

Nama : Raffy Jamil Octavialdy

NIM : 2241720082

JOBSHEET 04

MODEL dan ELOQUENT ORM

Praktikum 1 - \$fillable

```
// tambah data user dengan Eloquent Model
$data = [
    'username' => 'Manager_dua',
    'nama' => 'Manager 2',
    'password' => Hash::make('12345'),
    'level_id' => 2,
];
UserModel::create($data); // tambah data ke tabel m_user

$user = UserModel::all(); // ambil semua data dari tabel m_user
return view('user', ['data' => $user]);
```

localhost:8000/user

Data User

ID	Username	Nama	ID Level Pengguna
1	admin	Administrator	1
2	manager	Manager	2
3	staff	Staff/Kasir	3
5	customer-1	Pelanggan Pertama	4
6	Manager_dua	Manager 2	2

```
protected $fillable = [
    'level_id',
    'username',
    'nama',
    // 'password',
];
```

```
// tambah data user dengan Eloquent Model
$data = [
    'username' => 'Manager_tiga',
    'nama' => 'Manager 3',
    'password' => Hash::make('12345'),
    'level_id' => 2,
];
UserModel::create($data); // tambah data ke tabel m_user

$user = UserModel::all(); // ambil semua data dari tabel m_user
return view('user', ['data' => $user]);
```

Illuminate\Database\QueryException

PHP 8.2.4 10.46.0

SQLSTATE[HY000]: General error: 1364 Field 'password' doesn't have a default value

```
INSERT INTO `m_user` (`username`, `nama`, `level_id`, `updated_at`, `created_at`) VALUES (Manager_tiga, Manager 3, 2, 2024-03-08 07:56:18, 2024-03-08 07:56:18)
```

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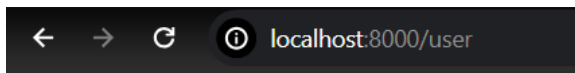
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Praktikum 2.1 – Retrieving Single Models

```
// mencari user dengan primary key 1
$user = UserModel::find(1);
return view('user', ['data' => $user]);
```

```
// mencari user pertama dengan level id 1
$user = UserModel::where('level_id', 1)->first();
return view('user', ['data' => $user]);
```

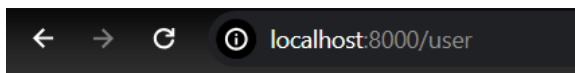
```
// mencari user pertama dengan level id 1
$user = UserModel::firstWhere('level_id', 1);
return view('user', ['data' => $user]);
```



Data User

ID	Username	Nama	ID Level Pengguna
1	admin	Administrator	1

```
// mencari menggunakan findOr
$user = UserModel::findOr(1, ['username', 'nama'], function () {
    abort(404);
});
return view('user', ['data' => $user]);
```



Data User

ID	Username	Nama	ID Level Pengguna
	admin	Administrator	

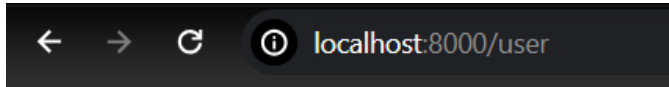
```
// mencari menggunakan findOr (tidak ditemukan)
$user = UserModel::findOr(20, ['username', 'nama'], function () {
    abort(404);
});
return view('user', ['data' => $user]);
```

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Praktikum 2.2 – Not Found Exceptions

