Modul 8

Middleware - Autentikasi – login/logout

Persiapan (1)

- Buat Tabel 'users'
  - Buat tabel, isi data user (username, password)
- Buat Model 'User_m' extends Authenticatable
- Konfigurasi middleware autentikasi
  (app\Http\Kernel.php)
  - Auth → otentikasi user (proses login)
    - config\auth.php → konfigurasi nama model user
    - app\Providers\RouteServiceProvider.php → konfigurasi const HOME
    - app\Http\Middleware\Authenticate.php → konfigurasi route 'login' di web.php
  - Guest → tanpa login

Persiapan (2)

- Buat view form login
- Modifikasi PerpusController
  - Tambah fungsi login() → menampilkan form login
- Buat LoginController
  - Fungsi authenticate() → untuk login
  - Fungsi logout()
- Modifikasi file view 'perpus/main.blade' → tambah tombol logout
- Modifikasi route 'route/web.php'
- Terapkan middleware 'auth' dan 'guest' pada route

Tabel User

Buat tabel 'users' pada database 'perpus'

#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id 🔑	tinyint(4)			No	None	AUTO_INCREMENT
2	username	varchar(10)	latin1_swedish_ci		No	None	
3	password	varchar(100)	latin1_swedish_ci		No	None	

Akses bcrypt-generator.com
untuk encrypt password (hash Bcrypt)

- Masukkan password yang akan di encrypt (contoh: admin)
- Kemudian salin ke phpmyadmin saat insert data
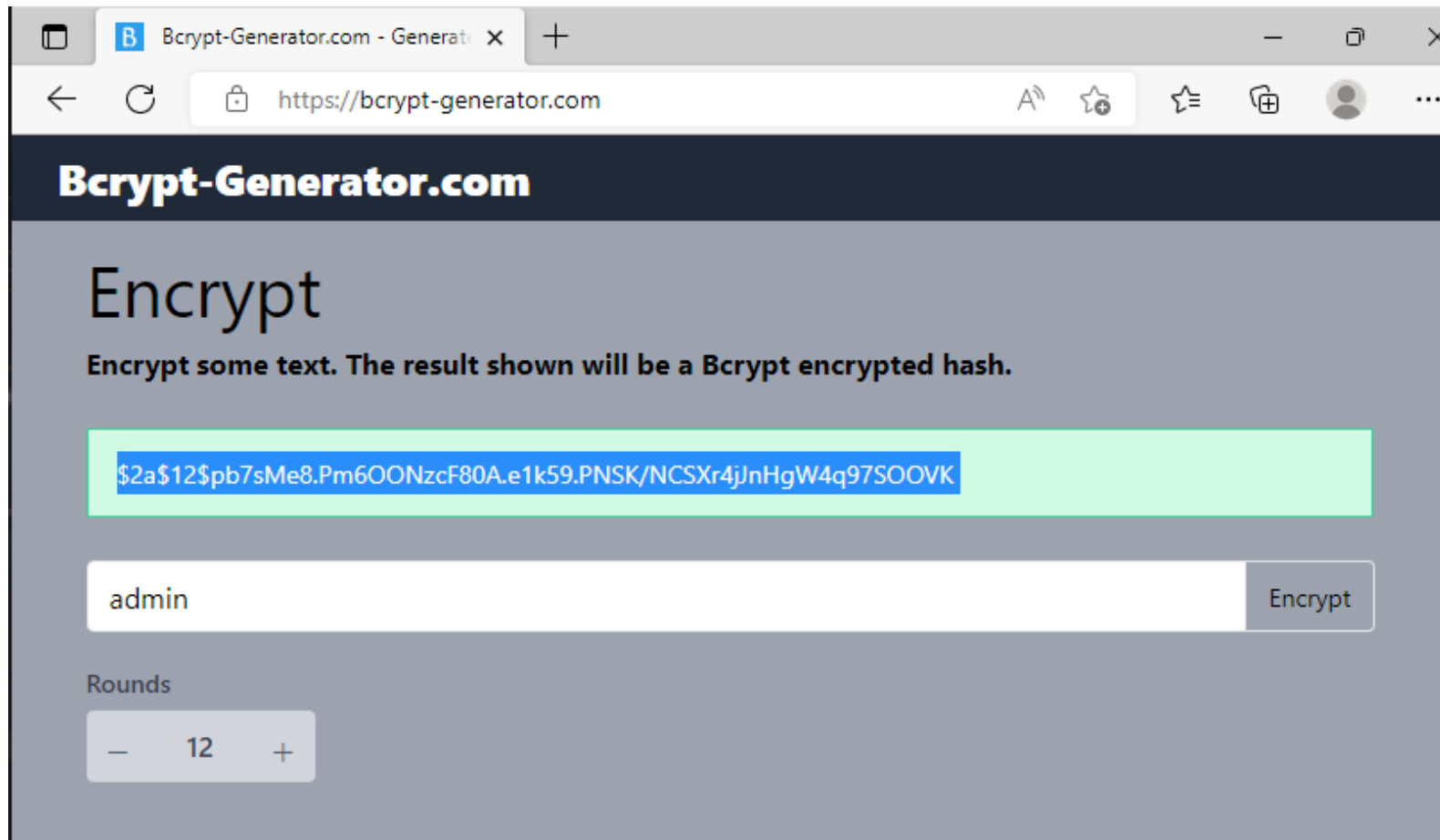
Tambah minimal 1 (satu) user ke tabel 'users'

