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## JOBSHEET 11

### RESTFUL API 2

#### Praktikum 1 – Implementasi Eloquent Accessor

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1. Sebelum memulai pastikan REST API, terlebih dahulu pastikan sudah ter instal aplikasi Postman.
2. Kita akan memodifikasi Table m\_user dengan menambahkan column : image, buka terminal lalu ketikkan

**php artisan make:migration add\_image\_to\_m\_user\_table**

```
PS C:\laragon\www\PWL_POS> php artisan make:migration add_image_to_m_user_table  
INFO Migration [C:\laragon\www\PWL_POS\database\Migrations\2024_04_30_040822_add_image_to_m_user_table.php] created successfully.
```

```
PS C:\laragon\www\PWL_POS> php artisan make:migration add_image_to_m_user_table  
INFO Migration [C:\laragon\www\PWL_POS\database\Migrations\2024_05_12_135004_add_image_to_m_user_table.php] created successfully.  
PS C:\laragon\www\PWL_POS> █
```

3. Buka file migrasi tersebut lalu modifikasi seperti ini lalu simpan:



```
<?php use
Illuminate\Database\Migrations\Migration;
use Illuminate\Database\Schema\Blueprint;
use Illuminate\Support\Facades\Schema;
return new class extends
Migration
{
    /**
     * Run the migrations.
     */    public function
up(): void
    {
        Schema::table('m_user', function (Blueprint $table) {
            $table->string('image');
        });
    }

    /**
     * Reverse the migrations.
     */    public function
down(): void
    {
        Schema::table('m_user', function (Blueprint $table) {
            $table->dropColumn('image');
        });
    }
};
```

4. Lakukan jalankan update migrasi dengan cara: php artisan migrate
5. Lalu lakukan modifikasi models pada App/Models/UserModel.php

```
<?php
namespace App\Models;
use Illuminate\Database\Eloquent\Model; use
Tymon\JWTAuth\Contracts\JWTSubject; use
Illuminate\Database\Eloquent\Casts\Attribute; use
Illuminate\Foundation\Auth\User as Authenticatable;
```



```
class UserModel extends Authenticatable implements JWTSubject {
    public function getJWTIdentifier(){          return $this->
    >getKey();
    }      public function
    getJWTCustomClaims(){          return [];
    }      protected $table = 'm_user';
    protected $primaryKey = 'user_id';
    protected $fillable = [
        'username',
        'nama',
        'password',
        'level_id',
        'image'//tambahan
    ];      public function
    level()
    {          return $this->belongsTo(LevelModel::class,
    'level_id', 'level_id');      }
    protected function image(): Attribute
    {
        return Attribute::make(
            get: fn ($image) => url('/storage/posts/' . $image),
        );
    }
}
```

6. Lakukan modifikasi pada Controllers/Api/RegisterController

```
<?php
namespace App\Http\Controllers\Api;
use App\Models\UserModel; use
App\Http\Controllers\Controller;
use Illuminate\Http\Request;
```



```
use Illuminate\Support\Facades\Validator;
class RegisterController extends
Controller
{
    public function __invoke(Request
$request)
    {
        //set validation
        $validator = Validator::make($request->all(), [
            'username' => 'required',
            'nama' => 'required',
            'password' => 'required|min:5|confirmed',
            'level_id' => 'required',
            'image' => '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,
            'image' => $request->image
        ]);

        //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);
    }
}
```



7. Anda dapat menambahkan detail untuk spesifikasi image pada validator

```
'image' => 'required|image|mimes:jpeg,png,jpg,gif,svg|max:2048',
```

8. Ubah atau tambahkan register1 pada routes/api.php

```
Route::post('/register1', App\Http\Controllers\Api\RegisterController::class)->name('register1');
```

8. Simpan dan akses pada aplikasi Postman, atur pada Body isi manual Key dan Valuenya pada Key image tambahkan value File dan upload gambar

<http://127.0.0.1:8000/api/register1> dengan method POST dan klik send

The screenshot shows the Postman interface for a POST request to `http://127.0.0.1:8000/api/register1`. The request body is set to 'form-data' and contains the following key-value pairs:

Key	Value	Content-Type	Description
username	penggunaempat	Auto	
nama	pengguna4	Auto	
password	12345	Auto	
password_confirmation	12345	Auto	
level_id	2	Auto	
image	File (Screenshot 2023-04-28 095851.png)	Auto	

The response is shown in JSON format:

```
{
  "success": true,
  "user": {
    "username": "penggunaempat",
    "nama": "pengguna4",
    "password": "$2y$12$9sd1lI/u2fy33ABuUj9s50tkYe3r1G9ci.SyNvbygSCYJgvh0vYNm",
    "level_id": "2",
    "image": "http://127.0.0.1:8000/storage/posts/C:\\Users\\Asus Zenbook 14 OLED\\AppData\\Local\\Temp\\php57C5.tmp",
    "updated_at": "2024-04-30T07:16:25.000000Z",
    "created_at": "2024-04-30T07:16:25.000000Z",
    "user_id": 22
  }
}
```



POST localhost/PWL\_POS/pu

HTTP PWL\_POS / localhost/PWL\_POS/public/api/register1

POST localhost/PWL\_POS/public/api/register1

Params Authorization Headers (8) Body Scripts Settings Cookies

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

key	value	Description
username	penggunaempat	
nama	pengguna4	
password	12345	
password_confirmation	12345	
level_id	2	
image	Screenshot 2024-01-19 191...	