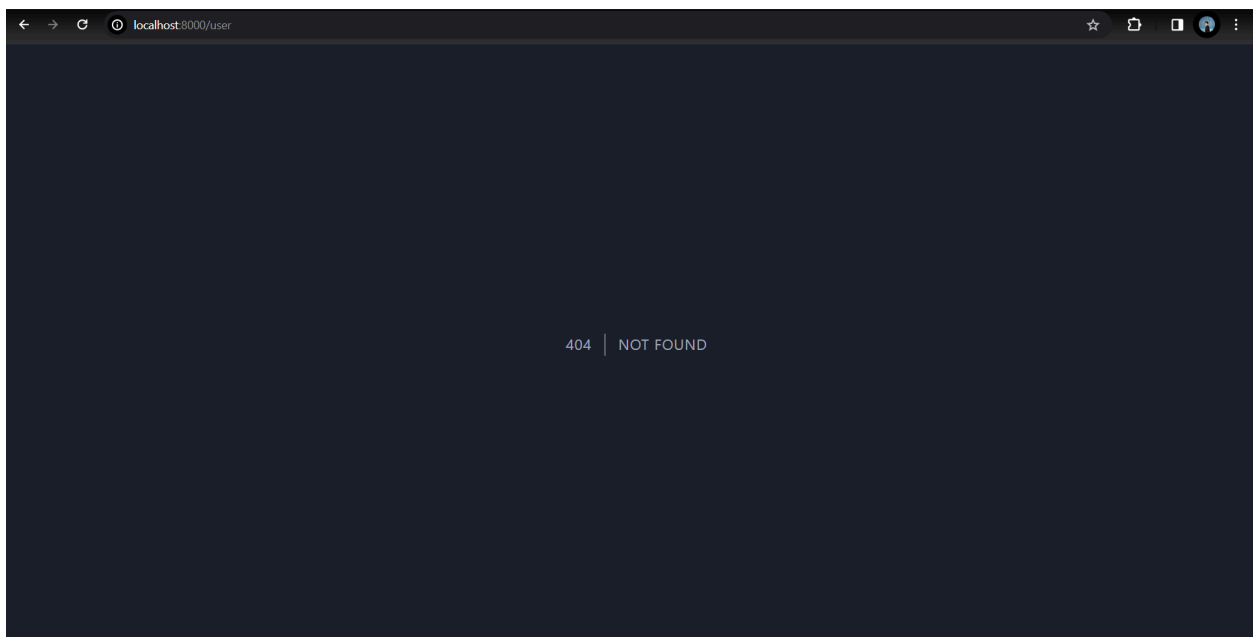
```
// mencari menggunakan findOrFail  
$user = UserModel::findOrFail(1);  
return view('user', ['data' => $user]);
```



Data User

ID	Username	Nama	ID Level Pengguna
1	admin	Administrator	1

```
// mencari menggunakan findOrFail (tidak ditemukan)  
$user = UserModel::where('username', 'manager9')->firstOrFail();  
return view('user', ['data' => $user]);
```



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Praktikum 2.3 – Retrieving Aggregates

```
// Retrieving Aggregates
$user = UserModel::where('level_id', 2)->count();
// dd($user);
return view('user', ['data' => $user]);
```

```
<body>
  <h1>Data User</h1>
  <table border="1" cellpadding="2" cellspacing="0">
    <tr>
      <th>Jumlah Pengguna</th>
    </tr>
    <tr>
      <td>{{ $data }}</td>
    </tr>
  </table>
</body>
```

← → ↻ ⓘ localhost:8000/user

Data User

Jumlah Pengguna
3

Praktikum 2.4 – Retrieving or Creating Models

```
// Retrieving or Creating Models
$user = UserModel::firstOrCreate(
  [
    'username' => 'manager',
    'nama' => 'Manager',
  ]
);
return view('user', ['data' => $user]);
```

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```
<body>
  <h1>Data User</h1>
  <table border="1" cellpadding="2" cellspacing="0">
    <tr>
      <th>ID</th>
      <th>Username</th>
      <th>Nama</th>
      <th>ID Level Pengguna</th>
    </tr>
    <tr>
      <td>{{ $data->user_id }}</td>
      <td>{{ $data->username }}</td>
      <td>{{ $data->nama }}</td>
      <td>{{ $data->level_id }}</td>
    </tr>
  </table>
</body>
```

← → ↻ ⓘ localhost:8000/user

Data User

ID	Username	Nama	ID Level Pengguna
2	manager	Manager	2

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```
// Retrieving or Creating Models (create model)
$user = UserModel::firstOrCreate(
    [
        'username' => 'manager22',
        'nama' => 'Manager Dua Dua',
        'password' => Hash::make('12345'),
        'level_id' => 2,
    ]
);

return view('user', ['data' => $user]);
```

