PRAKTIKUM PEMROGRAMAN WEB LANJUT TUGAS PERTEMUAN 7

Authentication dan Authorization di Laravel DISUSUN OLEH :

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Praktikum 1 – Implementasi Authentication:

1. Kita buka project laravel PWL_POS kita, dan kita modifikasi konfigurasi aplikasi kita di config/auth.php

```
'providers' => [
    'users' => [
        'driver' => 'eloquent',
        'model' => App\Models\User::class,
],
```

Pada bagian ini kita sesuaikan dengan Model untuk tabel m user yang sudah kita buat

```
'providers' => [
    'users' => [
        'driver' => 'eloquent',
        'model' => App\Models\UserModel::class,
],
```

2. Selanjutnya kita modifikasi sedikit pada UserModel.php untuk bisa melakukan proses otentikasi

3. Selanjutnya kita buat AuthController.php untuk memproses login yang akan kita lakukan

```
Minggu 7 > PWL_POS > app > Http > Controllers > ♥ AuthController.php > PHP Intelephense > ❤ AuthController
      namespace App\Http\Controllers;
      use Illuminate\Http\Request;
      use Illuminate\Support\Facades\Auth;
           public function login()
               if(Auth::check()) {
                   return redirect('/');
               return view('auth.login');
           public function postLogin(Request $request)
               if($request -> ajax() || $request -> wantsJson()) {
                   $credentials = $request->only('username', 'password');
                   if(Auth::attempt($credentials)) {
                       return response()->json([
                            'message' => 'Login Berhasil',
                            'redirect' => url('/')
                   return response()->json([
               return redirect('login');
           public function logout(Request $request)
               Auth::logout();
               $request->session()->invalidate();
               $request->session()->regenerateToken();
               return redirect('/login');
 47
```

4. Setelah kita membuat AuthController.php, kita buat view untuk menampilkan halaman login. View kita buat di auth/login.blade.php, tampilan login bisa kita ambil dari contoh login di template AdminLTE seperti berikut (pada contoh login ini, kita gunakan page login-V2 di AdminLTE)

```
<html lang="en">
        <title>Login Pengguna</title>
        <link rel="stylesheet" href="{{ asset('adminlte/plugins/fontawesome-free/css/all.min.css') }}">
        <link rel="stylesheet" href="{{ asset('adminlte/plugins/icheck-bootstrap/icheck-bootstrap.min.css') }}">
        <link rel="stylesheet" href="{{ asset('adminlte/plugins/sweetalert2-theme-bootstrap-4/bootstrap4.min.css') }}">
        <link rel="stylesheet" href="{{ asset('adminlte/dist/css/adminlte.min.css') }}">
kbody class="hold-transition login-page">
                <div class="card card-outline card-primary">

<div class="card-header text-center"><a href="{{ url('/') }}" class="h1"><b>Admin</b>LTE</a></div>
                               ### (* unl('login') }}" method="POST" id="form-login')
                                               <small id="error-username" class="error-text text-danger"></small>
                                                <small id="error-password" class="error-text text-danger"></small>
                                        <div class="row">
                                               <div class="col-8">
                                                         <div class="icheck-primary">
                                                            <input type="checkbox" id="remember"><label for="remember">Remember Me</label>
                                                      <button type="submit" class="btn btn-primary btn-block">Sign In</button>
        <script src="{{ asset('adminlte/plugins/bootstrap/js/bootstrap.bundle.min.js') }}"></script>
       $$ \script src="{\{ asset('adminite/plugins/jquery-validation/jquery.validate.min.js') }}"></script> $$ \script src="{\{ asset('adminite/plugins/jquery-validation/additional-methods.min.js') }}"></script> $$ \script> $$ \
        <script src="{{ asset('adminlte/plugins/sweetalert2/sweetalert2.min.js') }}"></script>
       <script src="{{ asset('adminlte/dist/js/adminlte.min.js') }}"></script>
              $.ajaxSetup({
                               'X-CSRF-TOKEN': $('meta[name="csrf-token"]').attr('content')
                            $("#form-login").validate({
    rules: {
                                             username: {required: true, minlength: 4, maxlength: 20},
                                              password: {required: true, minlength: 5, maxlength: 20}
```

