Tugas 10

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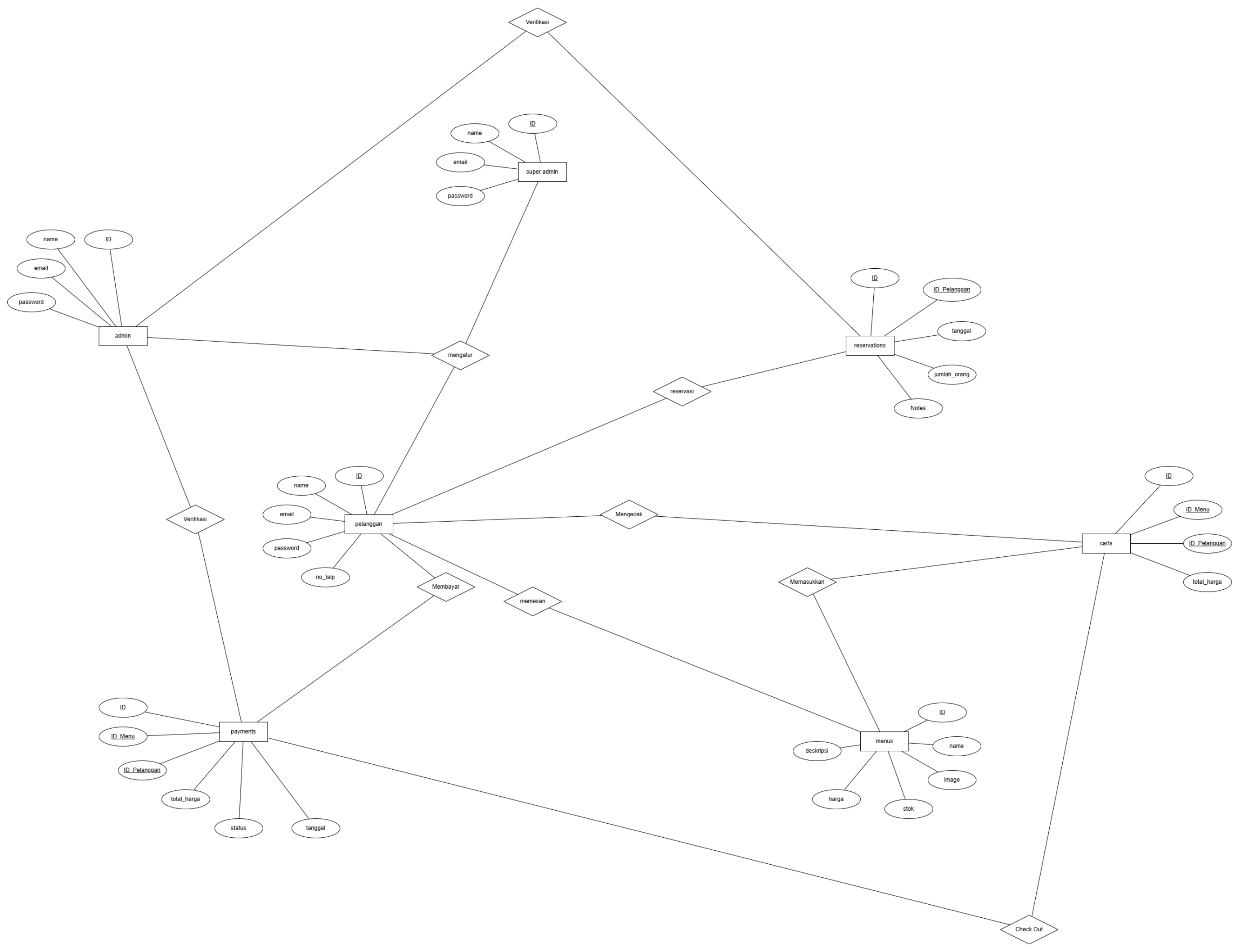
1. ERD (Entity Relationship Diagram)



Penjelasan ERD:

Entitas:

1. **super_admin**
   - Atribut: id, name, email, password, created_at, updated_at
   - Super admin memiliki akses penuh ke semua fitur
2. **admin**
   - Atribut: id, name, email, password, created_at, updated_at
   - Admin dapat mengelola menu, reservasi, dan pembayaran

3. **pelanggan**
    - Atribut: id, name, email, password, no_telepon, created_at, updated_at
    - Pelanggan dapat melakukan pemesanan menu, reservasi, dan pembayaran
4. **menus**
    - Atribut: id, name, price, gambar, stok, desc, created_at, updated_at
    - Berisi daftar menu makanan dan minuman
5. **reservations**
    - Atribut: id, pelanggan_id, tanggal, waktu, jumlah_orang, note, created_at, updated_at
    - Menyimpan informasi reservasi yang dibuat oleh pelanggan
6. **payments**
    - Atribut: id, pelanggan_id, bank, no_bank, total_price, created_at, updated_at
    - Menyimpan data pembayaran yang dilakukan oleh pelanggan
7. **cart**
    - Atribut: id, pelanggan_id, menus_id, total_price, created_at, updated_at
    - Keranjang belanja untuk menyimpan menu yang dipilih pelanggan