Data model yang baru ditambahkan belum tersimpan di dalam database.

```
// Retrieving or Creating Models (create model)
$user = UserModel::firstOrCreate(
    [
        'username' => 'manager22',
        'nama' => 'Manager Dua Dua',
        'password' => Hash::make('12345'),
        'level_id' => 2,
    ]
);
$user->save();

return view('user', ['data' => $user]);
```

← → ↻ ⓘ localhost:8000/user

Data User

ID	Username	Nama	ID Level Pengguna
13	manager22	Manager Dua Dua	2

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Praktikum 2.5 – Attribute Changes

```
// Attribute Changes
$user = UserModel::create([
    'username' => 'manager55',
    'nama' => 'Manager55',
    'password' => Hash::make('12345'),
    'level_id' => 2,
]);

$user->username = 'manager56';

$user->isDirty(); // true
$user->isDirty('username'); // true
$user->isDirty('nama'); // false
$user->isDirty(['nama', 'username']); // true

$user->isClean(); // false
$user->isClean('username'); // false
$user->isClean('nama'); // true
$user->isClean(['nama', 'username']); // false

$user->save();

$user->isDirty(); // false
$user->isClean(); // true
dd($user->isDirty());
```

← → ↻ ⓘ localhost:8000/user

false // app\Http\Controllers\UserController.php:96

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```
// Attribute Changes
$user = UserModel::create([
    'username' => 'manager11',
    'nama' => 'Manager11',
    'password' => Hash::make('12345'),
    'level_id' => 2,
]);

$user->username = 'manager12';

$user->save();

$user->wasChanged(); // true
$user->wasChanged('username'); // true
$user->wasChanged(['nama', 'username']); // true
$user->wasChanged('nama'); // false
dd($user->wasChanged(['nama', 'username'])); // true
```

← → ↻ ⓘ localhost:8000/user

true // app\Http\Controllers\UserController.php:114

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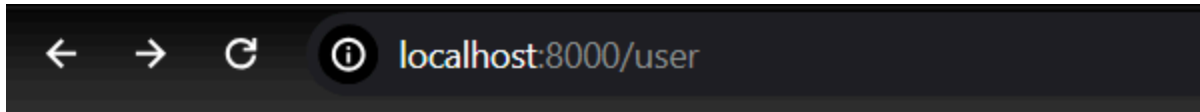
Praktikum 2.6 – Create, Read, Update, Delete (CRUD)

```
// get all user
$user = UserModel::all();
return view('user', ['data' => $user]);
```

```
<body>
  <h1>Data User</h1>
  <a href="/user/tambah">+ Tambah User</a>
  <table border="1" cellpadding="2" cellspacing="0">
    <tr>
      <td>ID</td>
      <td>Username</td>
      <td>Nama</td>
      <td>ID Level Pengguna</td>
      <td>Aksi</td>
    </tr>
    @foreach ($data as $d)
      <tr>
        <td>{{ $d->user_id }}</td>
        <td>{{ $d->username }}</td>
        <td>{{ $d->nama }}</td>
        <td>{{ $d->level_id }}</td>
        <td><a href="/user/ubah/{{ $d->user_id }}">Ubah</a> | <a href="/user/hapus/{{ $d->user_id }}">Hapus</a></td>
      </tr>
    @endforeach
  </table>
</body>
```

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Data User

[+ Tambah User](#)

ID	Username	Nama	ID Level Pengguna	Aksi
1	admin	Administrator	1	Ubah Hapus
2	manager	Manager	2	Ubah Hapus
3	staff	Staff/Kasir	3	Ubah Hapus
5	customer-1	Pelanggan Pertama	4	Ubah Hapus
6	Manager_dua	Manager 2	2	Ubah Hapus
9	Manager_tiga	Manager 3	2	Ubah Hapus
13	manager22	Manager Dua Dua	2	Ubah Hapus
18	manager56	Manager55	2	Ubah Hapus
19	manager12	Manager11	2	Ubah Hapus