Body Cookies Headers (11) Test Results

201 Created 2.43 s 740 B Save as example

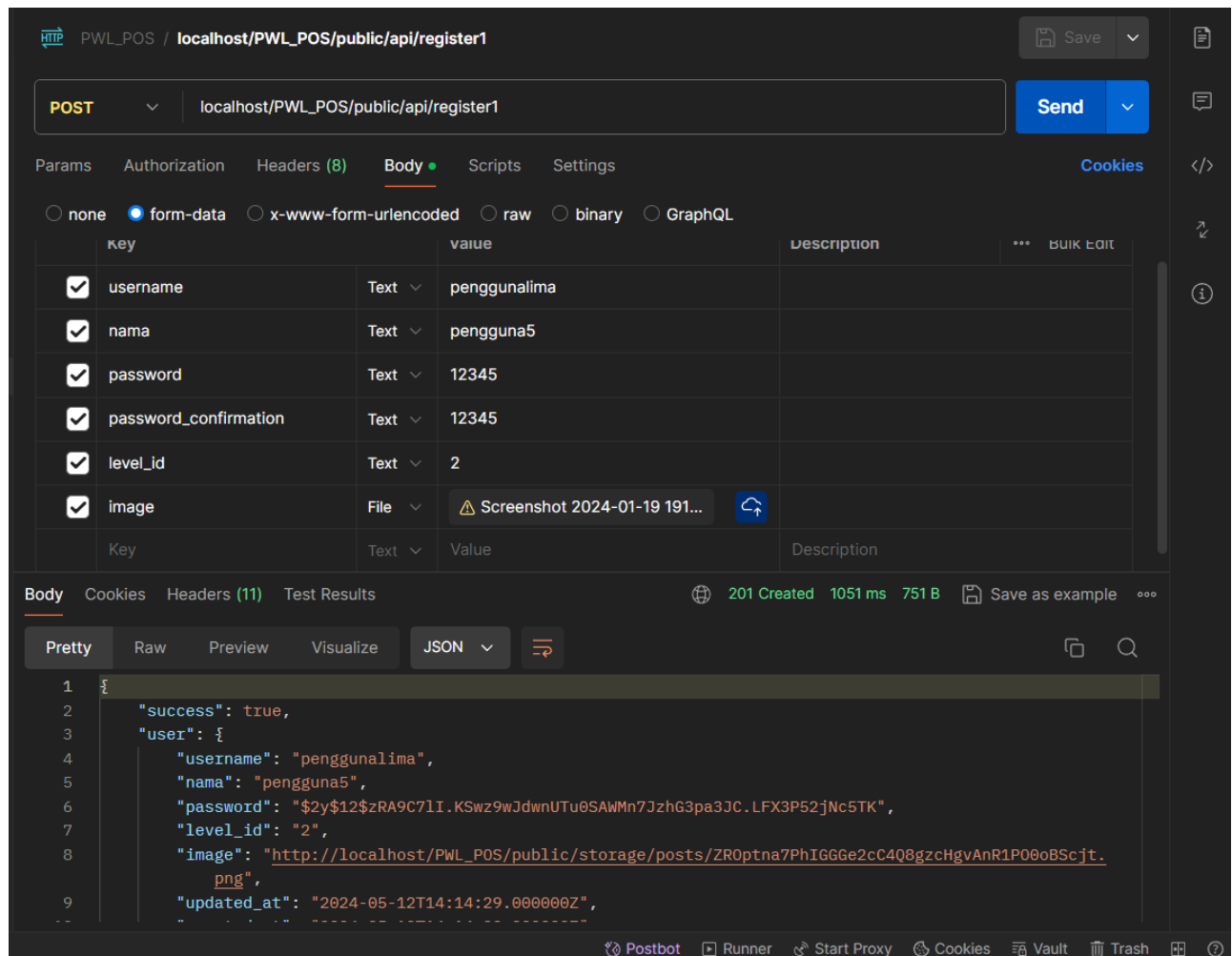
Pretty Raw Preview Visualize JSON

```
1 {
2   "success": true,
3   "user": {
4     "username": "penggunaempat",
5     "nama": "pengguna4",
6     "password": "$2y$12$URuI.kgP1P7nTOMxf/P90eet1.2Drfid0oHUcy030KndZdu7v5z/N6",
7     "level_id": "2",
8     "image": "http://localhost/PWL_POS/public/storage/posts/C:\\Windows\\Temp\\php203C.tmp",
9     "updated_at": "2024-05-12T14:08:59.000000Z",
10    "created_at": "2024-05-12T14:08:59.000000Z",
11  }
```

9. Pada Controllers/Api/RegisterController bagian create user ganti dengan

```
'image' => $image->hashName(),
```

10. Uji coba dan screenshot hasilnya apa perbedaan dari yang sebelumnya



Berdasarkan hasil percobaan diatas, sebelum diberi `hashName()` pada image, detail lokasi atau directory file yang diupload akan ditampilkan, sedangkan setelah diberi `hashName()` pada image, detail lokasi atau directory file yang diupload akan disembunyikan dan diganti dengan kode acak dari hash. Kesimpulannya, fungsi `hashName` digunakan untuk merahasiakan lokasi atau directory file, sehingga keamanan file yang diupload akan terjamin.

