



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

Nama : Elvaretta Salsabilla

NIM : 2241720116

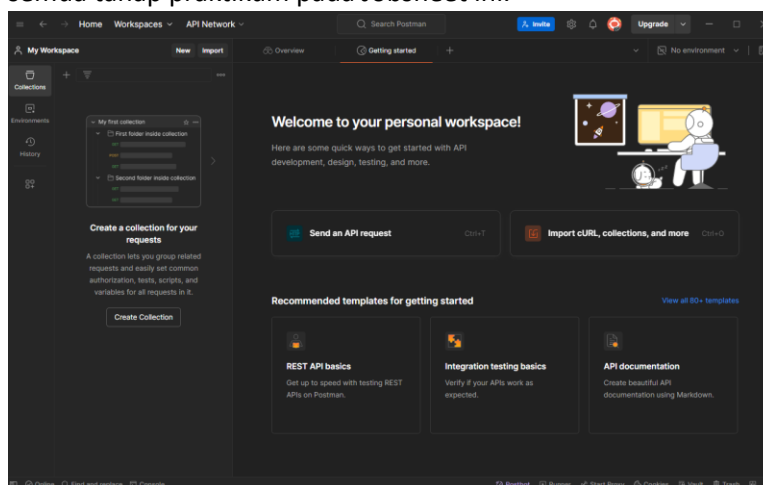
No/Kelas : 14/TI-2H

## JOBSHEET 10

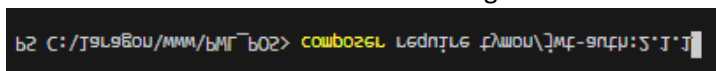
## RESTFUL API

### Praktikum 1 – Membuat RESTful API Register

1. Sebelum memulai membuat REST API, terlebih dahulu download aplikasi Postman di <https://www.postman.com/downloads>. Aplikasi ini akan digunakan untuk mengerjakan semua tahap praktikum pada Jobsheet ini.



2. Lakukan instalasi JWT dengan mengetikkan perintah berikut: `composer require tymon/jwt-auth:2.1.1` Pastikan Anda terkoneksi dengan internet.



## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

```

C:\laragon\www\PWA_POS>composer require tymon/jwt-auth:2.1.1
./composer.json has been updated
Running composer update tymon/jwt-auth
Loading composer repositories with package information
Updating dependencies
Lock file operations: 4 installs, 0 updates, 0 removals
  - Locking illuminate/clock (2.3.0)
  - Locking illuminate/jwt (4.0.4)
  - Locking stella-maris/clock (0.1.7)
  - Locking tymon/jwt-auth (2.1.1)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 4 installs, 0 updates, 0 removals
  - Downloading stella-maris/clock (0.1.7)
  - Downloading illuminate/clock (2.3.0)
  - Downloading illuminate/jwt (4.0.4)
  - Downloading tymon/jwt-auth (2.1.1)
  - Installing stella-maris/clock (0.1.7): Extracting archive
  - Installing illuminate/clock (2.3.0): Extracting archive
  - Installing illuminate/jwt (4.0.4): Extracting archive
  - Installing tymon/jwt-auth (2.1.1): Extracting archive
Generating optimized autoload files
Class App\Http\Controllers\AuthController located in C:\laragon\www\PWA_POS/app/Http/Controllers/AuthController.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Http\Controllers\BarcodeController located in C:\laragon\www\PWA_POS/app/Http/Controllers/BarcodeController.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Http\Controllers\CategoriesController located in C:\laragon\www\PWA_POS/app/Http/Controllers/CategoriesController.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Http\Controllers\PerfumeController located in C:\laragon\www\PWA_POS/app/Http/Controllers/PerfumeController.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Http\Controllers\VendorController located in C:\laragon\www\PWA_POS/app/Http/Controllers/VendorController.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Http\Controllers\VendorLogin located in C:\laragon\www\PWA_POS/app/Http/VendorLogin.php does not comply with psr-4 autoloading standard. Skipping.
Class App\Providers\ComposerScriptsPostAutoloadDump located in C:\laragon\www\PWA_POS/app/Providers/ComposerScriptsPostAutoloadDump.php does not comply with psr-4 autoloading standard. Skipping.
> php artisan vendor:publish --tag=laravel-assets --ansi
INFO Discovering packages.

jaramoten/laravel-adminlte ..... DONE
laravel/sail ..... DONE
laravel/ui ..... DONE
laravel/tinker ..... DONE
laravel/ui ..... DONE
mashb/carbon ..... DONE
numonduro/collision ..... DONE
numonduro/termwind ..... DONE
spatie/laravel-ignition ..... DONE
tymon/jwt-auth ..... DONE
yeyra/laravel-databases-buttons ..... DONE
yeyra/laravel-databases-editor ..... DONE
yeyra/laravel-databases-fractal ..... DONE
yeyra/laravel-databases-html ..... DONE
yeyra/laravel-databases-oracle ..... DONE

No packages you are using are looking for funding.
See 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.

```

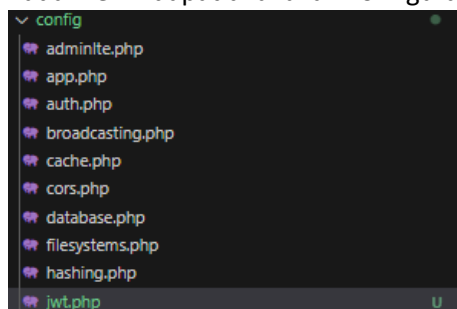
- Setelah berhasil menginstall JWT, lanjutkan dengan publish konfigurasi file dengan perintah berikut: `php artisan vendor:publish --provider="Tyumon\JWTAuth\Providers\LaravelServiceProvider"`

```
PS C:\laragon\www\PMIL_P05> php artisan vendor:publish --provider="Tymon\JWTAuth\Providers\LaravelServiceProvider"
```

**INFO** Publishing assets.

Copying file [C:\laragon\www\PMIL\_P05\vendor\tymon\jwt-auth\config\config.php] to [C:\laragon\www\PMIL\_P05\config\jwt.php] **DONE**

4. Jika perintah di atas berhasil, maka kita akan mendapatkan 1 file baru yaitu config/jwt.php. Pada file ini dapat dilakukan konfigurasi jika memang diperlukan.