```
public function tambah()  
{  
    return view('user_tambah');  
}
```

```
Route::get('/user/tambah', [UserController::class, 'tambah']);
```

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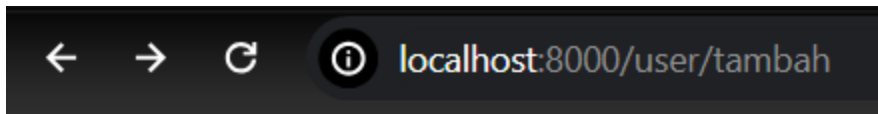
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```
<body>
  <h1>Form Tambah Data User</h1>
  <form action="user/tambah_simpan" method="post">

    {{ csrf_field() }}

    <label>Username</label>
    <input type="text" name="username" placeholder="Masukkan Username">
    <br>
    <label>Nama</label>
    <input type="text" name="nama" placeholder="Masukkan Nama">
    <br>
    <label>Password</label>
    <input type="password" name="password" placeholder="Masukkan Password">
    <br>
    <label>Level ID</label>
    <input type="text" name="level_id" placeholder="Masukkan ID Level">
    <br><br>
    <input type="submit" class="btn btn-success" value="simpan">

  </form>
</body>
```



Form Tambah Data User

Username	<input type="text" value="Masukkan Username"/>
Nama	<input type="text" value="Masukkan Nama"/>
Password	<input type="password" value="Masukkan Password"/>
Level ID	<input type="text" value="Masukkan ID Level"/>

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```
public function tambah_simpan(Request $request)
{
    UserModel::create([
        'username' => $request->username,
        'nama' => $request->nama,
        'password' => Hash::make('$request->password'),
        'level_id' => $request->level_id,
    ]);

    return redirect('/user');
}
```

```
Route::get('/user/tambah', [UserController::class, 'tambah']);
Route::get('/user/tambah_simpan', [UserController::class, 'tambah_simpan']);
```

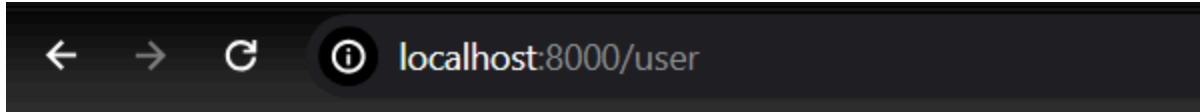
← → ↻ ⓘ localhost:8000/user/tambah

Form Tambah Data User

Username	<input type="text" value="manager33"/>
Nama	<input type="text" value="Manager33"/>
Password	<input type="password" value="....."/>
Level ID	<input type="text" value="2"/>
<input type="button" value="simpan"/>	

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Data User

[+ Tambah User](#)

ID	Username	Nama	ID Level Pengguna	Aksi
1	admin	Administrator	1	Ubah Hapus
2	manager	Manager	2	Ubah Hapus
3	staff	Staff/Kasir	3	Ubah Hapus
5	customer-1	Pelanggan Pertama	4	Ubah Hapus
6	Manager_dua	Manager 2	2	Ubah Hapus
9	Manager_tiga	Manager 3	2	Ubah Hapus
13	manager22	Manager Dua Dua	2	Ubah Hapus
18	manager56	Manager55	2	Ubah Hapus
19	manager12	Manager11	2	Ubah Hapus
20	manager33	Manager33	2	Ubah Hapus

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```
<body>
<h1>Form Ubah Data User</h1>
<form action="/user/ubah_simpan/{{ $data->user_id }}" method="post">

    {{ csrf_field() }}
    {{ method_field('PUT') }}

    <label>Username</label>
    <input type="text" name="username" placeholder="Masukkan Username" value="{{ $data->username }}">
    <br>
    <label>Nama</label>
    <input type="text" name="nama" placeholder="Masukkan Nama" value="{{ $data->nama }}">
    <br>
    <label>Password</label>
    <input type="password" name="password" placeholder="Masukkan Password" value="{{ $data->password }}">
    <br>
    <label>Level ID</label>
    <input type="text" name="level_id" placeholder="Masukkan ID Level" value="{{ $data->level_id }}">
    <br><br>
    <input type="submit" class="btn btn-success" value="simpan">

</form>
</body>
```

```
public function ubah($id)
{
    $user = UserModel::find($id);
    return view('user_ubah', ['data' => $user]);
}
```

