

## POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI

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Mata Kuliah
 Pemrograman Web Lanjut (PWL)
 Program Studi
 D4 – Sistem Informasi Bisnis

Semester : 5

Kelas : SIB

NIM : 2241760007

Nama : Anaradi Octa Lavechia

Jobsheet Ke- : 11

## **Laporan Jobsheet-11**

## RESTFUL API 2

## Praktikum Ke-1 Implementasi Eloquent Accessor

Langkah	Jawaban/Deskripsi
1	Sebelum memulai pastikan REST API, terlebih dahulu pastikan sudah ter instal aplikasiPostman.
2	Kita akan memodifikasi Table m_user dengan menambahkan column: image, bukaterminal lalu ketikkan  php artisan make:migration add_image_to_m_user_table  C:\laragon\www\POS>php artisan make:migration add_image_to_m_user_table  Warning: Module "gd" is already loaded in Unknown on line 0  INFO Migration [C:\laragon\www\POS\database\migrations/2024_11_06_070012_add_image_to_m_user_table.php] created successfully.  C:\laragon\www\POS>
3	Buka file migrasi tersebut lalu modifikasi seperti ini lalu simpan:



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```
use Illuminate\Database\Migrations\Migration;
                  use Illuminate\Database\Schema\Blueprint;
                  use Illuminate\Support\Facades\Schema;
                  return new class extends Migration
                      public function up(): void
                          Schema::table(table: 'm_user', callback: function (Blueprint $table): void {
    $table->string(column: 'image');
                      public function down(): void
                          Schema::table(table: 'm_user', callback: function (Blueprint $table): void {
    $table->dropColumn(columns: 'image');
4
           Lakukan jalankan update migrasi dengan cara:
           php artisan migrate
            C:\laragon\www\POS>php artisan migrate
            Warning: Module "gd" is already loaded in Unknown on line 0
             2024_11_06_070012_add_image_to_m_user_table .....
           Lalu lakukan modifikasi models pada App/Models/UserModel.php
5
```



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```
Lakukan modifikasi pada Controllers/Api/RegisterController
6
          app > Http > Controllers > Api > 🦬 RegisterController.php > PHP Intelephense > ધ RegisterController > 🖯 _invoke
                namespace App\Http\Controllers\Api;
                use App\Http\Controllers\Controller;
                use App\Models\UserModel;
                use Illuminate\Http\Request;
                use Illuminate\Support\Facades\Validator;
                2 references | 0 implementations
                class RegisterController extends Controller
                    public function __invoke(Request $request): JsonResponse|mixed
                        $validator = Validator::make(data: $request->all(), rules: [
                            'username' => 'required',
                            'password' => 'required|min:5|confirmed',
                                       => 'required|image|mimes:jpeg,png,jpg,gif,svg|max:2048',
                        if ($validator->fails()) {
                            return response()->json(data: $validator->errors(), status: 422);
                        $avatar = $request->avatar;
                        $user = UserModel::create(attributes: [
                            'username' => $request->username,
                                      => $request->nama,
                            'password' => bcrypt(value: $request->password),
                             'level_id' => $request->level_id,
                                        => $avatar->hashName(),
                        if ($user)
                            return response()->json(data: [
                                            => $user,
                            ],status: 201);
                        return response()->json(data: [
                        ],status: 409);
7
         Anda dapat menambahkan detail untuk spesifikasi image pada validator
```