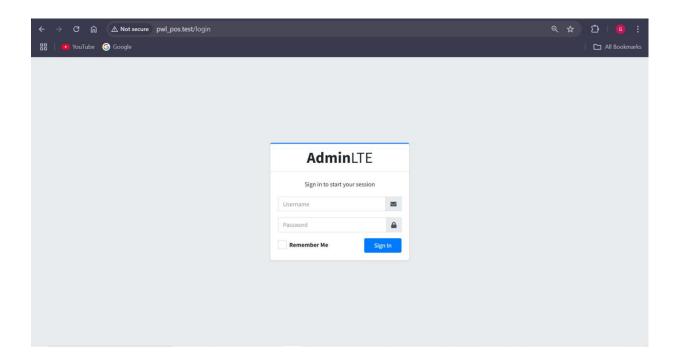
5. Kemudian kita modifikasi route/web.php agar semua route masuk dalam auth

```
Route::pattern('id', '[0-9]+');

Route::get('login', [AuthController::class, 'login'])->name('login');
Route::post('login', [AuthController::class, 'postLogin']);
Route::get('logout', [AuthController::class, 'logout'])->middleware('auth');

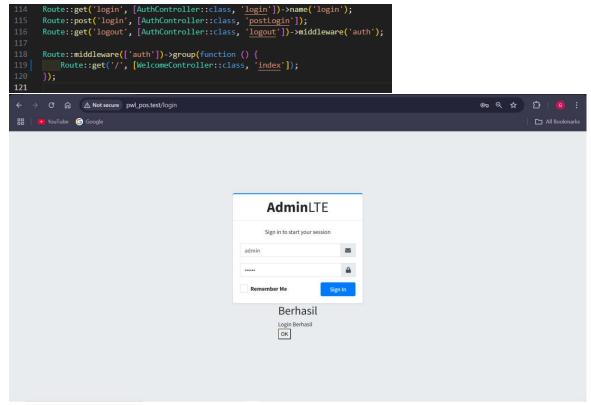
Route::middleware(['auth'])->group(function () []
```

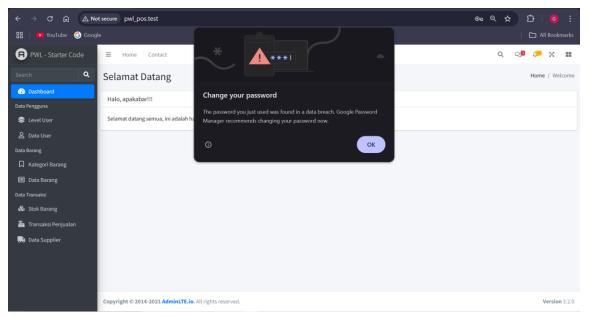
6. Ketika kita coba mengakses halaman localhost/PWL_POS/public makan akan tampil halaman awal untuk login ke aplikasi



Tugas 1 – Implementasi Authentication:

1. Silahkan implementasikan proses login pada project kalian masing-masing Jawab :





2. Silahkan implementasi proses logout pada halaman web yang kalian buat Jawab:

```
70
71
72
73
74
75
76
77
77
78
79

Colored Proposition

Total Class="nav nav-pills nav-sidebar flex-column">

Colored Proposition

Color
```

- 3. Amati dan jelaskan tiap tahapan yang kalian kerjakan, dan jabarkan dalam laporan Jawab: Jadi proses login ini pertama mengakses /login untuk menampilkan halaman login, isi username dan password, ketika menekan sign in maka data dikirim melalui postLogin() dengan menggunakan ajax. Jika valid Laravel melakukan Auth::attempt(). Jika sukses, akan diarahkan ke halaman utama (/), jika gagal, muncul pesan error. Untuk logout ketika klik logout, Laravel menjalankan Auth::logout(), menghapus sesi, dan mengarahkan ke halaman login.
- 4. Submit kode untuk impementasi Authentication pada repository github kalian. Jawab:

https://github.com/Gilangp/Pemrograman_Web_Lanjut/commit/2c58e1f8bcdecf6cac3066791533dfd579a93a3c