Column	Type	Function		Null	Value
id	tinyint(4)		⌄		
username	varchar(10)		⌄		admin
password	varchar(100)		⌄		$2a$12$pb7sMe8.Pm6OONzcF80A.e1k59.PNSK/NCSXr4jJnHgW4q97SOOVK

Go

Hasil enkripsi menggunakan Bcrypt

Model User

Buat Eloquent Model User (1)

- Buat file model **User_m.php** menggunakan artisan:

```
PS C:\framework\perpus> c:\xampp\php\php artisan make:model User_m
Model created successfully.
PS C:\framework\perpus>
```

- Hasil generate menggunakan artisan:

```
perpus > app > Models > 🐘 User_m.php
1    <?php
2
3    namespace App\Models;
4
5    use Illuminate\Database\Eloquent\Factories\HasFactory;
6    use Illuminate\Database\Eloquent\Model;
7
8    class User_m extends Model
9    {
10       use HasFactory;
11   }
```

Edit Eloquent Model "User_m"
Inheritance dari Auth\User as Authenticatable

- Edit isi file model "User_m.php" sbb:

perpus > app > Models > 🐘 User_m.php

Sesuaikan, kelas induk authenticatable dan detil tabel user

```php
<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;
// use Illuminate\Database\Eloquent\Model;
use Illuminate\Foundation\Auth\User as Authenticatable;

class User_m extends Authenticatable
{
    use HasFactory;

    protected $table = 'users';
    protected $primaryKey = 'id';
    public $timestamps = false;

    protected $fillable = [
        'username',
        'password',
    ];
}
```
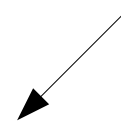
Halaman Login

Buat File Blade View login

- Simpan pada folder 'resources\views\perpus' dengan nama file 'login.blade.php'
  - C:\framework\perpus\resources\views\perpus\login.blade.php

