());
        }

        $mahasiswa->update([
            'nama' => $request->nama,
            'nim' => $request->nim,
            'jurusan' => $request->jurusan,
            'fakultas' => $request->fakultas,
            'foto_profil' => $foto_profil->hashName(),
        ]);
    } else {
        $mahasiswa->update([
            'nama' => $request->nama,
            'nim' => $request->nim,
            'jurusan' => $request->jurusan,
            'fakultas' => $request->fakultas,
        ]);
    }

    // TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Diubah!', $mahasiswa)
    return response()->json(data: new MahasiswaResource(status: true, message: 'Data Mahasiswa Berhasil Diubah!', resource: $mahasiswa));
}

// TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Ditambahkan!', $mahasiswa)
public function destroy($id): JsonResponse|MahasiswaResource|mixed
{
    $mahasiswa = Mahasiswa::find($id);
}
```

```
TP_MODULES_REG > app > Http > Controllers > Api > MahasiswaController.php > MahasiswaController
class MahasiswaController extends Controller
{
    public function update(Request $request, $id): JsonResponse|mixed
    {
        if ($validator->fails()) {
            return response()->json(data: [
                'data' => $validator->errors()
            ], status: 422);
        }

        if ($request->hasFile('foto_profil')) {
            Storage::delete(paths: 'foto_profil/' . basename(path: $mahasiswa->foto_profil));

            $foto_profil = $request->file('foto_profil');
            $foto_profil->storeAs(path: 'foto_profil', name: $foto_profil->hashName());
        }

        $mahasiswa->update([
            'nama' => $request->nama,
            'nim' => $request->nim,
            'jurusan' => $request->jurusan,
            'fakultas' => $request->fakultas,
            'foto_profil' => $foto_profil->hashName(),
        ]);
    } else {
        $mahasiswa->update([
            'nama' => $request->nama,
            'nim' => $request->nim,
            'jurusan' => $request->jurusan,
            'fakultas' => $request->fakultas,
        ]);
    }

    // TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Diubah!', $mahasiswa)
    return response()->json(data: new MahasiswaResource(status: true, message: 'Data Mahasiswa Berhasil Diubah!', resource: $mahasiswa));
}

// TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Ditambahkan!', $mahasiswa)
public function destroy($id): JsonResponse|MahasiswaResource|mixed
{
    $mahasiswa = Mahasiswa::find($id);
}
```

```
TP_MODULES_REG > app > Http > Controllers > Api > MahasiswaController.php > MahasiswaController
class MahasiswaController extends Controller
{
    public function update(Request $request, $id): JsonResponse|mixed
    {
        // TODO: Update the student's data
        $mahasiswa->update([
            'nama' => $request->nama,
            'nim' => $request->nim,
            'jurusan' => $request->jurusan,
            'fakultas' => $request->fakultas,
        ]);

        // TODO: Return object MahasiswaResource dengan argument (true, 'Data Mahasiswa Berhasil Diubah!', $mahasiswa)
        response()->json(data: new MahasiswaResource(status: true, message: 'Data Mahasiswa Berhasil Diubah!', resource: $mahasiswa));
    }

    0 references|0 overrides
    public function destroy($id): JsonResponse|MahasiswaResource|mixed
    {
        $mahasiswa = Mahasiswa::find($id);