- Setelah itu jalankan perintah berikut untuk membuat secret key JWT. `php artisan jwt:secret`  
Jika berhasil, maka pada file `.env` akan ditambahkan sebuah baris berisi nilai key JWT `SECRET`.

```
PS C:\laragon\www\PWL_POS> php artisan jwt:secret
jwt-auth secret [Yrt5jfL43nnG6YAV4XWqHif1fGcR9oTk1chfGay9vg1nyu0Ypuyepf6fjq3Qr] set successfully.
```

- Selanjutnya lakukan konfigurasi guard API. Buka config/auth.php. Ubah bagian 'guards' menjadi seperti berikut.



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

```
38     'guards' => [  
39         'web' => [  
40             'driver' => 'session',  
41             'provider' => 'users',  
42         ],  
43         'api' => 'jwt',  
44         'provider' => 'users',  
45     ],
```

7. Kita akan menambahkan kode di model UserModel, ubah kode seperti berikut:

```
5  use Illuminate\Database\Eloquent\Factories\HasFactory;  
6  use Illuminate\Database\Eloquent\Model;  
7  use Illuminate\Database\Eloquent\Relations\BelongsTo;  
8  use Illuminate\Foundation\Auth\User as Authenticatable;  
9  use Tymon\JWTAuth\Contracts\JWTSubject;  
10  
11  31 references | 0 implementations  
12  class UserModel extends Authenticatable implements JWTSubject  
13  {  
14      0 references | 0 overrides  
15      public function getJWTIdentifier(){  
16          return $this->getKey();  
17      }  
18      0 references | 0 overrides  
19      public function getJWTCustomClaims(){  
20          return [];  
21      }  
22      use HasFactory;  
23  
24      0 references  
25      protected $table = 'm_user'; // mendefinisikan nama tabel y  
26      0 references  
27      public $timestamps = false;  
28      0 references  
29      protected $primaryKey = 'user_id'; // mendefinisikan primar
```

8. Berikutnya kita akan membuat controller untuk register dengan menjalankan perintah berikut.

```
PS C:\laragon\www\PWL_POS> php artisan make:controller Api/RegisterController
```

```
INFO Controller [C:\laragon\www\PWL_POS\app\Http\Controllers\Api\RegisterController.php] created successfully.
```

Jika berhasil maka akan ada tambahan controller pada folder Api dengan nama RegisterController.

9. Buka file tersebut, dan ubah kode menjadi seperti berikut



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

```
<?php
namespace App\Http\Controllers\Api;

use App\Models\UserModel;
use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Validator;

0 references | 0 implementations
class RegisterController extends Controller
{
    0 references | 0 overrides
    public function __invoke(Request $request)
    {
        //set validation
        $validator = Validator::make($request->all(), [
            'username' => 'required',
            'nama' => 'required',
            'password' => 'required|min:5|confirmed',
            'level_id' => 'required'
        ]);

        //if validations fails
        if ($validator->fails()) {
            return response()->json($validator->errors(), 422);
        }

        // Create user
        $user = UserModel::create([
            'username' => $request->username,
            'nama' => $request->nama,
            'password' => bcrypt($request->password),
            'level_id' => $request->level_id,
        ]);

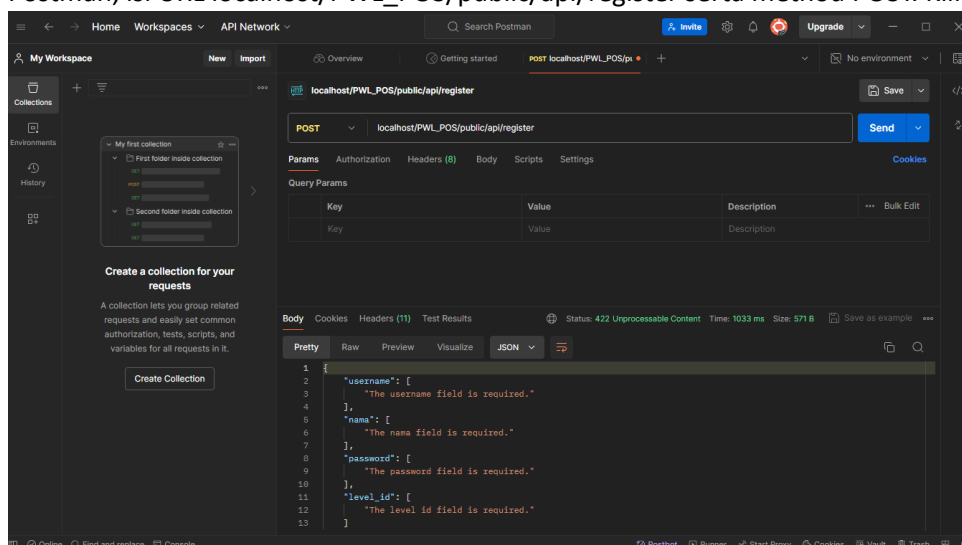
        // Return response JSON user is created
        if ($user) {
            return response()->json([
                'success' => true,
                'user' => $user,
            ], 201);
        }

        // Return JSON process insert failed
        return response()->json([
            'success' => false,
        ], 409);
    }
}
```

10. Selanjutnya buka routes/api.php, ubah semua kode menjadi seperti berikut

```
Route::post('/register', App\Http\Controllers\Api\RegisterController::class)->name
('register');
```

11. Jika sudah, kita akan melakukan uji coba REST API melalui aplikasi Postman. Buka aplikasi Postman, isi URL localhost/PWL\_POS/public/api/register serta method POST. Klik Send.





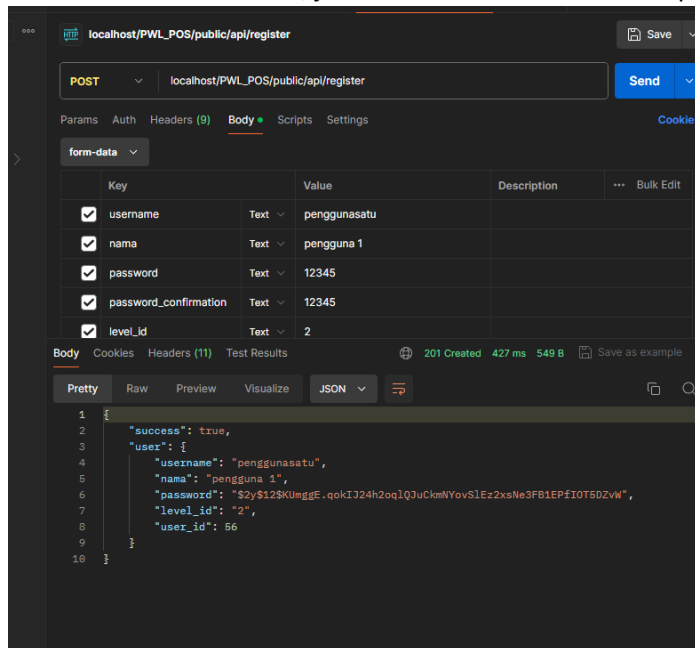
Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