perpus > resources > views > perpus > 🐘 login.blade.php

```
1  <!DOCTYPE html>
2  <html>
3  <head><title>Aplikasi Perpustakaan</title></head>
4  <body>
5      <h1>Silahkan Login</h1>
6      <form action="{{ url('perpus/login') }}" method="post" accept-charset="utf-8">
7      @csrf
8          <label for="username">Username: </label>
9          <input type="text" name="username" value="" size="20"  />
10         <br/><label for="password">Password: </label>
11         <input type="password" name="password" value="" size="20"  />
12         <br/><input type="submit" name="btn_simpan" value="Login"  />
13     </form>
14 </body>
15 </html>
16 |
```
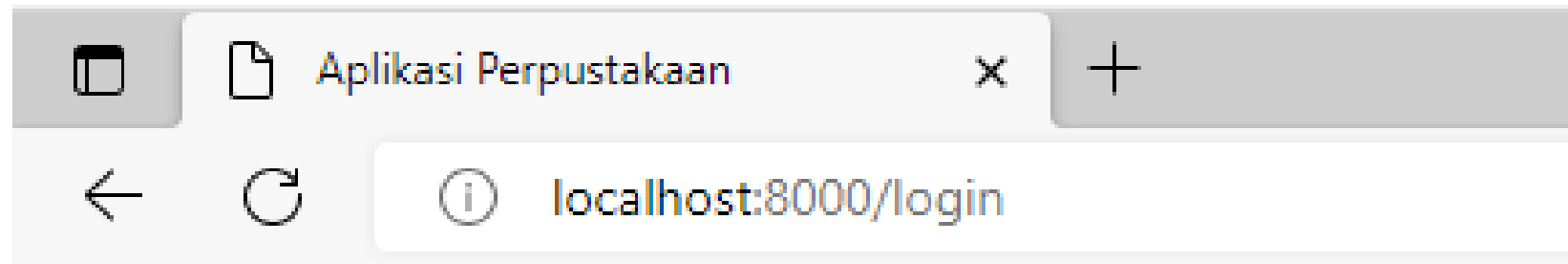
Coba akses view dengan Tambah route '/perpus/login'

- Buka file **web.php** yang ada di folder:

  - C:\framework\perpus\routes\web.php

- Tambahkan baris berikut:

```
80    use App\Http\Controllers\PerpusController;
81    Route::get('/perpus', [PerpusController::class, 'index']);
82    Route::get('/login', function () {
83        return view('perpus.login');
84    });
```

- Simpan file
- Akses halaman web melalui url: http://localhost:8000/login

Tampilan view halaman login

Silahkan Login

Username: [   ]
Password: [   ]
[Login]

Modifikasi Controller perpusController.php tambah method login()

perpus > app > Http > Controllers > 🐘 PerpusController.php

```php
1    <?php
2
3    namespace App\Http\Controllers;
4
5    use Illuminate\Http\Request;
6
7    class PerpusController extends Controller
8    {
9        public function index()
10       {
11           return view('perpus.main');
12       }
13
14       public function login()
15       {
16           return view('perpus.login');
17       }
18   }
```

Tambahan

Modifikasi Route untuk halaman Login melalui controller

- Lakukan modifikasi pada file route **web.php**
  - C:\framework\perpus\routes\web.php

```
80   use App\Http\Controllers\PerpusController;
81   Route::get('/perpus', [PerpusController::class, 'index']);
82   /*
83   Route::get('/login', function () {
84       return view('perpus.login');
85   });
86   */
87   Route::get('/login', [PerpusController::class, 'login']);
```

Autentikasi Login
&
Logout

Buat Controller Login

- Buat file controller **LoginController.php** menggunakan artisan:

```
PS C:\framework\perpus> c:\xampp\php\php artisan make:controller LoginController
Controller created successfully.
PS C:\framework\perpus>
```

Hasil generate menggunakan artisan:

```
perpus > app > Http > Controllers >  🐘 LoginController.php
1    <?php
2
3    namespace App\Http\Controllers;
4
5    use Illuminate\Http\Request;
6
7    class LoginController extends Controller
8    {
9        //
10   }
```