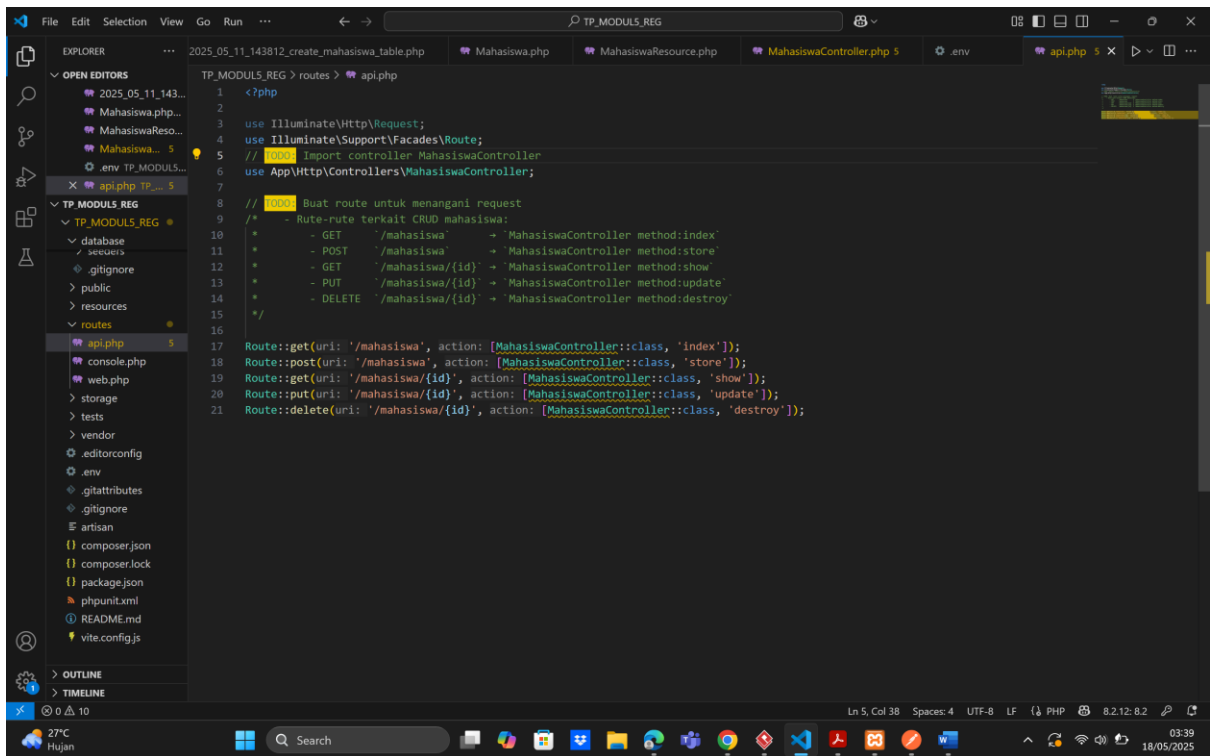
        if (!$mahasiswa) {
            return response()->json(data: ['message' => 'Mahasiswa tidak ditemukan'], status: 404);
        }

        // TODO: Hapus data gambar
        Storage::delete(paths: 'foto_profil/' . basename(path: $mahasiswa->foto_profil));

        // TODO: Hapus data mahasiswa
        $mahasiswa->delete();

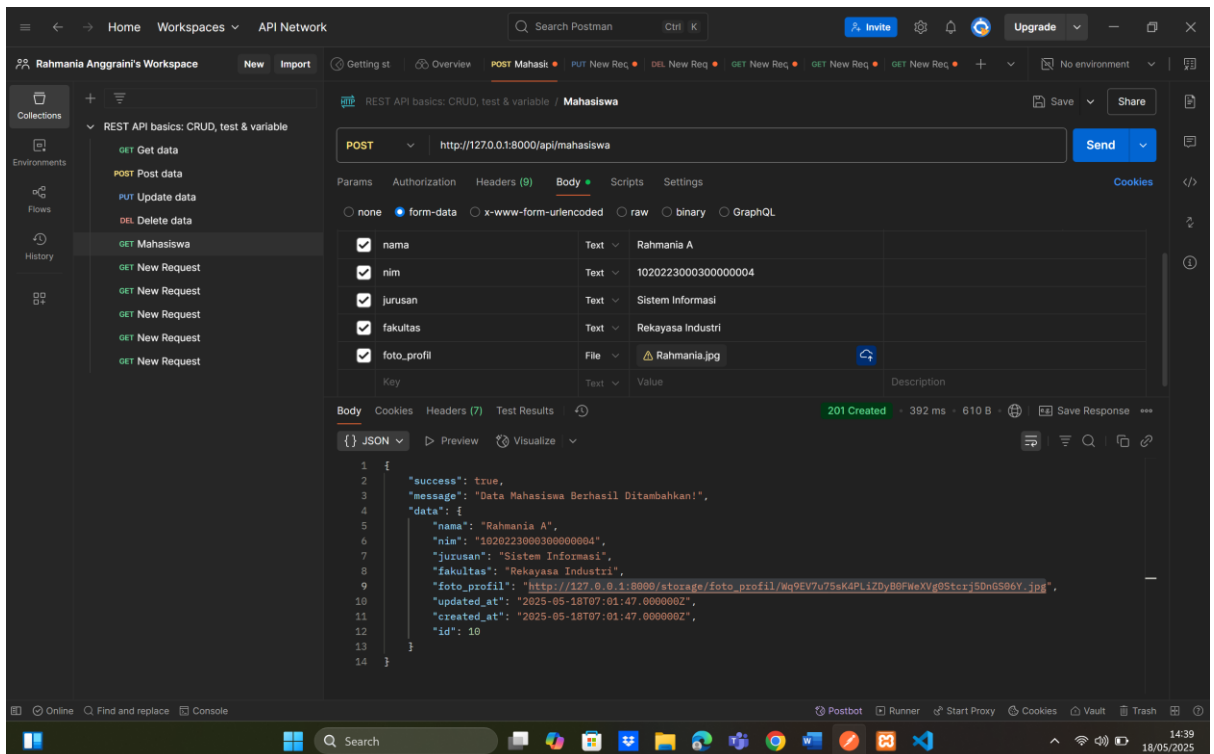
        return new MahasiswaResource(status: true, message: 'Data Mahasiswa Berhasil Dihapus!', resource: null);
    }
}
```