Praktikum 2 – Implementasi Authorizaton di Laravel dengan Middleware

1. Kita modifikasi UserModel.php dengan menambahkan kode berikut

```
public function level(): BelongsTo
{
    return $this->belongsTo(LevelModel::class, 'level_id', 'level_id');
}

// Mendapatkan nama role
public function getRoleName(): string
{
    return $this->level->level_nama;
}

// Cek apakah user memiliki role tertentu
public function hasRole($role): bool
{
    return $this->level->level_kode == $role;
}
```

2. Kemudian kita buat middleware dengan nama AuthorizeUser.php. Kita bisa buat middleware dengan mengetikkan perintah pada terminal/CMD

```
PS C:\laragon\www\Web_Lanjut\Minggu 7\PWL_POS> php artisan make:middleware AuthorizeUser

1NFO Middleware [C:\laragon\www\Web_Lanjut\Minggu 7\PWL_POS\app\Http\Middleware\AuthorizeUser.php] created successfully.
```

File middleware akan dibuat di app/Http/Middleware/AuthorizeUser.php

3. Kemudian kita edit middleware AuthorizeUser.php untuk bisa mengecek apakah pengguna yang mengakses memiliki Level/Role/Group yang sesuai

4. Kita daftarkan ke app/Http/Kernel.php untuk middleware yang kita buat barusan

```
protected $middlewareAliases = [

'auth' => \App\Http\Middleware\Authenticate::class,

'authorize' => \App\Http\Middleware\AuthenticateSer::class,

'auth.basic' => \Illuminate\Auth\Middleware\AuthenticateWithBasicAuth::class,
```

5. Sekarang kita perhatikan tabel m_level yang menjadi tabel untuk menyimpan level/group/role dari user ada



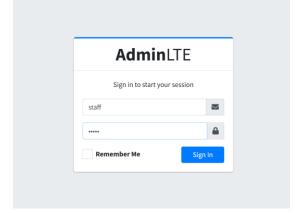
6. Untuk mencoba authorization yang telah kita buat, maka perlu kita modiifikasi route/web.php untuk menentukan route mana saja yang akan diberi hak akses sesuai dengan level user

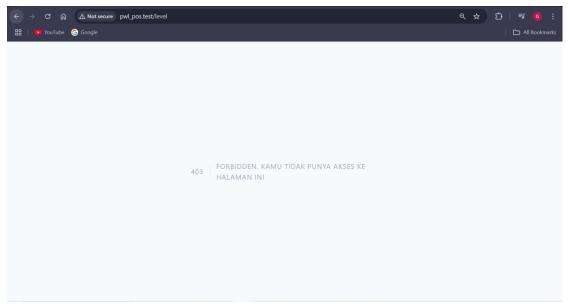
```
Route::middleware(['auth'])->group(function () {
Route::get('/', [WelcomeController::class, 'index']);

// semua route harus punya role ADM
Route::middleware(['authorize:ADM'])->group(function())[
Route::get('/', [LevelController::class, 'index']);
Route::get('/', [LevelController::class, 'index']);
Route::get('/create_ajax', [LevelController::class, 'create_ajax']);
Route::get('/create_ajax', [LevelController::class, 'store_ajax']);
Route::post('/ajax', [LevelController::class, 'store_ajax']);
Route::get('/', [levelController::class, 'store_ajax']);
Route::get('/id)/show_ajax', [LevelController::class, 'show_ajax']);
Route::get('/id)/edit', [LevelController::class, 'show_ajax']);
Route::get('/id)/edit_ajax', [LevelController::class, 'edit_ajax']);
Route::get('/id)/delte_ajax', [LevelController::class, 'update_ajax']);
Route::get('/id)/delte_ajax', [LevelController::class, 'update_ajax']);
Route::get('/id)/delte_ajax', [LevelController::class, 'update_ajax']);
Route::delete('/id)/delte_ajax', [LevelController::class, 'delte_ajax']);
Route::delete('/id)/delte_ajax', [LevelController::class, 'delte_ajax']);
Route::delete('/id)/ [LevelController::class, 'delte_aj
```

Pada kode yang ditandai merah, terdapat authorize: ADM . Kode ADM adalah nilai dari level_kode pada tabel m_level. Yang artinya, user yang bisa mengakses route untuk manage data level, adalah user yang memiliki level sebagai Administrator.