Edit file Controller Login (1)

```php
 1   <?php
 2
 3   namespace App\Http\Controllers;
 4
 5   use Illuminate\Http\Request;
 6   use Illuminate\Support\Facades\Auth;
 7
 8   class LoginController extends Controller
 9   {
10       public function authenticate(Request $request)
11       {
12           $credentials = $request->validate([
13               'username' => ['required'],
14               'password' => ['required'],
15           ]);
16
17           if (Auth::attempt($credentials)) {
18               $request->session()->regenerate();
19
20               return redirect()->intended('/perpus');
21           }
22           return back()->with('loginError','Login Gagal.');
23       }
```

Edit file Controller Login (2)

```
26     public function logout(Request $request)
27     {
28         Auth::logout();
29         $request->session()->invalidate();
30         $request->session()->regenerateToken();
31         return redirect('/');
32     }
33 }
```

Modifikasi Route untuk Login

- Lakukan modifikasi pada file route **web.php**
  - C:\framework\perpus\routes\web.php

```
80  use App\Http\Controllers\PerpusController;
81  Route::get('/perpus', [PerpusController::class, 'index']);
82  /*
83  Route::get('/login', function () {
84      return view('perpus.login');
85  });
86  */
87  Route::get('/login', [PerpusController::class, 'login']);
88
89  use App\Http\Controllers\LoginController;
90  Route::post('/login', [LoginController::class, 'authenticate']);
91
```

Tambah fungsi logout pada halaman utama perpus

- Lakukan modifikasi pada file blade **perpus/main.blade.php**

  - C:\framework\perpus\resources\views\perpus\main.blade.php

perpus > resources > views > perpus > 🐘 main.blade.php

```
1   <!DOCTYPE html>
2   <html>
3   <head><title>Aplikasi Perpustakaan</title></head>
4   <body>
5       <h2>Aplikasi Perpustakaan FTIK USM</h2>
6       <b>Pilihan menu :</b>
7       <ol>
8           <li><a href="{{ url('buku') }}">Kelola data buku</a></li>
9           <li><a href="{{ url('anggota') }}">Kelola data anggota</a></li>
10          <li><a href="{{ url('pinjam') }}">Kelola Transaksi Pinjam</a></li>
11      </ol>
12      <a href="{{ url('logout') }}">Logout</a>
13  </body>
14  </html>
15  
```

Modifikasi Route untuk Logout

- Lakukan modifikasi pada file route **web.php**
  - C:\framework\perpus\routes\web.php

```
89
90    use App\Http\Controllers\LoginController;
91    Route::post('/login', [LoginController::class, 'authenticate']);
92    Route::get('/logout', [LoginController::class, 'logout']);
93
94
```

Middleware

Middleware "auth" & "guest" untuk proses autentikasi

- Buka file file 'kernel.php' pada folder:
  - C:\framework\perpus\app\Http\Kernel.php

perpus > app > Http > 🐘 Kernel.php

```
52          * These middleware may be assigned to groups or used individually.
53          *
54          * @var array<string, class-string|string>
55          */
56         protected $routeMiddleware = [
57  ──►        'auth' => \App\Http\Middleware\Authenticate::class,
58             'auth.basic' => \Illuminate\Auth\Middleware\AuthenticateWithBasicAuth::class,
59             'cache.headers' => \Illuminate\Http\Middleware\SetCacheHeaders::class,
60             'can' => \Illuminate\Auth\Middleware\Authorize::class,
61  ──►        'guest' => \App\Http\Middleware\RedirectIfAuthenticated::class,
62             'password.confirm' => \Illuminate\Auth\Middleware\RequirePassword::class,
63             'signed' => \Illuminate\Routing\Middleware\ValidateSignature::class,
64             'throttle' => \Illuminate\Routing\Middleware\ThrottleRequests::class,
65             'verified' => \Illuminate\Auth\Middleware\EnsureEmailIsVerified::class,
66         ];
67     }
```

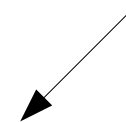Auth → otentikasi user (proses login)
Guest → tanpa login