```
TP_MODULES_REG > .env
1 APP_NAME=Laravel
2 APP_ENV=local
3 APP_KEY=base64:4L16MjszNuHBRY3D/1CHakMmuD9Q1mq0eKzduRb1E1w=
4 APP_DEBUG=true
5 APP_URL=http://localhost
6
7 APP_LOCALE=en
8 APP_FALLBACK_LOCALE=en
9 APP_FAKER_LOCALE=en_US
10
11 APP_MAINTENANCE_DRIVER=file
12 # APP_MAINTENANCE_STORE=database
13
14 PHP_CLI_SERVER_WORKERS=4
15
16 BCRYPT_ROUNDS=12
17
18 LOG_CHANNEL=stack
19 LOG_STACK=single
20 LOG_DEPRECATIONS_CHANNEL=null
21 LOG_LEVEL=debug
22
23 # TODO: Konfigurasi koneksi ke database
24 DB_CONNECTION=mysql
25 DB_HOST=127.0.0.1
26 DB_PORT=3306
27 DB_DATABASE=tpmodul1_5
28 DB_USERNAME=root
29 DB_PASSWORD=
30
31 SESSION_DRIVER=database
32 SESSION_LIFETIME=120
33 SESSION_ENCRYPT=false
34 SESSION_PATH=/
35 SESSION_DOMAIN=null
36
37 BROADCAST_CONNECTION=log
38 # TODO: Ubah menjadi public untuk memudahkan pemanggilan gambar
39 FILESYSTEM_DISK=local
```



```
1 <?php
2
3 use Illuminate\Http\Request;
4 use Illuminate\Support\Facades\Route;
5 // TODO Import controller MahasiswaController
6 use App\Http\Controllers\MahasiswaController;
7
8 // TODO Buat route untuk menangani request
9 /* - Route-route terkait CRUD mahasiswa:
10 * - GET /mahasiswa → MahasiswaController method:index
11 * - POST /mahasiswa → MahasiswaController method:store
12 * - GET /mahasiswa/{id} → MahasiswaController method:show
13 * - PUT /mahasiswa/{id} → MahasiswaController method:update
14 * - DELETE /mahasiswa/{id} → MahasiswaController method:destroy
15 */
16
17 Route::get(uri: '/mahasiswa', action: [MahasiswaController::class, 'index']);
18 Route::post(uri: '/mahasiswa', action: [MahasiswaController::class, 'store']);
19 Route::get(uri: '/mahasiswa/{id}', action: [MahasiswaController::class, 'show']);
20 Route::put(uri: '/mahasiswa/{id}', action: [MahasiswaController::class, 'update']);
21 Route::delete(uri: '/mahasiswa/{id}', action: [MahasiswaController::class, 'destroy']);
```

2. HASIL



REST API basics: CRUD, test & variable / Mahasiswa

POST http://127.0.0.1:8000/api/mahasiswa

Params Authorization Headers (0) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

Key	Value	Description
nama	Rahmania A	
nim	1020223000300000004	
jurusan	Sistem Informasi	
fakultas	Rekayasa Industri	
foto_profil	http://127.0.0.1:8000/storage/foto_profil/Mq9EV7u75sk4PLizDyB0FwXVg0Stcrj5DnG506Y.jpg	

Body Cookies Headers (7) Test Results

201 Created · 392 ms · 610 B · Save Response