12. Sekarang kita coba masukkan data. Klik tab Body dan pilih form-data. Isikan key sesuai dengan kolom data, serta isikan data registrasi menggunakan nilai yang Anda inginkan. Setelah klik tombol Send, jika berhasil maka akan keluar pesan sukses seperti gambar



13. Lakukan commit perubahan file pada Github.

### Praktikum 2 – Membuat RESTful API Login

1. Kita buat file controller dengan nama LoginController. php artisan make:controller Api/LoginController Jika berhasil maka akan ada tambahan controller pada folder Api dengan nama LoginController.

```
PS C:\laragon\www\PWL_POS> php artisan make:controller Api/LoginController
INFO Controller [C:\laragon\www\PWL_POS\app\Http\Controllers\Api>LoginController.php] created successfully.
```

2. Buka file tersebut, dan ubah kode menjadi seperti berikut.



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Validator;

0 references | 0 implementations
class LoginController extends Controller
{
    0 references | 0 overrides
    public function __invoke(Request $request){
        //set validasi
        $validator = Validator::make($request->all(), [
            'username' => 'required',
            'password' => 'required'
        ]);

        //if validator fails
        if($validator->fails()){
            return response()->json($validator->errors(),422);
        }

        //get credentials from request
        $credentials = $request->only('username','password');

        //if auth failde
        if(!$token = auth()->guard('api')->attempt($credentials)){
            return response()->json([
                'success' => false,
                'message' => 'Username atau Password Anda salah'
            ], 401);
        }

        //if auth success
        return response()->json([
            'success' => true,
            'user'=> auth()->user(),
            'token'=> $token
        ], 200);
    }
}
```

3. Berikutnya tambahkan route baru pada file api.php yaitu /login dan /user.

```
Route::post('/login',
App\Http\Controllers\Api\LoginController::class)->name('login');