Konfigurasi User Provider

- Edit file 'auth.php' pada folder:
    - C:\framework\perpus\config\auth.php

Sesuaikan dengan nama model yang kita buat

```
62      'providers' => [
63          'users' => [
64              'driver' => 'eloquent',
65              // 'model' => App\Models\User::class,
66              'model' => App\Models\User_m::class,
67          ],
68
69          // 'users' => [
70          //      'driver' => 'database',
71          //      'table' => 'users',
72          // ],
73      ],
```
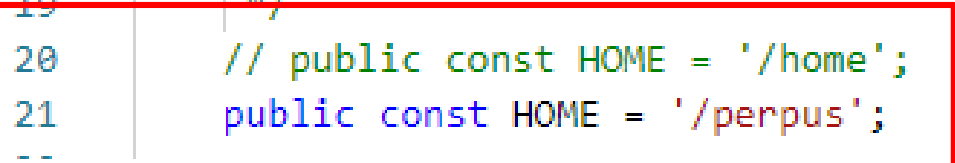
Konfigurasi RouteServiceProvider

- Edit file 'RouteServiceProvider.php' pada folder:
  - C:\framework\perpus\app\Providers\RouteServiceProvider.php

```
11    class RouteServiceProvider extends ServiceProvider
12    {
13        /**
14         * The path to the "home" route for your application.
15         *
16         * This is used by Laravel authentication to redirect users after login.
17         *
18         * @var string
19         */
20        // public const HOME = '/home';
21        public const HOME = '/perpus';
```

Sesuaikan dengan route halaman dashboard aplikasi perpus

C:\framework\perpus\app\Http\ Middleware\Authenticate.php

perpus > app > Http > Middleware > 🐘 Authenticate.php

```php
1   <?php
2
3   namespace App\Http\Middleware;
4
5   use Illuminate\Auth\Middleware\Authenticate as Middleware;
6
7   class Authenticate extends Middleware
8   {
9       /**
10       * Get the path the user should be redirected to when they are not authenticated.
11       *
12       * @param  \Illuminate\Http\Request  $request
13       * @return string|null
14       */
15      protected function redirectTo($request)
16      {
17          if (! $request->expectsJson()) {
18              return route('login');
19          }
20      }
21  }
```

Buat nama route 'login' untuk halaman login pada file route/web.php sesuai konfigurasi

Modifikasi Route

Modifikasi Route get /login beri nama 'login' sesuai Middleware\Authenticate.php

- Lakukan modifikasi pada file route **web.php**

  – C:\framework\perpus\routes\web.php

```
83   /*
84   Route::get('/login', function () {
85       return view('perpus.login');
86   });
87   */
88   Route::get('/login', [PerpusController::class, 'login'])->name('login');
```

Modifikasi Route '/' menuju halaman dasboard perpus

- Lakukan modifikasi pada file route **web.php**
  - C:\framework\perpus\routes\web.php

```
16    Route::get('/', function () {
17        //return view('ftik');
18        return redirect('perpus');
19    });
```

Route yang menggunakan middleware

Route	middleware
/	auth
/buku	auth
/anggota	auth
/pinjam	auth
/perpus	auth
/login	guest

Modifikasi Route untuk implementasi middleware 'auth' dan 'guest'