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```
app > Http > Controllers > Api > ՠ RegisterController.php > PHP Intelephense > ધ RegisterController > 😭 _invoke
                     namespace App\Http\Controllers\Api;
                     use App\Http\Controllers\Controller;
                     use App\Models\UserModel;
                     use Illuminate\Http\Request;
                     use Illuminate\Support\Facades\Validator;
                     2 references | 0 implementations class RegisterController extends Controller
                           public function __invoke(Request $request): JsonResponse mixed
                                $validator = Validator::make(data: $request->all(), rules: [
                                     'username' => 'required',
'nama' => 'required',
                                     'password' => 'required|min:5|confirmed',
'level_id' => 'required',
'avatar' => 'required|image|mimes:jpeg,png,jpg,gif,svg|max:2048',
                                if ($validator->fails()) [
              18
                                     return response()->json(data: $validator->errors(), status: 422);
                                $avatar = $request->avatar;
                                $user = UserModel::create(attributes: [
            Ubah atau tambahkan register1 pada routes/api.php
             routes > 😭 ani nhn >
                   Route::post(uri: '/register', action: App\Http\Controllers\Api\RegisterController::class)->name(name: 'register');
                   Route::post(uri: '/login', action: App\Http\Controllers\Api\LoginController::class)->name(name: 'login');
                   Route::middleware(middleware: 'auth:api')->get(uri: '/user', action: function (Request $request): mixed{
                       return $request->user():
                   Route::post(uri: '/logout', action: App\Http\Controllers\Api\LogoutController::class)->name(name: 'logout');
                   Route::post(uri: '/register1', action: App\\ttp\Controllers\Api\\RegisterController::class)->name(name: 'register1');
           Simpan dan akses pada aplikasi Postman, atur pada Body isi manual Key dan Valuenya
8
           pada
                                                                                                                                   gambar
                         Key
                                     image
                                                     tambahkan
                                                                            value
                                                                                          File
                                                                                                      dan
                                                                                                                  upload
           http://127.0.0.1:8000/api/register1 dengan method POST dan klik send
                                                                          Save
            localhost/POS/public/api/kategori?kategori_nama=Sembako
             POST v localhost/POS/public/api/register1
                                                                       Send
            Params Auth Headers (8) Body • Pre-req. Tests Settings
                                                                          Cookies
            form-data ∨
              username
              nama
              password
                                                123456
              password_confirmation
                                               123456
              level_id
                           cing.jpg ×
              avatar
                                               201 Created 1652 ms 660 B Save Response
            Pretty Raw Preview Visualize JSON V
                                                                           □ C
                    "success": true,
                       "username": "Supervisor3",
                      "username": "Supervisor3",
"nama": "Supervisor3",
"level_id": "9",
"avatar": "http://localhost/POS/public/
gambarnuTomFSenCoUKCEllWn0bShWmHHYEndIcU7Kqiy8.jpg",
"updated_at": "2824-11-06167:25:06.0000002",
"created_at": "2024-11-06167:25:06.0000002",
"user_id": 72
```



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9 Pada Controllers/Api/RegisterController bagian create user ganti dengan 🦬 RegisterController.php > PHP Intelephense > ધ RegisterController > 🕥 namespace App\Http\Controllers\Api; use App\Http\Controllers\Controller; use App\Models\UserModel; use Illuminate\Http\Request; use Illuminate\Support\Facades\Validator; class RegisterController extends Controller public function \_\_invoke(Request \$request): JsonResponse|mixed \$validator = Validator::make(data: \$request->all(), rules: [ 'username' => 'required',
'nama' => 'required|min:5|confirmed',
'level\_id' => 'required',
'avatar' => 'required|mines:jpeg,png,jpg,gif,svg|max:2048', if (\$validator->fails()) { return response()->json(data: \$validator->errors(), status: 422); \$avatar = \$request->avatar: \$user = UserModel::create(attributes: [ 'username' => \$request->username,
'nama' => \$request->nama, 'password' => bcrypt(value: \$request->password),
'level\_id' => \$request->level\_id,
'avatar' => \$avatar->hashName(), 29 10 Uji coba dan screenshot hasilnya apa perbedaan dari yang sebelumnya localhost/POS/public/api/kategori?kategori\_nama=Sembako Save POST localhost/POS/public/api/register1 Send Params Auth Headers (8) Body Pre-req. Tests Settings Cookies form-data username Supervisor3 nama Supervisor Tiga password 123456 123456 password confirmation level\_id  $\square$  $\square$ avatar cing.jpg X Body 201 Created 1652 ms 660 B Save Response Raw Pretty Preview Visualize JSON □ C "success": true, 3 "user": { "username": "Supervisor3", 4 5 "nama": "Supervisor Tiga", "level\_id": "9", "avatar": "http://localhost/POS/public/ gambarnuTomFSenCoUKCmlNKwDs8hWmHHYEndIcU7Kqiy8.jpg",8 "updated\_at": "2024-11-06T07:25:06.000000Z", "created\_at": "2024-11-06T07:25:06.000000Z", "user\_id": 72



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#### **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.

## Soal Praktikum m\_barang