Relasi:

- Pelanggan **memiliki banyak** Reservasi (one-to-many)
- Pelanggan **memiliki banyak** Payment (one-to-many)
- Pelanggan **memiliki banyak** Cart (one-to-many)
- Menu **memiliki banyak** Cart (one-to-many)

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2. Backend Skeleton (Endpoint Dasar)

Saya telah mengimplementasikan beberapa endpoint REST API dasar menggunakan Laravel. Berikut adalah beberapa endpoint yang sudah berfungsi:

Controller Auth

```
// AuthController.php
public function register(Request $request)
{
    $validator = Validator::make($request->all(), [
        'name' => 'required|string|max:255',
        'email' => 'required|string|email|max:255|unique:pelanggan',
        'password' => 'required|string|min:8',
        'no_telepon' => 'required|string|max:15',
    ]);

    if ($validator->fails()) {
        return response()->json([
            'message' => 'Validation error',
            'errors' => $validator->errors()
        ], 422);
    }

    $user = Pelanggan::create([
        'name' => $request->name,
        'email' => $request->email,
        'password' => Hash::make($request->password),
        'no_telepon' => $request->no_telepon,
    ]);

    $token = $user->createToken('auth_token')->plainTextToken;

    return response()->json([
        'message' => 'Registration successful',
        'user' => $user,
        'access_token' => $token,
        'token_type' => 'Bearer',
    ], 201);
}

public function login(Request $request)
{
    $validator = Validator::make($request->all(), [
        'email' => 'required|string|email',
        'password' => 'required|string',
    ]);

    if ($validator->fails()) {
        return response()->json([
            'message' => 'Validation error',
            'errors' => $validator->errors()
        ], 422);
    }

    if (!Auth::guard('web')->attempt($request->only('email', 'password'))) {
        return response()->json([
            'message' => 'Invalid login credentials',
        ], 401);
    }

    $user = Pelanggan::where('email', $request->email)->first();
    $token = $user->createToken('auth_token')->plainTextToken;

    return response()->json([
        'message' => 'Login successful',
        'user' => $user,
        'access_token' => $token,
        'token_type' => 'Bearer',
    ]);
}
```

Controller Menu

```
// MenuController.php
public function index()
{
    $menus = Menu::all();
    return response()->json([
        'success' => true,
        'data' => $menus
    ]);
}

public function show($id)
{
    $menu = Menu::find($id);

    if (!$menu) {
        return response()->json([
            'success' => false,
            'message' => 'Menu not found'
        ], 404);
    }

    return response()->json([
        'success' => true,
        'data' => $menu
    ]);
}

public function store(Request $request)
{
    $validator = Validator::make($request->all(), [
        'name' => 'required|string|max:255',
        'price' => 'required|numeric',
        'stok' => 'required|integer',
        'desc' => 'nullable|string',
        'gambar' => 'nullable|image|mimes:jpeg,png,jpg,gif|max:2048',
    ]);

    if ($validator->fails()) {
        return response()->json([
            'success' => false,
            'message' => 'Validation error',
            'errors' => $validator->errors()
        ], 422);
    }

    $data = $request->all();

    if ($request->hasFile('gambar')) {
        $file = $request->file('gambar');
        $filename = time() . '.' . $file->getClientOriginalExtension();
```

```
            $file->move(public_path('uploads/menus'), $filename);
            $data['gambar'] = 'uploads/menus/' . $filename;
        }

        $menu = Menu::create($data);

        return response()->json([
            'success' => true,
            'message' => 'Menu created successfully',
            'data' => $menu
        ], 201);
    }
```

API Routes

```
// api.php
// Auth Routes
Route::post('/register', [AuthController::class, 'register']);
Route::post('/login', [AuthController::class, 'login']);

// Public Routes
Route::get('/menus', [MenuController::class, 'index']);
Route::get('/menus/{id}', [MenuController::class, 'show']);

// Protected Routes
Route::middleware('auth:sanctum')->group(function () {
    Route::post('/logout', [AuthController::class, 'logout']);
    Route::get('/profile', [AuthController::class, 'user']);

    // Menu Routes (Admin Only)
    Route::post('/menus', [MenuController::class, 'store']);
    Route::put('/menus/{id}', [MenuController::class, 'update']);
    Route::delete('/menus/{id}', [MenuController::class, 'destroy']);

    // Reservation Routes
    Route::get('/reservations', [ReservationController::class, 'index']);
    Route::post('/reservations', [ReservationController::class, 'store']);

    // Cart Routes
    Route::get('/user/{userId}/cart', [CartController::class, 'userCart']);
    Route::post('/cart', [CartController::class, 'store']);
});
```

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3. Frontend Skeleton (React dengan Routing)

Saya telah mengimplementasikan struktur dasar frontend menggunakan React dengan React Router untuk menangani navigasi.