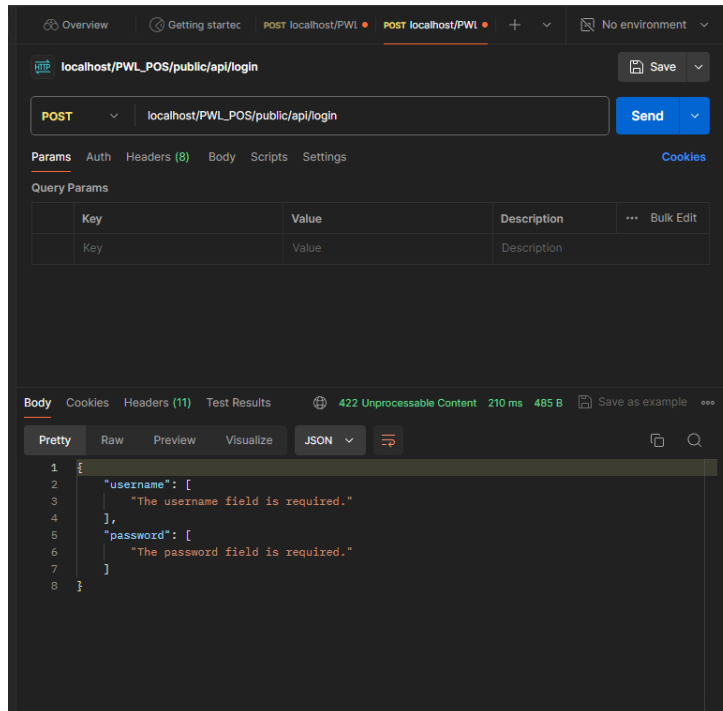
Route::middleware('auth:api')->get('/user', function (Request
$request){
    return $request->user();
});
```

4. Jika sudah, kita akan melakukan uji coba REST API melalui aplikasi Postman. Buka aplikasi Postman, isi URL localhost/PWL\_POS/public/api/login serta method POST. Klik Send.

## Jobsheet-10 : RESTFUL API

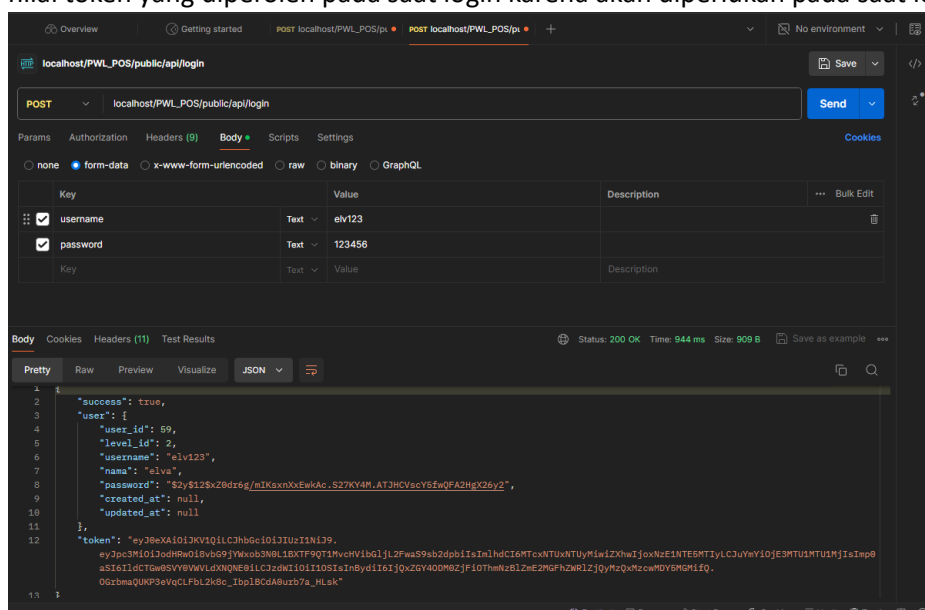
Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024



Jika berhasil akan muncul error validasi seperti gambar di atas.

- Selanjutnya, isikan username dan password sesuai dengan data user yang ada pada database. Klik tab Body dan pilih form-data. Isikan key sesuai dengan kolom data, serta isikan data user. Klik tombol Send, jika berhasil maka akan keluar tampilan seperti berikut. Copy nilai token yang diperoleh pada saat login karena akan diperlukan pada saat logout.



6. Lakukan percobaan yang untuk data yang salah dan berikan screenshoot hasil percobaan Anda.

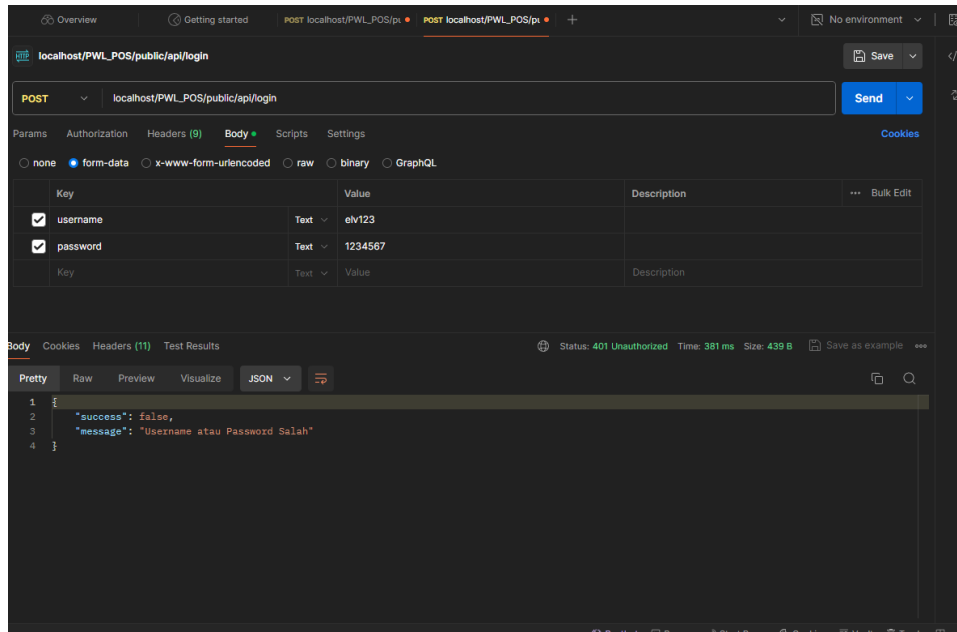


Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

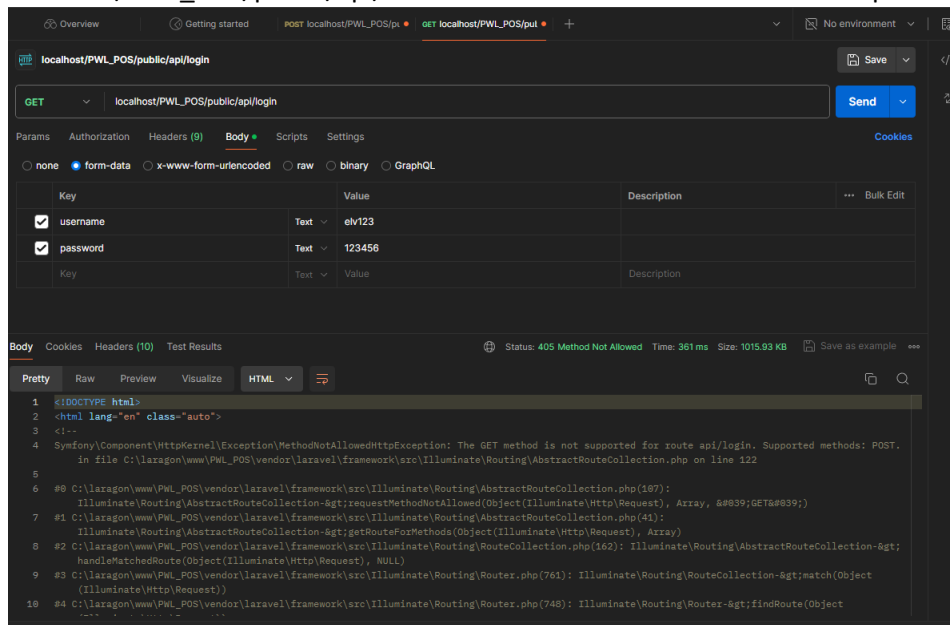
Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024



Ketika login salah maka akan memunculkan pesan username atau password salah

7. Coba kembali melakukan login dengan data yang benar. Sekarang mari kita coba menampilkan data user yang sedang login menggunakan URL `localhost/PWL_POS/public/api/user` dan method GET. Jelaskan hasil dari percobaan tersebut.



Ketika mengirim menggunakan GET maka akan menimbulkan error

8. Lakukan commit perubahan file pada Github.

### Praktikum 3 – Membuat RESTful API Logout





Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

1. Tambahkan kode berikut pada file .env

```
JWT_SHOW_BLACKLIST_EXCEPTION=true
```

2. Buat Controller baru dengan nama LogoutController.

```
PS C:\laragon\www\PWL_POS> php artisan make:controller Api/LogoutController
```

```
INFO Controller [C:\laragon\www\PWL_POS\app\Http\Controllers\Api\LogoutController.php] created successfully.
```

3. Buka file tersebut dan ubah kode menjadi seperti berikut.

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use Tymon\JWTAuth\Facades\JWTAuth;
use Tymon\JWTAuth\Exceptions\JWTException;
use Tymon\JWTAuth\Exceptions\TokenExpiredException;
use Tymon\JWTAuth\Exceptions\TokenInvalidException;

0 references | 0 implementations
class LogoutController extends Controller
{
    0 references | 0 overrides
    public function __invoke(Request $request){
        $removeToken = JWTAuth::invalidate(JWTAuth::getToken());

        if($removeToken){
            //return response JSON
            return response()->json([
                'success' => true,
                'message' => 'Logout Berhasil',
            ]);
        }
    }
}
```

4. Lalu kita tambahkan routes pada api.php

```
Route::post('/logout',
App\Http\Controllers\Api\LogoutController::class)->name('logout');
```

5. Jika sudah, kita akan melakukan uji coba REST API melalui aplikasi Postman. Buka aplikasi Postman, isi URL localhost/PWL\_POS/public/api/logout serta method POST