```
Langkah
             Jawaban/Deskripsi
    1
             Memodifikasi Table m_barang dengan menambahkan column : image, buka terminal
             lalu ketikkan
             Php artisan make:migration add_image_to_m_user_table
              C:\laragon\www\POS>Php artisan make:migration add_image_to_m_user_table
              Warning: Module "gd" is already loaded in Unknown on line 0
                INFO Migration [C:\laragon\www\POS\database\migrations/2024_11_06_072910_add_image_to_m_user_table.php] created successfully.
              C:\laragon\www\POS>
    2
             Buka file migrasi tersebut lalu modifikasi seperti ini lalu simpan
               database > migrations > 🦬 2024_11_06_072910_add_image_to_m_user_table.php > ધ class > 🖯 down > 🕀 Closure
                     use Illuminate\Database\Migrations\Migration;
                     use Illuminate\Database\Schema\Blueprint;
                     use Illuminate\Support\Facades\Schema;
                     return new class extends Migration
                         public function up(): void
                             Schema::table(table: 'm_user', callback: function (Blueprint $table): void {
                                 $table->string(column: 'image');
                          * Reverse the migrations.
                         public function down(): void
                             Schema::table(table: 'm_user', callback: function (Blueprint $table): void {
                                 $table->dropColumn(columns: 'image');
```



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3 Lakukan jalankan update migrasi dengan cara:

#### php artisan migrate

```
C:\laragon\www\POS>php artisan migrate
Warning: Module "gd" is already loaded in Unknown on line 0
 INFO Running migrations.

        2024_11_66_072910_add_image_to_m_user_table
        175ms DONE

C:\laragon\www\POS>
```

4 Lalu lakukan modifikasi models pada App/Models/BarangModel.php

```
Models > 🦛 BarangModel.php > PHP Intelephense > ધ BarangModel
 namespace App\Models;
 use Illuminate\Database\Eloquent\Factories\HasFactory;
 use Illuminate\Database\Eloquent\Model;
 use Illuminate\Database\Eloquent\Relations\BelongsTo;
 use Tymon\JWTAuth\Contracts\JWTSubject;
 30 references | O implementations class BarangModel extends Model implements JWTSubject
      O references | O overrides public function getJWTIdentifier(): mixed
           return $this->getKey();
      Oreferences | O overrides public function getJWTCustomClaims(): array
      O references
protected $table = 'm_barang';
      O references
protected $primaryKey = 'barang_id';
      Oreferences