Struktur Frontend

```
resources/js/
├── Components/
│   └── Layout.jsx            # Layout utama aplikasi
├── Pages/
│   ├── Auth/
│   │   ├── Login.jsx         # Halaman login
│   │   └── Register.jsx      # Halaman registrasi
│   ├── Menu/
│   │   └── MenuList.jsx      # Halaman daftar menu
│   └── Home/
│       └── Home.jsx          # Halaman beranda
└── App.jsx                   # Komponen utama dengan setup routing
```

Implementasi Router (App.jsx)

```
import React from 'react';
import { BrowserRouter as Router, Routes, Route } from 'react-router-dom';
import Home from './Pages/Home/Home';
import Login from './Pages/Auth/Login';
import Register from './Pages/Auth/Register';
import MenuList from './Pages/Menu/MenuList';
import PrivateRoute from './Components/PrivateRoute';

const App = () => {
    return (
        <Router>
            <Routes>
                <Route path="/" element={<Home />} />
                <Route path="/login" element={<Login />} />
                <Route path="/register" element={<Register />} />
                <Route path="/menu" element={<MenuList />} />

                {/* Protected routes */}
                <Route path="/cart" element={
                    <PrivateRoute>
                        <Cart />
                    </PrivateRoute>
                } />
                <Route path="/reservation" element={
                    <PrivateRoute>
                        <ReservationForm />
                    </PrivateRoute>
                } />
            </Routes>
        </Router>
    );
};

export default App;
```

Implementasi Components/Layout.jsx

```
import React, { useState } from 'react';
import { Link, useNavigate } from 'react-router-dom';
import axios from 'axios';

const Layout = ({ children }) => {
    const [isMenuOpen, setIsMenuOpen] = useState(false);
    const navigate = useNavigate();
    const user = JSON.parse(localStorage.getItem('user'));
    const token = localStorage.getItem('token');

    const handleLogout = async () => {
        try {
            await axios.post('/api/logout', {}, {
                headers: {
                    Authorization: `Bearer ${token}`
                }
            });
            localStorage.removeItem('user');
            localStorage.removeItem('token');
            navigate('/login');
        } catch (error) {
            console.error('Logout failed', error);
        }
    };

    return (
        <div className="min-h-screen bg-gray-100">
            {/* Navigation */}
            <nav className="bg-white shadow-sm">
                <div className="max-w-7xl mx-auto px-4 sm:px-6 lg:px-8">
                    <div className="flex justify-between h-16">
                        <div className="flex">
                            <div className="flex-shrink-0 flex items-center">
                                <Link to="/" className="text-2xl font-bold text-
indigo-600">SORA</Link>
                            </div>
                            <div className="hidden sm:ml-6 sm:flex sm:space-x-8">
                                <Link to="/" className="border-indigo-500 text-
gray-900 inline-flex items-center px-1 pt-1 border-b-2 text-sm font-medium">
                                    Home
                                </Link>
                                <Link to="/menu" className="border-transparent
text-gray-500 hover:border-gray-300 hover:text-gray-700 inline-flex items-center
px-1 pt-1 border-b-2 text-sm font-medium">
                                    Menu
                                </Link>
                                <Link to="/reservation" className="border-
transparent text-gray-500 hover:border-gray-300 hover:text-gray-700 inline-flex
items-center px-1 pt-1 border-b-2 text-sm font-medium">
                                    Reservation
                                </Link>
                            </div>
                        </div>
                        <div className="hidden sm:ml-6 sm:flex sm:items-center">
                            {user ? (
                                <div className="flex items-center space-x-4">
                                    <Link to="/cart" className="text-gray-500 
hover:text-gray-700">
                                        <svg xmlns="http://www.w3.org/2000/svg" 
className="h-6 w-6" fill="none" viewBox="0 0 24 24" stroke="currentColor">
                                            <path strokeLinecap="round" 
strokeLinejoin="round" strokeWidth={2} d="M3 3h2l.4 2M7 13h10l4-8H5.4M7 13L5.4 5M7 
13l-2.293 2.293c-.63.63-.184 1.707.707 1.707H17m0 0a2 2 0 100 4 2 2 0 000-4zm-8 
2a2 2 0 11-4 0 2 2 0 014 0z" />
                                        </svg>
                                    </Link>
                                    <button onClick={handleLogout}>
                                        Logout
                                    </button>
                                </div>
                            ) : (
                                <div className="flex items-center space-x-4">
                                    <Link to="/login" className="text-gray-500 
hover:text-gray-700 px-3 py-2 rounded-md text-sm font-medium">Login</Link>
                                    <Link to="/register" className="bg-indigo-600 
text-white hover:bg-indigo-700 px-3 py-2 rounded-md text-sm font-
medium">Register</Link>
                                </div>
                            )}
                        </div>
                    </div>
                </div>
            </nav>

            {/* Main content */}
            <main className="py-10">
                <div className="max-w-7xl mx-auto sm:px-6 lg:px-8">
                    {children}
                </div>
            </main>

            {/* Footer */}
            <footer className="bg-white">
                <div className="max-w-7xl mx-auto py-12 px-4 sm:px-6 lg:px-8">
                    <div className="border-t border-gray-200 pt-8 md:flex 
md:items-center md:justify-between">
                        <div className="mt-8 md:mt-0">
                            <p className="text-base text-gray-400">&copy; 2024 
SORA. All rights reserved.</p>
                        </div>
                    </div>
                </div>
            </footer>
        </div>
```

```
    );
};

export default Layout;
```