← → ↻ ⓘ localhost:8000/user/ubah/20

Form Ubah Data User

Username	<input type="text" value="manager33"/>
Nama	<input type="text" value="Manager33"/>
Password	<input type="password" value="....."/>
Level ID	<input type="text" value="2"/>
<input type="button" value="simpan"/>	

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```
public function ubah_simpan($id, Request $request)
{
    $user = UserModel::find($id);

    $user->username = $request->username;
    $user->nama = $request->nama;
    $user->password = Hash::make('$request->password');
    $user->level_id = $request->level_id;

    $user->save();

    return redirect('/user');
}
```

```
Route::get('/user/tambah', [UserController::class, 'tambah']);
Route::post('/user/tambah_simpan', [UserController::class, 'tambah_simpan']);
Route::get('/user/ubah/{id}', [UserController::class, 'ubah']);
Route::put('/user/ubah_simpan/{id}', [UserController::class, 'ubah_simpan']);
```

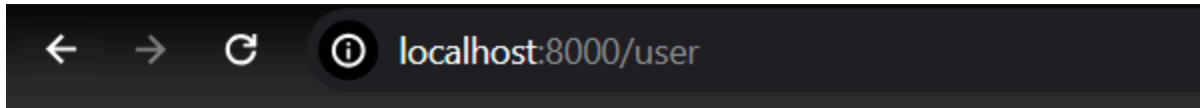
← → ↻ ⓘ localhost:8000/user/ubah/20

Form Ubah Data User

Username	<input type="text" value="manager33"/>
Nama	<input type="text" value="Manager66"/>
Password	<input type="password" value="....."/>
Level ID	<input type="text" value="2"/>
<input type="button" value="simpan"/>	

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Data User

+ Tambah User

ID	Username	Nama	ID Level Pengguna	Aksi
1	admin	Administrator	1	Ubah Hapus
2	manager	Manager	2	Ubah Hapus
3	staff	Staff/Kasir	3	Ubah Hapus
5	customer-1	Pelanggan Pertama	4	Ubah Hapus
6	Manager_dua	Manager 2	2	Ubah Hapus
9	Manager_tiga	Manager 3	2	Ubah Hapus
13	manager22	Manager Dua Dua	2	Ubah Hapus
18	manager56	Manager55	2	Ubah Hapus
19	manager12	Manager11	2	Ubah Hapus
20	manager33	Manager66	2	Ubah Hapus

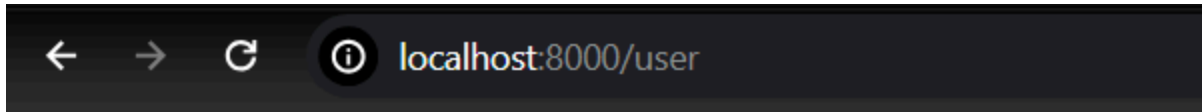
```
public function hapus($id)
{
    $user = UserModel::find($id);
    $user->delete();