```
1 {
2   "success": true,
3   "message": "Data Mahasiswa Berhasil Ditambahkan!",
4   "data": {
5     "nama": "Rahmania A",
6     "nim": "1020223000300000004",
7     "jurusan": "Sistem Informasi",
8     "fakultas": "Rekayasa Industri",
9     "foto_profil": "http://127.0.0.1:8000/storage/foto_profil/Mq9EV7u75sk4PLizDyB0FwXVg0Stcrj5DnG506Y.jpg",
10    "updated_at": "2025-05-18T07:01:47.000000Z",
11    "created_at": "2025-05-18T07:01:47.000000Z",
12    "id": 10
13  }
14 }
```

REST API basics: CRUD, test & variable / **New Request**

PUT http://127.0.0.1:8000/api/mahasiswa/1

Params Authorization Headers (8) **Body** Scripts Settings Cookies

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

Key	Value	Description
<input checked="" type="checkbox"/> nama	Rahmania Anggraini	
<input checked="" type="checkbox"/> nim	102022300034	
<input checked="" type="checkbox"/> jurusan	Sistem Informasi	

Body Cookies Headers (6) Test Results **200 OK** · 568 ms · 571 B Save Response

JSON Preview Visualize

```
1 {
2   "success": true,
3   "message": "Data Mahasiswa Berhasil Diubah!",
4   "data": {
5     "id": 1,
6     "nama": "Rahmania Anggraini",
7     "nim": "102022300034",
8     "jurusan": "Sistem Informasi",
9     "fakultas": "Rekayasa Industri",
10    "foto.profil": "http://127.0.0.1:8000/storage/foto_mahasiswa/rooRzxunNLQAaYacAe3PPdowSdQhBEripaIxzgrj.jpg",
11    "created_at": "2025-05-18T06:04:48.000000Z",
12    "updated_at": "2025-05-18T06:04:48.000000Z"
13  }
14 }
```

REST API basics: CRUD, test & variable / **New Request**

DELETE http://127.0.0.1:8000/api/mahasiswa/1

Params Authorization Headers (6) **Body** Scripts Settings Cookies

Query Params

Key	Value	Description
Key	Value	Description

Body Cookies Headers (7) Test Results **200 OK** · 369 ms · 294 B Save Response

JSON Preview Visualize

```
1 {
2   "success": true,
3   "message": "Data Mahasiswa Berhasil Dihapus!",
4   "data": null
5 }
```

REST API basics: CRUD, test & variable / **New Request**

GET http://127.0.0.1:8000/api/mahasiswa/3

Params Authorization Headers (6) Body Scripts Settings Cookies

Query Params

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body Cookies Headers (7) Test Results 200 OK · 429 ms · 582 B Save Response

JSON Preview Visualize

```
1 {
2   "success": true,
3   "message": "Detail Data Mahasiswa!",
4   "data": {
5     "id": 3,
6     "nama": "Rahmania A",
7     "nim": "19202230003",
8     "jurusan": "Sistem Informasi",
9     "fakultas": "Rekayasa Industri",
10    "foto_profil": "http://127.0.0.1:8000/storage/foto_profil/6huCad7n2d49xL0mskoIHgmpUuv1jW0YRXAPMDtk.jpg",
11    "created_at": "2025-05-18T06:21:24.000000Z",
12    "updated_at": "2025-05-18T06:21:24.000000Z"
13  }
14 }
```

REST API basics: CRUD, test & variable / **New Request**

GET http://127.0.0.1:8000/api/mahasiswa

Params Authorization Headers (6) Body Scripts Settings Cookies

Query Params

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body Cookies Headers (7) Test Results 200 OK · 299 ms · 1.17 KB Save Response

JSON Preview Visualize

```
1 {
2   "success": true,
3   "message": "List Data Mahasiswa",
4   "data": [
5     {
6       "id": 2,
7       "nama": "Rahmania Anggraini",
8       "nim": "192022300034",
9       "jurusan": "Sistem Informasi",
10      "fakultas": "Rekayasa Industri",
11      "foto_profil": "http://127.0.0.1:8000/storage/foto_profil/Ns0RhOmNws2EZG8cDx9H88nPtceztKYU6EUt08oa.jpg",
12      "created_at": "2025-05-18T06:15:22.000000Z",
13      "updated_at": "2025-05-18T06:15:22.000000Z"
14     },
15     {
16       "id": 3,
17       "nama": "Rahmania A",
18       "nim": "19202230003",
19       "jurusan": "Sistem Informasi"
20     }
21   ]
22 }
```