7. Untuk membuktikannya, sekarang kita coba login menggunakan akun selain level administrator, dan kita akses route menu level tersebut





Jadi ketika login dengan menggunakan user staff maka tidak akan bisa mengakses menu level.

Tugas 2 – Implementasi Authoriization:

- 1. Apa yang kalian pahami pada praktikum 2 ini? Jawab : praktikum 2 ini untuk otorisasi user menggunakan Laravel yang dimana agar semua user memiliki hak akses tertentu.
- 2. Amati dan jelaskan tiap tahapan yang kalian kerjakan, dan jabarkan dalam laporan Jawab: Model UserModel untuk menangani data pengguna dan memiliki fungsi untuk mengecek role user. Middleware AuthorizeUser digunakan untuk memfilter akses berdasarkan role user. Route menggunakan middleware authorize:ADM agar hanya admin yang dapat mengakses halaman tersebut.
- 3. Submit kode untuk impementasi Authorization pada repository github kalian Jawab:

 https://github.com/Gilangn/Pomrogramen_Web_Leniut/commit/1f36457d10647

https://github.com/Gilangp/Pemrograman_Web_Lanjut/commit/1f36457d19647fffcf63a3e6b7c21b40d7787a8d

Praktikum 3 – Implementasi Multi-Level Authorizaton di Laravel dengan Middleware

1. Kita modifikasi UserModel.php untuk mendapatkan level_kode dari user yang sudah login. Jadi kita buat fungsi dengan nama getRole()

```
// Mendapatkan nama role
public function getRoleName(): string
{
    return $this->level->level_nama;
}

// Cek apakah user memiliki role tertentu
public function hasRole($role): bool
{
    return $this->level->level_kode == $role;
}

// untuk mendapatkan kode role
public function getRole()
{
    return $this->level->level_kode;
}
```

2. Selanjutnya, Kita modifikasi middleware AuthorizeUser.php dengan kode berikut

3. Setelah itu tinggal kita perbaiki route/web.php sesuaikan dengan role/level yang diinginkan. Contoh

```
Route::middleware(['authorize:ADM,MNG'])->group(function(){

Route::group(['prefix' => 'barang'], function () {

Route::get('/', [BarangController::class, 'index']);

Route::get('/list', [BarangController::class, 'create']);

Route::get('/create', [BarangController::class, 'create']);

Route::get('/create_ajax', [BarangController::class, 'create_ajax']);

Route::post('/, [BarangController::class, 'store_ajax']);

Route::post('/', [BarangController::class, 'store']);

Route::get('/idd)', [BarangController::class, 'show']);

Route::get('/idd)/show_ajax', [BarangController::class, 'show_ajax']);

Route::get('/idd)/edit', [BarangController::class, 'edit']);

Route::get('/idd)/edit_ajax', [BarangController::class, 'edit_ajax']);

Route::get('/idd)/delete_ajax', [BarangController::class, 'confirm_ajax']);

Route::delete('/idd)/delete_ajax', [BarangController::class, 'delete_ajax']);

Route::delete('/idd)/, [BarangController::class, 'delete_ajax']);

Route::delete('/idd)', [BarangController::class, 'delete_ajax']);

Route::delete('/idd)', [BarangController::class, 'destroy']);

});
```

4. Sekarang kita sudah bisa memberikan hak akses menu/route ke beberapa level user

Tugas 3 – Implementasi Multi-Level Authorization:

- 1. Silahkan implementasikan multi-level authorization pada project kalian masing-masing
- 2. Amati dan jelaskan tiap tahapan yang kalian kerjakan, dan jabarkan dalam laporan Jawab: pada praktikum 3 ini yang dibagian usermodel untuk mendapatkan role user/pengguna, lalu bagian middleware untuk memeriksa hak akses user. Pada web.php/routing ini menerapkan middleware tersebut agar hanya pengguna dengan role tertentu yang bisa mengakses menu-menu tertentu.
- 3. Implementasikan multi-level authorization untuk semua Level/Jenis User dan Menumenu yang sesuai dengan Level/Jenis User Jawab :

```
// Hak akses untuk role ADM
Route::mdddleware(['authorize:ADM'])->group(function(){
Route::get(cyt), [LevelController::class, 'index']);
Route::get('/reate_jax', [LevelController::class, 'ist']);
Route::get('/reate_jax', [LevelController::class, 'iste']);
Route::get('/reate_jax', [LevelController::class, 'store']);
Route::get('/reate_jax', [LevelController::class, 'store ajax']);
Route::get('/ida)', [LevelController::class, 'store ajax']);
Route::get('/ida)', [LevelController::class, 'show ajax']);
Route::get('/ida)', [LevelController::class, 'show ajax']);
Route::get('/ida)', [LevelController::class, 'show ajax']);
Route::get('/ida)', [LevelController::class, 'edit ajax']);
Route::get('/ida)', [LevelController::class, 'update']);
Route::get('/ida)', [LevelController::class, 'update']);
Route::get('/ida)', [LevelController::class, 'update ajax']);
Route::get('/ida)', [LevelController::class, 'update ajax']);
Route::get('/ida)', [LevelController::class, 'delteta ajax']);
Route::get('/ida)', [LevelController::class, 'destroy']);

Route::get('/ida)', [LevelController::class, 'destroy']);

Route::get('/ida)', [LevelController::class, 'destroy']);

Route::get('/ida)', [LevelController::class, 'index']);
Route::get('/ida)', [LevelController::class, 'index']);
Route::get('/ida)', [BarangController::class, 'index']);
Route::get('/ida)', [BarangCont
```

```
// Hak akses hanya admin, manager, dan staff
Route::middleware(['authorize:ADM,MMG,STF'])->group(function(){
Route::group(['prefix' => 'stok'], function () {
Route::get('/', [StokController::class, 'index']);
Route::get('/list', [StokController::class, 'list']);
Route::get('/create', [StokController::class, 'create']);
Route::get('/fid)', [StokController::class, 'stome']);
Route::get('/fid)', [StokController::class, 'show']);
Route::get('/fid)', [StokController::class, 'update']);
Route::delete('/fid)', [StokController::class, 'destroy']);
});
// Hak akses hanya admin, manager, staff, dan customer
Route::middleware(['authorize:ADM,MNG,STF,CUS'])->group(function(){
Route::group(['prefix' >> 'penjualan'], function () {
Route::get('/', [PenjualanController::class, 'index']);
Route::post('/list', [PenjualanController::class, 'ist']);
Route::get('/create', [PenjualanController::class, 'store']);
Route::get('/id)', [PenjualanController::class, 'store']);
Route::get('/id)', [PenjualanController::class, 'show']);
Route::get('/id)', [PenjualanController::class, 'update']);
Route::dete('/id)', [PenjualanController::class, 'update']);
Route::dete('/id)', [PenjualanController::class, 'destroy']);
});
            // Hak akses hanya admin, manager, staff, dan supplier
Route::middleware(['authorize:ADM,MNG,STF,SUP'])->group(function(){
                                              Tak akses hanya admin, manager, start, dan supplier
te::middleware(['authorize:ADM,Mos,STF,SUP'])->group(function(){

Route::get('/', [SupplierController::class, 'index']);

Route::get('/list', [SupplierController::class, 'index']);

Route::get('/list', [SupplierController::class, 'create']);

Route::get('/reate', [SupplierController::class, 'create ajax']);

Route::get('/ajax', [SupplierController::class, 'store_ajax']);

Route::get('/ajax', [SupplierController::class, 'store']);

Route::get('/id)', [SupplierController::class, 'show']);

Route::get('/id)',show, ajax', [SupplierController::class, 'show']);

Route::get('/id)/show', [SupplierController::class, 'show ajax']);

Route::get('/id)/edit', [SupplierController::class, 'edit']);

Route::get('/id)/udate_ajax', [SupplierController::class, 'edit ajax']);

Route::get('/id)/delete_ajax', [SupplierController::class, 'edit ajax']);

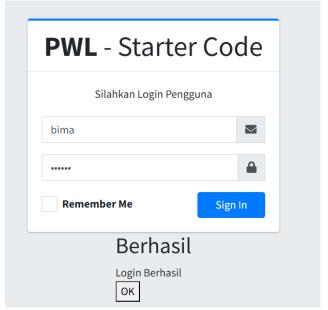
Route::get('/id)/delete_ajax', [SupplierController::class, 'confirm ajax']);

Route::delete('/id)/delete_ajax', [SupplierController::class, 'delete_ajax']);

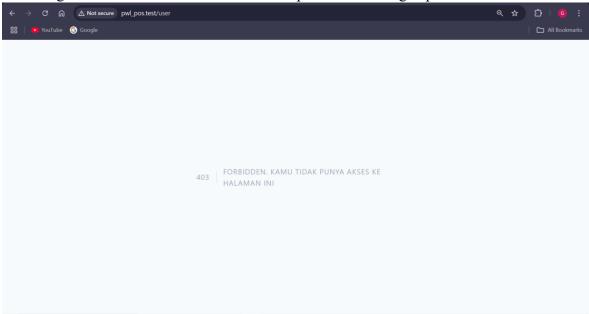
Route::delete('/id), [SupplierController::class, 'destroy']);

Route::delete('/id)', [SupplierController::class, 'destroy']);
     // Hak akses untuk semua level
Route::middleware(['authorize:ADM,MNG,STF,CUS,SUP'])->group(function(){
    Route::group(['prefix' -> 'kategori'], function() {
        Route::get('/, [KetegoriController::class, 'index']);
        Route::get('/reate_ajax', [KetegoriController::class, 'create']);
        Route::get('/create_ajax', [KetegoriController::class, 'store_ajax']);
        Route::post('/ajax', [KetegoriController::class, 'store_ajax']);
        Route::post('/iajax', [KetegoriController::class, 'store']);
        Route::get('/idj', [KetegoriController::class, 'store']);
        Route::get('/idj', [KetegoriController::class, 'store']);
        Route::get('/idj/show_ajax', [KetegoriController::class, 'gedit']);
        Route::get('/idj/edit_ajax', [KetegoriController::class, 'gedit_ajax']);
        Route::put('/idj/udate_ajax', [KetegoriController::class, 'update_ajax']);
        Route::get('/idj/delete_ajax', [KetegoriController::class, 'update_ajax']);
        Route::delete('/idj/delete_ajax', [KetegoriController::class, 'delete_ajax']);
        Route::delete('/idj', [KetgoriController::class, 'delete_ajax']);
        Route::d
```