- Lakukan modifikasi pada file route **web.php**
  - C:\framework\perpus\routes\web.php

```php
16  Route::get('/', function () {
17      //return view('ftik');
18      return redirect('perpus');
19  })->middleware('auth');

42  Route::get('/buku', [BukuController::class, 'index'])->middleware('auth');

49  Route::get('/anggota', [AnggotaController::class, 'index'])->middleware('auth');

75  Route::get('/pinjam', [PinjamController::class, 'index'])->middleware('auth');

83  Route::get('/perpus', [PerpusController::class, 'index'])->middleware('auth');

89  Route::get('/login', [PerpusController::class, 'login'])->name('login')
90          ->middleware('guest');
```
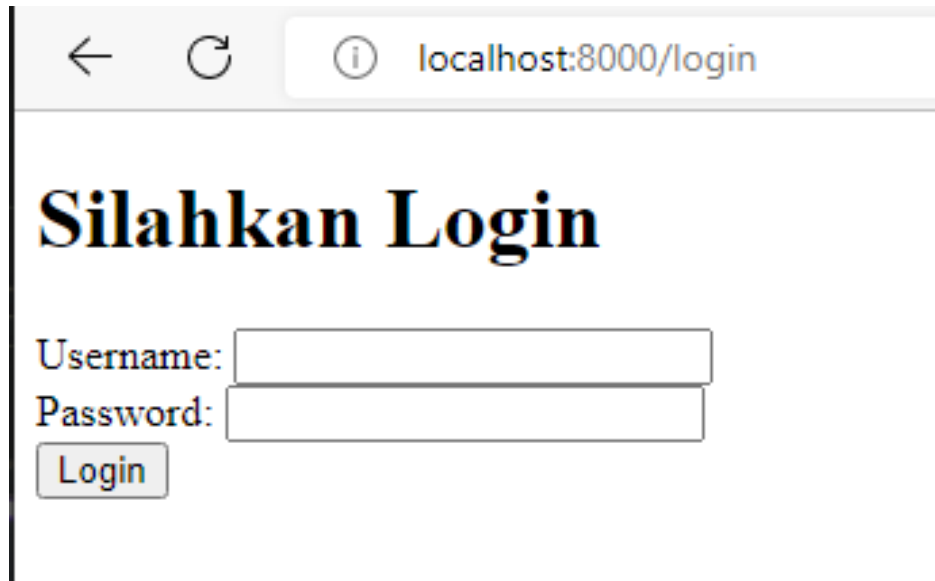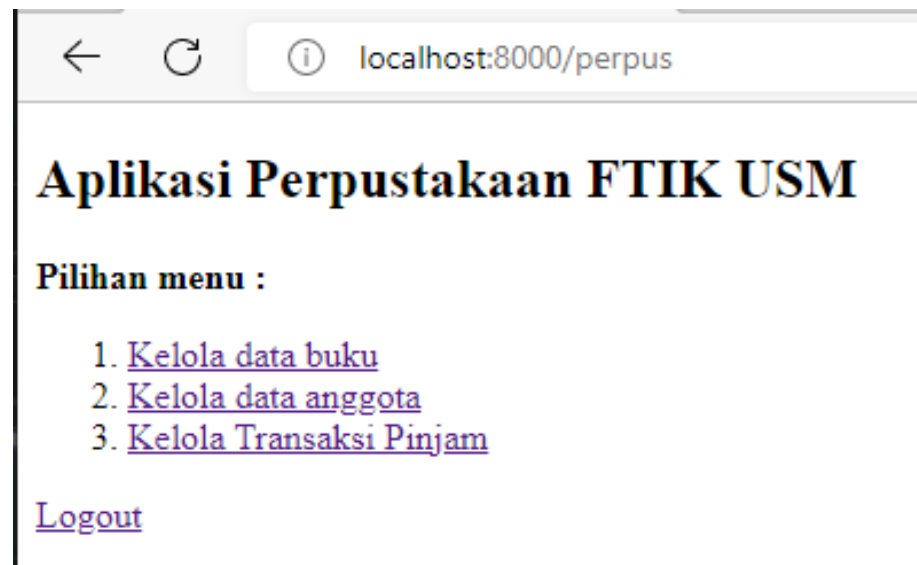
Tampilan

← Sebelum Login

Silahkan Login

Username:
Password:
Login

Setelah Login →

Aplikasi Perpustakaan FTIK USM

Pilihan menu :

1. Kelola data buku
2. Kelola data anggota
3. Kelola Transaksi Pinjam

Logout