protected $fillable =['barang_id','kategori_id','barang_kode','barang_nama','harga_beli','harga_jual'];
      O references | O overrides
public function kategori():BelongsTo{
    return $this->belongsTo(related: kategorimodel::class,foreignKey: 'kategori_id', ownerKey: 'kategori_id');
```

5 Lakukan modifikasi pada Controllers/Api/BarangController



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```
app > Http > Controllers > Api > 🐄 BarangController.php > PHP Intelephense > ધ BarangController > 😚 _invoke
          namespace App\Http\Controllers\Api;
         use App\Http\Controllers\Controller;
          use App\Models\BarangModel;
         use App\Models\KategoriModel;
          use Illuminate\Http\Request;
         use Illuminate\Support\Facades\Validator;
         6 references | 0 implementations
class BarangController extends Controller
               0 references | 0 overrides
public function __invoke(Request $request): JsonResponse|mixed
                    $validator = Validator::make(data: $request->all(), rules: [
                          'kategori_id' => 'required|integer',
'barang_kode' => 'required|min:3|max:20|unique:m_barang,barang_kode',
                          'barang_nama' => 'required|string|max:100',
                          'harga_beli' => 'required|numeric',
'harga_jual' => 'required|numeric',
                    if ($validator->fails()) {
                         return response()->json(data: $validator->errors(), status: 422);
                    $image = $request->image;
                   $hashedName = $image->hashName();
$image->move(public_path('gambar'), $hashedName);
                          'kategori_id' => $request->kategori_id,
'barang_kode' => $request->barang_kode,
                          'barang_nama' => $request->barang_nama,
                          'harga_beli' => $request->harga_beli,
'harga_jual' => $request->harga_jual,
'image' => $hashedName,
                   if ($user) {
    return response()->json(data: [
                            'success' => true,
'user' => $user,
                    return response()->json(data: [
                    ], status: 409);
               1 reference | O overrides public function show(BarangModel $barang): array|BarangModel|Collection|Model|null
                    return BarangModel::find(id: $barang);
Ubah atau tambahkan barang pada routes/api.php
```

6

```
Route::get(uri: 'barang', action: [BarangController::class, 'index']);
Route::get(uri: 'barang', action: [BarangController::class, 'store']);
Route::get(uri: 'barang/{barang}', action: [BarangController::class, 'show']);
Route::put(uri: 'barang/{barang}', action: [BarangController::class, 'update']);
Route::delete(uri: 'barang/{barang}', action: [BarangController::class, 'destroy']);
Route::post(uri: 'barang', action: Annitto(Controller:ShoilBarangController::class)
           Route::post(uri: '/barang', action: App\Http\Controllers\Api\BarangController::class)->name(name: 'barang');
           Route::get(uri: 'barang/{barang}', action: [BarangController::class, 'show']);
60
```



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7 Simpan dan akses pada aplikasi Postman, atur pada Body isi manual Key dan Valuenya pada Key image tambahkan value File dan upload gambar localhost/POS/public/api/kategori?kategori\_nama=Sembako □ Save POST localhost/POS/public/api/barang Send Cookies Params Auth Headers (8) Body • Pre-req. Tests Settings form-data V kategori\_id ALF-001 barang\_kode Alfa Hello Kitty barang\_nama harga\_beli 13000 20000 harga\_jual barang.jpg × image ⚠ Body ~ (A) 201 Created 610 ms 619 B Save Response V ■ Q Pretty Raw Preview Visualize JSON "success": true, 3 "user": { "kategori\_id": "4", "barang\_kode": "ALF-001", "barang\_nama": "Alfa Hello Kitty", "harga\_beli": "13000", 7 "harga\_jual": "20000", 8 9 "updated\_at": "2024-11-06T07:43:45.000000Z", "created\_at": "2024-11-06T07:43:45.000000Z", 10 "barang\_id": 28 11 8 Menampilkan barang sesuai barang\_id yang dipilih dengan method GET

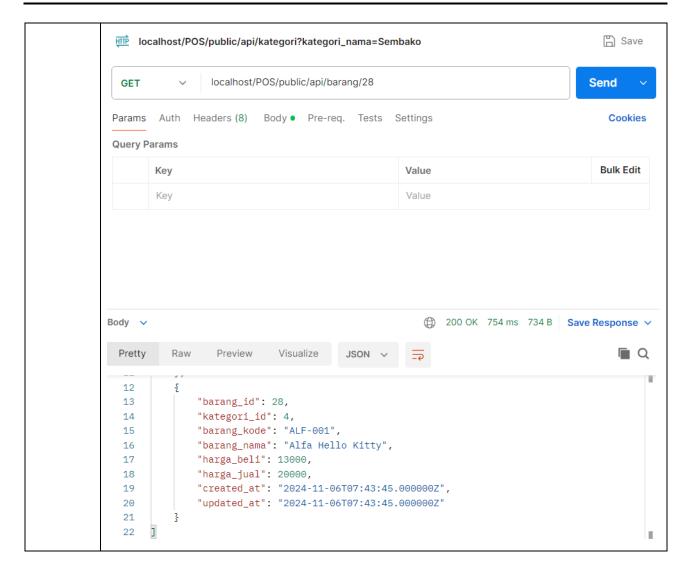


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## Soal Praktikum t\_penjualan