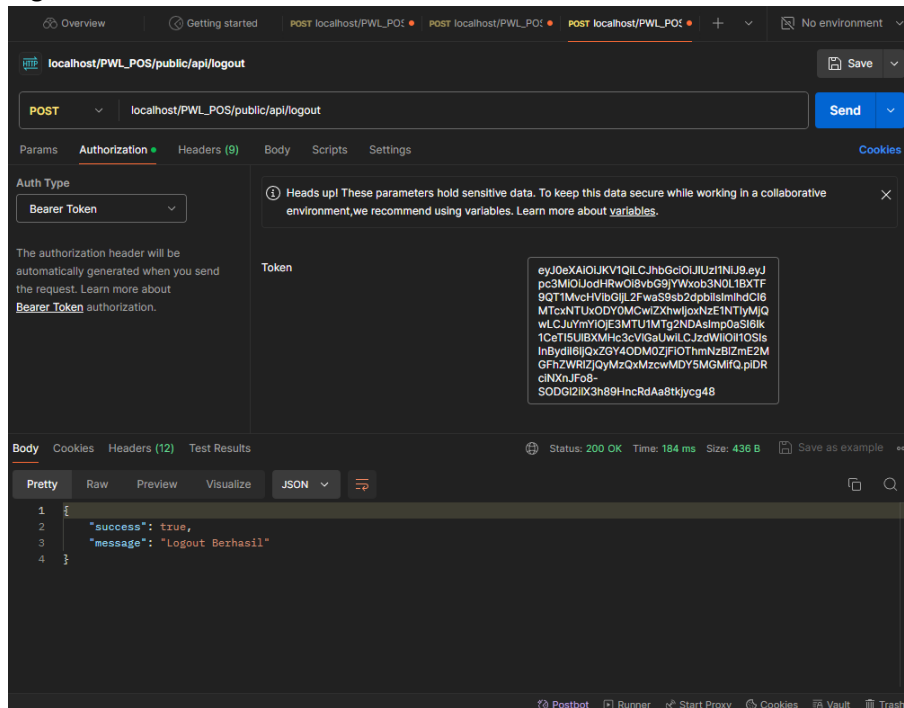
Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

- Isi token pada tab Authorization, pilih Type yaitu Bearer Token. Isikan token yang didapat saat login. Jika sudah klik Send.



- Lakukan commit perubahan file pada Github.

### Praktikum 4 – Implementasi CRUD dalam RESTful API

- Pertama, buat controller untuk mengolah API pada data level.

```
PS C:\laragon\www\PWL_POS> php artisan make:controller Api/LevelController  
  
INFO Controller [C:\laragon\www\PWL_POS\app\Http\Controllers\Api\LevelController.php]  
p] created successfully.
```

- Setelah berhasil, buka file tersebut dan tuliskan kode seperti berikut yang berisi fungsi CRUDnya.



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\LevelModel;

0 references | 0 implementations
class LevelController extends Controller
{
    0 references | 0 overrides
    public function index(){
        return LevelModel::all();
    }

    0 references | 0 overrides
    public function store(Request $request){
        $level = LevelModel::create($request->all());
        return response()->json($level, 201);
    }

    0 references | 0 overrides
    public function show(LevelModel $level){
        return LevelModel::find($level);
    }

    0 references | 0 overrides
    public function update(Request $request, LevelModel $level){
        $level->update($request->all());
        return LevelModel::find($level);
    }

    0 references | 0 overrides
    public function destroy(LevelModel $user){
        $user->delete();

        return response()->json([
            'success' => true,
            'message' => 'Data terhapus',
        ]);
    }
}
```

3. Kemudian kita lengkapi routes pada api.php.