Jadi jika login sebagai supplier



dan mengkases menu Data User maka menampilkan error dengan pesan tersebut.



karena tidak memiliki hak akses untuk menu Data User.

4. Submit kode untuk impementasi Authorization pada repository github kalian. Jawab:

https://github.com/Gilangp/Pemrograman_Web_Lanjut/commit/d7513ec6a52889bfd1121_17842b89d9315611bc0

Tugas 4 – Implementasi Form Registrasi:

 Silahkan implementasikan form untuk registrasi user. Route

```
Route::get('/register', [AuthController::class, 'register'])->name('register');
Route::post('/register', [AuthController::class, 'storeRegister']);
```

AuthController

```
public function register()
               if (Auth::check()) {
                   return redirect('/');
               $levels = LevelModel::all();
               return view('auth.register', ['levels' => $levels]);
          public function storeRegister(Request $request)
               if ($request->ajax() || $request->wantsJson()) {
                   $validator = Validator::make($request->all(), |
                        'level_id' => 'required exists:m_level,level_id',
                        'username' => 'required|unique:m_user,username',
                         'password' => 'required|min:6|confirmed',
                   if ($validator->fails()) {
                        return response()->json([
                            'status' => false,
'message' => 'Validasi gagal!',
                            'msgField' => $validator->errors()
                   UserModel::create([
82
                       'level_id' => $request->level_id,
                        'username' => $request->username,
                        'nama' => $request->nama,
'password' => Hash::make($request->password),
                   ]);
                   return response()->json([
                        'status' => true,
'message' => 'Registrasi berhasil!',
'redirect' => route('login')
               return redirect()->route('register')->with('success', 'Registrasi berhasil!');
```