Langkah	Jawaban/Deskripsi
1	Memodifikasi Table m_penjualan dengan menambahkan column: image, buka terminal lalu ketikkan  Php artisan make:migration add_image_to_t_penjualan_table  C:\laragon\www\POS>php artisan make:migration add_image_to_t_penjualan_table  Warning: Module "gd" is already loaded in Unknown on line 0  INFO Migration [C:\laragon\www\POS\database\migrations/2024_11_06_074957_add_image_to_t_penjualan_table.php] created successfully.  C:\laragon\www\POS>
2	Buka file migrasi tersebut lalu modifikasi seperti ini lalu simpan



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```
database > migrations > 🦛 2024_11_06_074957_add_image_to_t_penjualan_table.php > ધ class > 🖯 down > 🖯 Closure
               v use Illuminate\Database\Migrations\Migration;
                 use Illuminate\Database\Schema\Blueprint;
                 use Illuminate\Support\Facades\Schema;
               return new class extends Migration
                     public function up(): void
                         Schema::table(table: 't_penjualan', callback: function (Blueprint $table): void {
                             $table->string(column: 'image');
                      * Reverse the migrations.
                     public function down(): void
                         Schema::table(table: 't_penjualan', callback: function (Blueprint $table): void {
                             $table->dropColumn(columns: 'image');
3
         Lakukan jalankan update migrasi dengan cara:
         php artisan migrate
          C:\laragon\www\POS>php artisan migrate
          Warning: Module "gd" is already loaded in Unknown on line 0
           INFO Running migrations.
           2024_11_06_074957_add_image_to_t_penjualan_table .....
          C:\laragon\www\POS>
4
         Lalu lakukan modifikasi models pada App/Models/BarangModel.php
```



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```
app > Models > 🟶 PenjualanModel.php > PHP Intelephense > ધ PenjualanModel > 😭 image
                    \lor \verb"use Illuminate\Database\Eloquent\Factories\HasFactory";
                      use Illuminate\Database\Eloquent\Model;
                      use App\Models\PenjualanDetailModel;
                      use Illuminate\Database\Eloquent\Relations\BelongsTo;
                      use Illuminate\Database\Eloquent\Relations\HasMany;
                      use Tymon\JWTAuth\Contracts\JWTSubject;
                      use Illuminate\Database\Eloquent\Casts\Attribute;
                18 references | 0 implementations
10 > class PenjualanModel extends Model implements JWTSubject
                           O references | O overrides public function getJWTIdentifier(): mixed
                                return $this->getKey();
                           Oreferences | O overrides

public function getJWTCustomClaims(): array
                           O references

protected $table = 't_penjualan'; // Mendefinisikan nama tabel yang digunakan oleh model ini
...
                           Oreferences

protected SprimaryKey = 'penjualan_id'; // Mendefinisikan primary key dari tabel yang digunakan
                           Protected $fillable = ['user_id', 'barang_id', 'pembeli', 'penjualan_kode', 'penjualan_tanggal', 'image'];
Oreferences | O overrides
public function user():BelongsTo
                                return $this->belongsTo(related: UserModel::class, foreignKey: 'user_id',ownerKey: 'user_id');
                           O references | O overrides public function detail():HasMany
                                return $this->hasMany(related: PenjualanDetailModel::class, foreignKey: 'penjualan_id',localKey: 'penjualan_id');
                           Oreferences | O overrides
protected function image(): Attribute[]
return Attribute::make(
                                    get: fn ($image): string|UrlGenerator => url(path: '/gambar/' . $image),
5
             Lakukan modifikasi pada Controllers/Api/PenjualanController
```