```
Route::get('levels', [LevelController::class, 'index']);
Route::post('levels', [LevelController::class, 'store']);
Route::get('levels/{level}', [LevelController::class, 'show']);
Route::put('levels/{level}', [LevelController::class, 'update']);
Route::delete('levels/{level}', [LevelController::class, 'destroy']);
```

4. Jika sudah. Lakukan uji coba API mulai dari fungsi untuk menampilkan data. Gunakan URL: localhost/PWL\_POS-main/public/api/levels dan method GET.

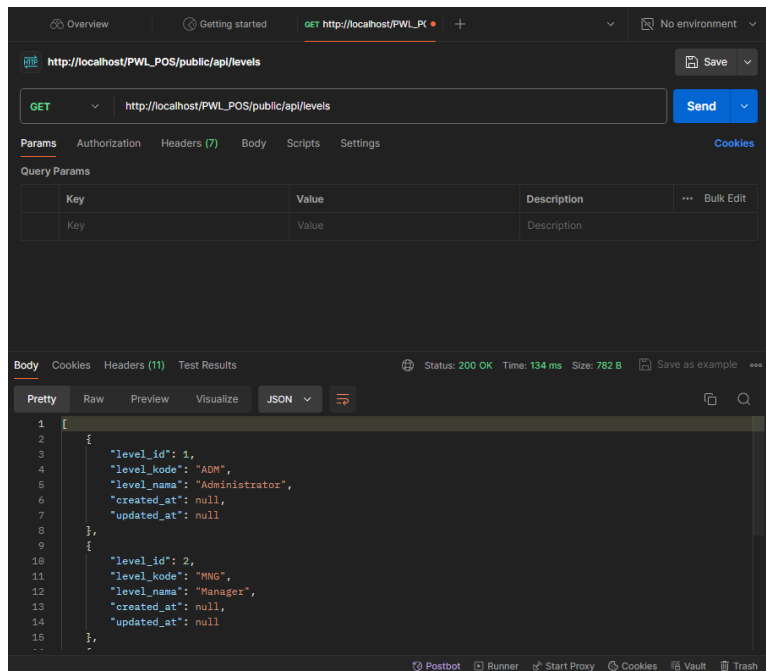


Jurusan Teknologi Informasi Politeknik Negeri Malang

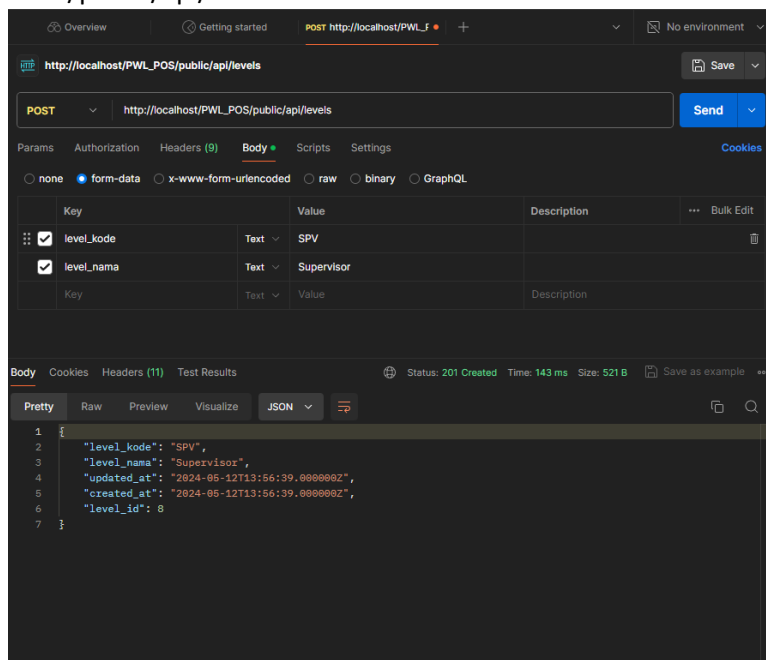
## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024



5. Kemudian, lakukan percobaan penambahan data dengan URL : localhost/PWL\_POS-main/public/api/levels dan method POST



6. Berikutnya lakukan percobaan menampilkan detail data

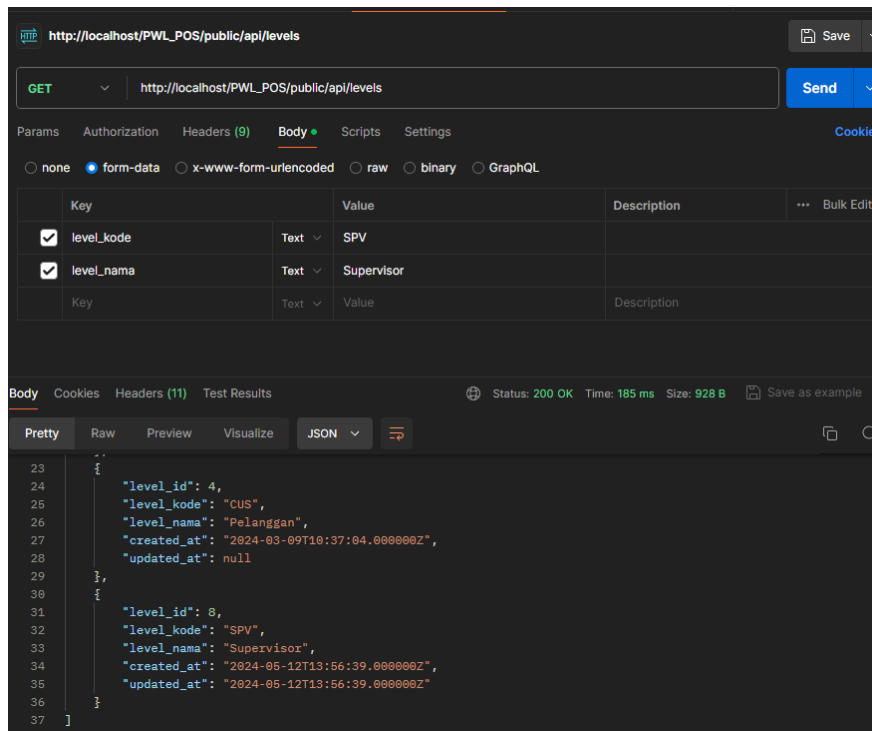


Jurusan Teknologi Informasi Politeknik Negeri Malang

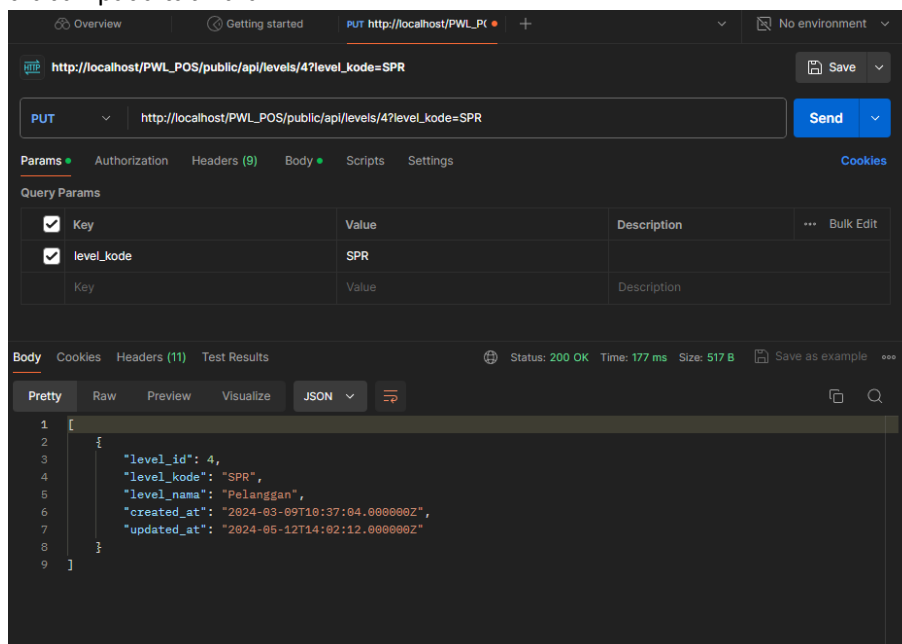
## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024



7. Jika sudah, kita coba untuk melakukan edit data menggunakan localhost/PWL\_POS main/public/api/levels/{id} dan method PUT. Isikan data yang ingin diubah pada tab Param.



Setelah berhasil di edit maka akan menampilkan data yang telah di edit

8. Terakhir lakukan percobaan hapus data.

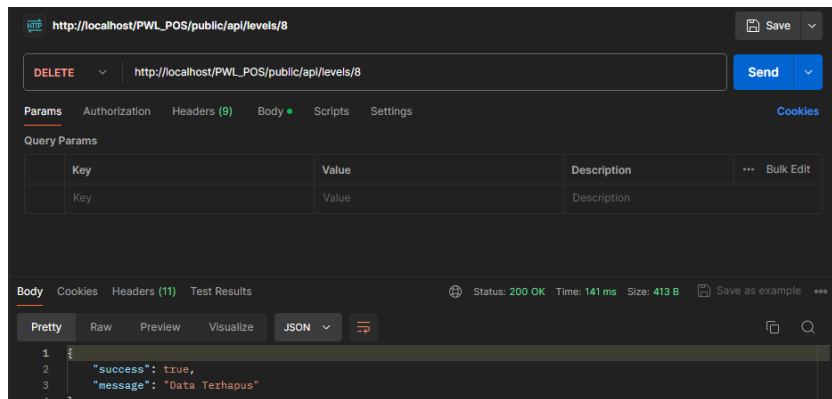


Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024



Setelah data berhasil dihapus maka akan memunculkan pesan 'data berhasil dihapus'

9. Lakukan commit perubahan file pada Github.

### TUGAS

#### 1. m\_user

##### a. Api

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\UserModel;

6 references | 0 implementations
class UserController extends Controller
{
    1 reference | 0 overrides
    public function index(){
        return UserModel::all();
    }

    1 reference | 0 overrides
    public function store(Request $request){
        $user = UserModel::create($request->all());
        return response()->json($user, 201);
    }

    1 reference | 0 overrides
    public function show(UserModel $user){
        return UserModel::find($user);
    }

    1 reference | 0 overrides
    public function update(Request $request, UserModel $user){
        $user->update($request->all());
        return UserModel::find($user);
    }

    1 reference | 0 overrides
    public function destroy(UserModel $user){
        $user->delete();
        return response()->json([
            'success' => true,
            'message' => 'Data Terhapus'
        ]);
    }
}
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

b. Route