    return redirect('/user');
}
```

```
Route::get('/user/tambah', [UserController::class, 'tambah']);
Route::post('/user/tambah_simpan', [UserController::class, 'tambah_simpan']);
Route::get('/user/ubah/{id}', [UserController::class, 'ubah']);
Route::put('/user/ubah_simpan/{id}', [UserController::class, 'ubah_simpan']);
Route::get('/user/hapus/{id}', [UserController::class, 'hapus']);
```


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Data User

[+ Tambah User](#)

ID	Username	Nama	ID Level Pengguna	Aksi
1	admin	Administrator	1	Ubah Hapus
2	manager	Manager	2	Ubah Hapus
3	staff	Staff/Kasir	3	Ubah Hapus
5	customer-1	Pelanggan Pertama	4	Ubah Hapus
6	Manager_dua	Manager 2	2	Ubah Hapus
9	Manager_tiga	Manager 3	2	Ubah Hapus
13	manager22	Manager Dua Dua	2	Ubah Hapus
18	manager56	Manager55	2	Ubah Hapus

Menghapus data user dengan id 20 dan 19.

Praktikum 2.7 – Relationships

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

```
public function index()
{
    // get all user with level
    $user = UserModel::with('level')->get();
    dd($user);
}
```

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```
localhost:8000/user

Illuminate\Database\Eloquent\Collection {#318 ▼ // app\Http\Controllers\UserController.php:16
  #items: array:8 [▼
    0 => App\Models\UserModel {#325 ▶}
    1 => App\Models\UserModel {#326 ▶}
    2 => App\Models\UserModel {#327 ▶}
    3 => App\Models\UserModel {#328 ▶}
    4 => App\Models\UserModel {#329 ▶}
    5 => App\Models\UserModel {#330 ▶}
    6 => App\Models\UserModel {#331 ▶}
    7 => App\Models\UserModel {#332 ▶}
  ]
  #escapeWhenCastingToString: false
}
```

```
public function index()
{
    // get all user with level
    $user = UserModel::with('level')->get();
    return view('user', ['data' => $user]);
}
```

```
<body>
<h1>Data User</h1>
<a href="/user/tambah">+ Tambah User</a>
<table border="1" cellpadding="2" cellspacing="0">
  <tr>
    <td>ID</td>
    <td>Username</td>
    <td>Nama</td>
    <td>ID Level Pengguna</td>
    <td>Kode Level</td>
    <td>Nama Level</td>
    <td>Aksi</td>
  </tr>
  @foreach ($data as $d)
    <tr>
      <td>{{ $d->user_id }}</td>
      <td>{{ $d->username }}</td>
      <td>{{ $d->nama }}</td>
      <td>{{ $d->level_id }}</td>
      <td>{{ $d->level->level_kode }}</td>
      <td>{{ $d->level->level_nama }}</td>
      <td><a href="/user/ubah/{{ $d->user_id }}">Ubah</a> | <a href="/user/hapus/{{ $d->user_id }}">Hapus</a></td>
    </tr>
  @endforeach
</table>
</body>
```

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Data User

[+ Tambah User](#)

ID	Username	Nama	ID Level Pengguna	Kode Level	Nama Level	Aksi
1	admin	Administrator	1	ADM	Administrator	Ubah Hapus
2	manager	Manager	2	MNG	Manager	Ubah Hapus
3	staff	Staff/Kasir	3	STF	Staff/Kasir	Ubah Hapus
5	customer-1	Pelanggan Pertama	4	CUS	Pelanggan	Ubah Hapus
6	Manager_dua	Manager 2	2	MNG	Manager	Ubah Hapus
9	Manager_tiga	Manager 3	2	MNG	Manager	Ubah Hapus
13	manager22	Manager Dua Dua	2	MNG	Manager	Ubah Hapus
18	manager56	Manager55	2	MNG	Manager	Ubah Hapus