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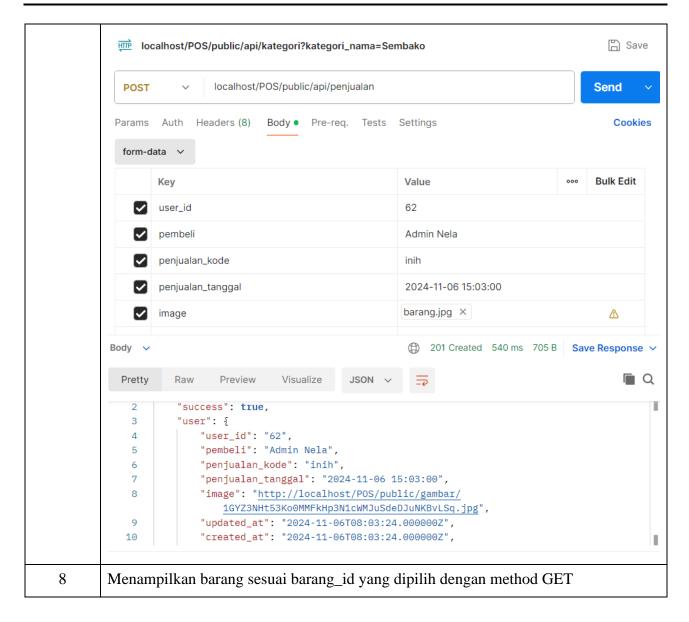
```
app > Http > Controllers > Api > 🦬 PenjualanController.php > ...
                  namespace App\Http\Controllers\Api;
                  use App\Http\Controllers\Controller;
                 use App\Models\PenjualanModel;
                  use App\Models\UserModel;
                  use Illuminate\Http\Request;
                  use Illuminate\Support\Facades\Validator;
                  0 references | 0 implementations
                  class PenjualanController extends Controller
                       public function __invoke(Request $request): JsonResponse|mixed
                           $validator = Validator::make(data: $request->all(), rules: [
                               'user_id' => 'required|integer',
                                'pembeli' => 'required|string|min:3|max:100',
                                penjualan_kode' => 'required|string|min:3|unique:t_penjualan,penjualan_kode',
penjualan_tanggal' => 'required|date',
                               'image' => 'required|image|mimes:jpeg,png,jpg,gif,svg|max:2048',
                           if ($validator->fails()) {
                               return response()->json(data: $validator->errors(), status: 422);
                          $image = $request->image;
                           $hashedName = $image->hashName();
                          $image->move(public_path('gambar'), $hashedName);
                          $user = PenjualanModel::create(attributes: [
                               'user_id' => $request->user_id,
                               'pembeli' => $request->pembeli,
                                'penjualan_kode' => $request->penjualan_kode,
                                 penjualan_tanggal' => $request->penjualan_tanggal,
                               'image' => $hashedName,
                           if ($user) {
                               return response()->json(data: [
                                   'user' => $user,
                               ], status: 201);
                          return response()->json(data: [
                           ], status: 409);
                       0 references | 0 overrides
                       public function show(PenjualanModel $penjualan): array|Collection|Model|PenjualanModel|nul_
                           return PenjualanModel::find(id: $penjualan);
6
          Ubah atau tambahkan barang pada routes/api.php
                 Route::post(uri: '/penjualan', action: App\Http\Controllers\Api\PenjualanController::class)->name(name: 'penjualan');
Route::get(uri: 'penjualan/{penjualan}', action: [PenjualanController::class, 'show']);
            64
7
          Simpan dan akses pada aplikasi Postman, atur pada Body isi manual Key dan Valuenya
          pada Key image tambahkan value File dan upload gambar
```



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