```
Route::get('users', [UserController::class, 'index']);
Route::post('users', [UserController::class, 'store']);
Route::get('users/{user}', [UserController::class, 'show']);
Route::put('users/{user}', [UserController::class, 'update']);
Route::delete('users/{user}', [UserController::class, 'destroy']);
```

c. Create

POST http://localhost/PWL\_POS/public/api/users

Params Authorization Headers (9) Body Scripts Settings Cookies

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

Key	Value	Description
nama	elvaretta	
password	12345	

Body Cookies Headers (11) Test Results

Status: 201 Created Time: 168 ms Size: 462 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "level_id": "2",
3   "username": "elvai",
4   "nama": "elvaretta",
5   "password": "12345",
6   "user_id": 60
7 }
```

d. Detail

GET http://localhost/PWL\_POS/public/api/users

Params Authorization Headers (9) Body Scripts Settings Cookies

Query Params

Key	Value	Description
Key	Value	Description

Body Cookies Headers (11) Test Results

Status: 200 OK Time: 167 ms Size: 2.91 KB Save as example

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "user_id": 1,
4     "level_id": 1,
5     "username": "admin1",
6     "nama": "Administrator12",
7     "password": "12345",
8     "created_at": null,
9     "updated_at": "2024-03-16 08:51:51"
10  },
11  {
12    "user_id": 2,
13    "level_id": 2,
14    "username": "manager",
15    "nama": "Manager",
16    "password": "$2y$12$40Yz4ht9BwZ4Q1ht2qEuh180fM8QsW4YCTqf7bnkQQAlyWeLL.m",
17    "created_at": null,
18    "updated_at": null
19  },
20 ]
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### e. Edit

PUT [http://localhost/PWL\\_POS/public/api/users/59?username=elva456](http://localhost/PWL_POS/public/api/users/59?username=elva456) Save Send

Params Authorization Headers (9) Body Scripts Settings Cookies

Query Params

Key	Value	Description
username	elva456	

Body Cookies Headers (11) Test Results Status: 200 OK Time: 158 ms Size: 721 B Save as example

Pretty Raw Preview Visualize JSON Copy Search

```
1 [
2   {
3     "user_id": 2,
4     "level_id": 2,
5     "username": "manager",
6     "nama": "Manager",
7     "password": "$2y$12$N40YZzht9BwZ4Q1ht2qEuh16DfM9QsWAYCTqf7bnkQQA1yWeLL.m",
8     "created_at": null,
9     "updated_at": null
10  },
11  {
12    "user_id": 59,
13    "level_id": 2,
14    "username": "elva456",
15    "nama": "elva",
16    "password": "$2y$12$XZ8dr6g/mIKxnxXxEwkAc.S27KY4M.ATJHCVscY5fwQFA2HgX26y2",
17    "created_at": null,
18    "updated_at": null
19  }
20 ]
```

### f. Delete

DELETE [http://localhost/PWL\\_POS/public/api/users/60](http://localhost/PWL_POS/public/api/users/60) Save Send

Params Authorization Headers (9) Body Scripts Settings Cookies

Query Params

Key	Value	Description
Key	Value	Description

Body Cookies Headers (11) Test Results Status: 200 OK Time: 140 ms Size: 413 B Save as example

Pretty Raw Preview Visualize JSON Copy Search

```
1 {
2   "success": true,
3   "message": "Data Terhapus"
4 }
```





Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### 2. m\_kategori

#### a. Api

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\KategoriModel;

6 references | 0 implementations
class KategoriController extends Controller
{
    1 reference | 0 overrides
    public function index(){
        return KategoriModel::all();
    }

    1 reference | 0 overrides
    public function store(Request $request){
        $kategori = KategoriModel::create($request->all());
        return response()->json($kategori, 201);
    }

    1 reference | 0 overrides
    public function show(KategoriModel $kategori){
        return KategoriModel::find($kategori);
    }

    1 reference | 0 overrides
    public function update(Request $request, KategoriModel $kategori){
        $kategori->update($request->all());
        return KategoriModel::find($kategori);
    }

    1 reference | 0 overrides
    public function destroy(KategoriModel $kategori){
        $kategori->delete();
        return response()->json([
            'success' => true,
            'message' => 'Data Terhapus'
        ]);
    }
}
```

#### b. Route

```
Route::get('categories', [KategoriController::class, 'index']);
Route::post('categories', [KategoriController::class, 'store']);
Route::get('categories/{kategori}', [KategoriController::class, 'show']);
Route::put('categories/{kategori}', [KategoriController::class, 'update']);
Route::delete('categories/{kategori}', [KategoriController::class, 'destroy']);
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### c. Create

http://localhost/PWL\_POS/public/api/categories

POST http://localhost/PWL\_POS/public/api/categories

Params Authorization Headers (9) Body Scripts Settings Cookies

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

Key	Value	Description
kategori_id	6	
kategori_kode	LPT	
kategori_nama	Laptop	

Body Cookies Headers (11) Test Results

Status: 201 Created Time: 171 ms Size: 526 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "kategori_kode": "LPT",
3   "kategori_nama": "Laptop",
4   "updated_at": "2024-05-12T14:32:33.000000Z",
5   "created_at": "2024-05-12T14:32:33.000000Z",
6   "kategori_id": 9
7 }
```

### d. Detail

http://localhost/PWL\_POS/public/api/categories

GET http://localhost/PWL\_POS/public/api/categories

Params Authorization Headers (7) Body Scripts Settings Cookies

Query Params

Key	Value	Description
Key	Value	Description

Body Cookies Headers (11) Test Results

Status: 200 OK Time: 176 ms Size: 897 B Save as example

Pretty Raw Preview Visualize JSON