Implementasi Pages/Auth/Login.jsx

```
import React, { useState } from 'react';
import { Link, useNavigate } from 'react-router-dom';
import axios from 'axios';
import Layout from '../../Components/Layout';

const Login = () => {
    const [formData, setFormData] = useState({
        email: '',
        password: '',
    });
    const [errors, setErrors] = useState({});
    const [isLoading, setIsLoading] = useState(false);
    const navigate = useNavigate();

    const handleChange = (e) => {
        setFormData({
            ...formData,
            [e.target.name]: e.target.value,
        });
    };

    const handleSubmit = async (e) => {
        e.preventDefault();
        setIsLoading(true);
        setErrors({});

        try {
            const response = await axios.post('/api/login', formData);
            localStorage.setItem('token', response.data.access_token);
            localStorage.setItem('user', JSON.stringify(response.data.user));
            navigate('/');
        } catch (error) {
            console.error('Login error:', error);
            if (error.response?.data?.errors) {
                setErrors(error.response.data.errors);
            } else if (error.response?.data?.message) {
                setErrors({ general: error.response.data.message });
            } else {
                setErrors({ general: 'Something went wrong. Please try again.' });
            }
        } finally {
            setIsLoading(false);
        }
    };
    return (
        <Layout>
            <div className="flex justify-center">
                <div className="w-full max-w-md">
                    <h2 className="text-center text-3xl font-bold mb-6">Login</h2>
                    <form onSubmit={handleSubmit} className="bg-white shadow-md
rounded px-8 pt-6 pb-8 mb-4">
                        {errors.general && (
                            <div className="bg-red-100 border border-red-400 text-
red-700 px-4 py-3 rounded mb-4">
                                {errors.general}
                            </div>
                        )}
                        <div className="mb-4">
                            <label className="block text-gray-700 text-sm font-
bold mb-2" htmlFor="email">
                                Email
                            </label>
                            <input
                                className="shadow appearance-none border rounded
w-full py-2 px-3 text-gray-700 leading-tight focus:outline-none focus:shadow-
outline"
                                id="email"
                                type="email"
                                name="email"
                                value={formData.email}
                                onChange={handleChange}
                                placeholder="Email"
                                required
                            />
                            {errors.email && <p className="text-red-500 text-xs
italic">{errors.email}</p>}
                        </div>
                        <div className="mb-6">
                            <label className="block text-gray-700 text-sm font-
bold mb-2" htmlFor="password">
                                Password
                            </label>
                            <input
                                className="shadow appearance-none border rounded
w-full py-2 px-3 text-gray-700 mb-3 leading-tight focus:outline-none focus:shadow-
outline"
                                id="password"
                                type="password"
                                name="password"
                                value={formData.password}
                                onChange={handleChange}
                                placeholder="******************"
                                required
                            />
                            {errors.password && <p className="text-red-500 text-xs
italic">{errors.password}</p>}
                        </div>
                        <div className="flex items-center justify-between">
                            <button
                                className="bg-blue-500 hover:bg-blue-700 text-white font-bold py-2 px-4 rounded focus:outline-none focus:shadow-outline"
                                type="submit"
                                disabled={isLoading}
                            >
                                {isLoading ? 'Loading...' : 'Sign In'}
                            </button>
                            <Link
                                className="inline-block align-baseline font-bold text-sm text-blue-500 hover:text-blue-800"
                                to="/register"
                            >
                                Register
                            </Link>
                        </div>
                    </form>
                </div>
            </div>
        </Layout>
    );
};

export default Login;
```

Link Github Repository untuk website : https://github.com/brosora6/sora.git Link Github Repository untuk Laporan : https://github.com/justdyn/laporan_proweb.git