## TUGAS

Implementasikan API untuk upload file/gambar pada tabel lainnya yaitu tabel `m_barang` dan gunakan pada transaksi. Uji coba dengan method GET untuk memanggil data yang sudah di inputkan.

Uji Coba Menginputkan Data :

Tanpa `hashName()`:



localhost/PWL\_POS/public/api/barangs

POST localhost/PWL\_POS/public/api/barangs

Params Authorization Headers (8) Body Scripts Settings Cookies

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

key	value	Description
barang_kode	Text ACCU	
kategori_id	Text 4	
barang_nama	Text Aki Yuasa	
harga_beli	Text 800000	
harga_jual	Text 900000	
image	File Screenshot 2024-01-19 191...	

Body Cookies Headers (11) Test Results 201 Created 1625 ms 690 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "barang_kode": "ACCU",
3   "kategori_id": "4",
4   "barang_nama": "Aki Yuasa",
5   "harga_beli": "800000",
6   "harga_jual": "900000",
7   "image": "http://localhost/PWL_POS/public/storage/posts/C:\\Windows\\Temp\\php4B58.tmp",
8   "updated_at": "2024-05-14T06:09:23.000000Z",
9   "created_at": "2024-05-14T06:09:23.000000Z",
10  "barang_id": 14
11 }
```

Postbot Runner Start Proxy Cookies Vault Trash

Menggunakan `hashCode()`:





localhost/PWL\_POS/public/api/barangs

POST localhost/PWL\_POS/public/api/barangs

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"/> harga_beli	Text 800000	
<input checked="" type="checkbox"/> harga_jual	Text 900000	
<input checked="" type="checkbox"/> image	File Screenshot 2024-01-19 191...	

Body Cookies Headers (11) Test Results 201 Created 518 ms 704 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "barang_kode": "ACCU",
3   "barang_nama": "Aki Yuasa",
4   "harga_beli": "800000",
5   "harga_jual": "900000",
6   "kategori_id": "4",
7   "image": "http://localhost/PWL_POS/public/storage/posts/I0gRP4pWKN7fqpVtJ3yMRIobZHLbKIZjSbwenvIF.png",
8   "updated_at": "2024-05-14T06:24:40.000000Z",
9   "created_at": "2024-05-14T06:24:40.000000Z",
10  "barang_id": 15
11 }
```

Postbot Runner Start Proxy Cookies Vault Trash

Uji coba memanggil data yang telah diinputkan :



localhost/PWL\_POS/public/api/barangs/14

GET localhost/PWL\_POS/public/api/barangs/14

Send

Params Authorization Headers (6) Body Scripts Settings Cookies

Query Params

Key	Value	Description	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (11) Test Results 200 OK 162 ms 679 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "barang_id": 14,
3   "barang_kode": "ACCU",
4   "kategori_id": 4,
5   "barang_nama": "Aki Yuasa",
6   "harga_beli": 800000,
7   "harga_jual": 900000,
8   "created_at": "2024-05-14T06:09:23.000000Z",
9   "updated_at": "2024-05-14T06:09:23.000000Z",
10  "image": "http://localhost/PWL_POS/public/storage/posts/C:\\Windows\\Temp\\php4B58.tmp"
11 }
```

Postbot Runner Start Proxy Cookies Vault Trash



localhost/PWL\_POS/public/api/barangs/15

GET localhost/PWL\_POS/public/api/barangs/15

Send

Params Authorization Headers (6) Body Scripts Settings Cookies

Query Params

Key	Value	Description	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (11) Test Results 200 OK 207 ms 693 B Save as example

Pretty Raw Preview Visualize JSON

```
1 {
2   "barang_id": 15,
3   "barang_kode": "ACCU",
4   "kategori_id": 4,
5   "barang_nama": "Aki Yuasa",
6   "harga_beli": 800000,
7   "harga_jual": 900000,
8   "created_at": "2024-05-14T06:24:40.000000Z",
9   "updated_at": "2024-05-14T06:24:40.000000Z",
10  "image": "http://localhost/PWL_POS/public/storage/posts/I0gRP4pWKN7fqpVtJ3yMRIobZHLbKIzjSbwenvIF.png"
11 }
```

Postbot Runner Start Proxy Cookies Vault Trash

\*\*\* Sekian, dan selamat belajar \*\*\*