```
1 [
2   {
3     "kategori_id": 1,
4     "kategori_kode": "FSH",
5     "kategori_nama": "Fashion",
6     "created_at": null,
7     "updated_at": null
8   },
9   {
10    "kategori_id": 2,
11    "kategori_kode": "MKU",
12    "kategori_nama": "Make Up",
13    "created_at": null,
14    "updated_at": null
15  },
16  {
17    "kategori_id": 3,
18    "kategori_kode": "ELK",
19    "kategori_nama": "Elektronik",
20    "created_at": null,
21    "updated_at": null
22  }
23 ]
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### e. Edit

PUT `http://localhost/PWL_POS/public/api/categories/9?kategori_nama=Laptop Gaming` Save Send

Params Authorization Headers (9) **Body** Scripts Settings Cookies

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

Key	Value	Description
<input checked="" type="checkbox"/> kategori_id	Text 6	
<input checked="" type="checkbox"/> kategori_kode	Text LPT	
<input checked="" type="checkbox"/> kategori_nama	Text Laptop	
Key	Value	Description

Body Cookies Headers (11) Test Results Status: 200 OK Time: 178 ms Size: 530 B Save as example

Pretty Raw Preview Visualize JSON Copy

```
1 {
2   "kategori_id": 9,
3   "kategori_kode": "LPT",
4   "kategori_nama": "Laptop Gaming",
5   "created_at": "2024-05-12T14:32:33.000000Z",
6   "updated_at": "2024-05-12T14:34:16.000000Z"
7 }
8
9 }
```

### f. Delete

DELETE `http://localhost/PWL_POS/public/api/categories/9` Save Send

Params Authorization Headers (9) **Body** Scripts Settings Cookies

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

Key	Value	Description
<input checked="" type="checkbox"/> kategori_id	Text 6	
<input checked="" type="checkbox"/> kategori_kode	Text LPT	
<input checked="" type="checkbox"/> kategori_nama	Text Laptop	
Key	Value	Description

Body Cookies Headers (11) Test Results Status: 200 OK Time: 159 ms Size: 413 B Save as example

Pretty Raw Preview Visualize JSON Copy

```
1 {
2   "success": true,
3   "message": "Data Terhapus"
4 }
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### 3. m\_barang

#### a. Api

```
<?php

namespace App\Http\Controllers\Api;

use App\Http\Controllers\Controller;
use Illuminate\Http\Request;
use App\Models\BarangModel;

6 references | 0 implementations
class BarangController extends Controller
{
    1 reference | 0 overrides
    public function index(){
        return BarangModel::all();
    }

    1 reference | 0 overrides
    public function store(Request $request){
        $barang = BarangModel::create($request->all());
        return response()->json($barang, 201);
    }

    1 reference | 0 overrides
    public function show(BarangModel $barang){
        return BarangModel::find($barang);
    }

    1 reference | 0 overrides
    public function update(Request $request, BarangModel $barang){
        $barang->update($request->all());
        return BarangModel::find($barang);
    }

    1 reference | 0 overrides
    public function destroy(BarangModel $barang){
        $barang->delete();
        return response()->json([
            'success' => true,
            'message' => 'Data Terhapus'
        ]);
    }
}
```

#### b. Route

```
Route::get('items', [BarangController::class, 'index']);
Route::post('items', [BarangController::class, 'store']);
Route::get('items/{barang}', [BarangController::class, 'show']);
Route::put('items/{barang}', [BarangController::class, 'update']);
Route::delete('items/{barang}', [BarangController::class, 'destroy']);
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### c. Create

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost/PWL_POS/public/api/items`
- Method:** `POST`
- Body Type:** `form-data`
- Body Data:**

Key	Value	Description
<input checked="" type="checkbox"/> kategori_id	Text 10	
<input checked="" type="checkbox"/> barang_kode	Text LPT	
<input checked="" type="checkbox"/> barang_nama	Text Laptop	
<input checked="" type="checkbox"/> harga_beli	Text 7000000	
<input checked="" type="checkbox"/> harga_jual	Text 7500000	
- Status:** 201 Created
- Time:** 163 ms
- Size:** 586 B
- Body (JSON):**

```
1 {
2   "kategori_id": "10",
3   "barang_kode": "LPT",
4   "barang_nama": "Laptop",
5   "harga_beli": "7000000",
6   "harga_jual": "7500000",
7   "updated_at": "2024-05-12T14:43:26.000000Z",
8   "created_at": "2024-05-12T14:43:26.000000Z",
9   "barang_id": 14
10 }
```

### d. Detail

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost/PWL_POS/public/api/items`
- Method:** `GET`
- Status:** 200 OK
- Time:** 183 ms
- Size:** 2.27 KB
- Body (JSON):**

```
1 [
2   {
3     "barang_id": 1,
4     "kategori_id": 1,
5     "barang_kode": "KMU",
6     "barang_nama": "Kemeja",
7     "harga_beli": 20000,
8     "harga_jual": 25000,
9     "created_at": null,
10    "updated_at": null
11  },
12  {
13    "barang_id": 2,
14    "kategori_id": 2,
15    "barang_kode": "MSK",
16    "barang_nama": "Maskara",
17    "harga_beli": 30000,
18    "harga_jual": 35000,
19    "created_at": null,
20    "updated_at": null
21  },
22  ]
```



Jurusan Teknologi Informasi Politeknik Negeri Malang

## Jobsheet-10 : RESTFUL API

Mata Kuliah Praktikum Pemrograman Web Lanjut (PWL)

Maret 2024

### e. Edit

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost/PWL_POS/public/api/items/14?harga_jual=7550000`
- Method:** PUT
- Body:** form-data
- Form Data:**

Key	Value	Description
<input checked="" type="checkbox"/> kategori_id	10	
<input checked="" type="checkbox"/> barang_kode	LPT	
<input checked="" type="checkbox"/> barang_nama	Laptop	
<input checked="" type="checkbox"/> harga_beli	7000000	
<input checked="" type="checkbox"/> harga_jual	7500000	
- Body Tab:** Pretty view showing JSON response:

```
{  "barang_id": 14,  "kategori_id": 10,  "barang_kode": "LPT",  "barang_nama": "Laptop",  "harga_beli": 7000000,  "harga_jual": 7500000,  "created_at": "2024-05-12T14:43:26.000000Z",  "updated_at": "2024-05-12T14:44:26.000000Z"}
```
- Status:** 200 OK, Time: 169 ms, Size: 767 B

### f. Delete

The screenshot shows a REST client interface with the following details:

- URL:** `http://localhost/PWL_POS/public/api/items/14`
- Method:** DELETE
- Body:** (Empty)
- Body Tab:** Pretty view showing JSON response:

```
{  "success": true,  "message": "Data Terhapus"}
```
- Status:** 200 OK, Time: 159 ms, Size: 413 B