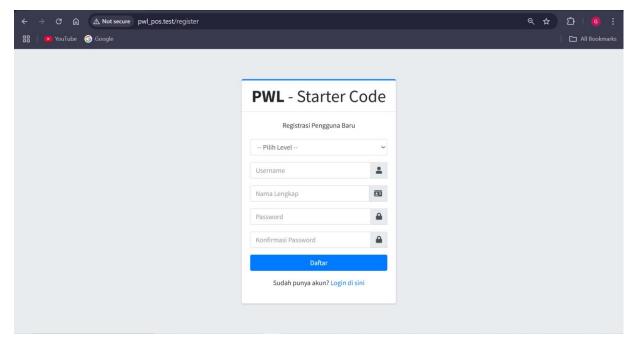
Form regristasi

```
vilinggu 7 > PWL_POS > resources > views > auth > 🦛 register.blade.php > 🚱 html > 😭 body.hold-transition.login-page > 쥥 div.login-box > 쥥 div.card.card-outline.card-primary > 쥥 div.card-body
             <html lang="en">
                     <title>Register Pengguna</title>
                    kegister Pengguna</title>
kef="stylesheet" href="https://fonts.googleapis.com/css?family=Source+Sans+Pro:300,400,400i,700&display=fallback">
kel="stylesheet" href="{{ asset('adminlte/plugins/fontawesome-free/css/all.min.css') }}">
krel="stylesheet" href="{{ asset('adminlte/plugins/icheck-bootstrap/icheck-bootstrap.min.css') }}">
krel="stylesheet" href="{{ asset('adminlte/plugins/sweetalert2-theme-bootstrap-4/bootstrap4.min.css') }}">
krel="stylesheet" href="{{ asset('adminlte/dist/css/adminlte.min.css') }}">

            <form action="{{ url('/register') }}" method="POST" id="form-register">
                                                                @foreach($levels as $level)
                                                                              </p
                                                       <div class="input-group-text"><span class="fas fa-user"></span></div>
                                                                 <input type="text" name="nama" class="form-control" placeholder="Nama Lengkap">
                                                                 <small id="error-nama" class="error-text text-danger"></small>
                                                                <input type="password" name="password" class="form-control" placeholder="Password">
<div class="input-group-append">
                                                                 <small id="error-password" class="error-text text-danger"></small>
                                                                <input type="password" name="password_confirmation" class="form-control" placeholder="Konfirmasi Password">
                                                                  <div class="input-group-app</pre>
                                                        <div class="row";
                                                      Sudah punya akun? <a href="{{ url('/login') }}">Login di sinik/a>
                   <!-- Scripts -->
<script scr="{{ asset('adminlte/plugins/jquery/jquery.min.js') }}"></script>
<script src="{{ asset('adminlte/plugins/bootstrap/js/bootstrap.bundle.min.js') }}"></script>
<script src="{{ asset('adminlte/plugins/jquery-validation/jquery.validate.min.js') }}"></script>
<script src="{{ asset('adminlte/plugins/jquery-validation/additional-methods.min.js') }}"></script>
<script src="{{ asset('adminlte/plugins/sweetalert2/sweetalert2.min.js') }}"></script>
<script src="{{ asset('adminlte/dist/js/adminlte.min.js') }}"></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scr
```

```
es: {
  level_id: { required: true },
  username: { required: true, minlength: 4, maxlength: 20 },
       password_confirmation: { required: true, minlength: 6, maxlength: 20 },
password_confirmation: { required: true, equalTo: '[name="password"]' },
 submitHandler: function(form) {
       $.ajax({
url: form.action,
               data: $(form).serialize(),
               success: function(response) {
                     if(response.status) {
    Swal.fire({
        icon: 'success',
        title: 'Berhasil',
                                    text: response.message
                            }).then(function() {
    window.location.href = response.redirect || "{{ url('/login') }}";
                     $.each(response.msgField, function(prefix, val) {
    $('#error-' + prefix).text(val[0]);
                                    icon: 'error',
title: 'Gagal',
text: response.message
},
errorflement: 'span',
errorPlacement: function (error, element) {
    error.addClass('invalid-feedback');
    element.closest('.input-group, .form-group').append(error);
    element.closest('.input-group, .form-group').append(error);
},
highlight: function (element) {
    $(element).addClass('is-invalid');
 unhighlight: function (element) {
    $(element).removeClass('is-invalid');
```

2. Screenshot hasil yang kalian kerjakan



3. Commit dan push hasil tugas kalian ke masing-masing repo github kalian Jawab :

 $\frac{https://github.com/Gilangp/Pemrograman_Web_Lanjut/commit/dc6238766359a6e56851}{76af36dde0c2e425c109}$