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Migrations

Berikut table yang dibuat yaitu :

1. Category untuk menyimpan category nya ada apa saja. Dalam table Category terdapat atribut id, CategoryName, created_at dan updated_at.

```
Schema::create('categories', function (Blueprint $table) {  
    $table->id();  
    $table->string('CategoryName');  
    $table->timestamps();  
});
```

2. Subject untuk menyimpan subject sesuai category nya. Dalam table Subject terdapat atribut id, CategoryID, SubjectName, created_at dan updated_at,

```
Schema::create('subjects', function (Blueprint $table) {  
    $table->id();  
    $table->unsignedBigInteger('CategoryID');  
    $table->string('SubjectName');  
    $table->timestamps();  
    $table->foreign('CategoryID')->references('id')->on('categories');  
});
```

3. Writers untuk menyimpan data penulis. Dalam table Writer terdapat atribut id, WriterName, WriterDesc (untuk menyimpan data pekerjaan), WriterProfPict (untuk menyimpan foto profil), created_at dan updated_at.

```
Schema::create('writers', function (Blueprint $table) {  
    $table->id();  
    $table->string('WriterName');  
    $table->string('WriterDesc');  
    $table->string('WriterProfPict');  
    $table->timestamps();  
});
```

4. Article untuk menyimpan artikel. Dalam table Article terdapat atribut id, SubjectID, ArticleImage, WriterID, ArticleContent, created_at dan updated_at.

```
Schema::create('articles', function (Blueprint $table) {
    $table->id();
    $table->unsignedBigInteger('SubjectID');
    $table->string('ArticleImage');
    $table->unsignedBigInteger('WriterID');
    $table->string('ArticleContent');
    $table->timestamps();
    $table->foreign('SubjectID')->references('id')->on('subjects');
    $table->foreign('WriterID')->references('id')->on('writers');
});
```

Seeding & Factory

Berikut seeding & factory masing-masing table seperti ini :

1. Category

Saya langsung membuat 2 category yaitu Interactive Multimedia dan Software Engineering dengan createMany.

```
public function run()
{
    Category::factory()->createMany([
        [
            'CategoryName' => 'Interactive Multimedia'
        ],
        [
            'CategoryName' => 'Software Engineering'
        ]
    ]);
}
```

2. Subject

Saya langsung membuat 6 subject dengan createMany.

```
Subject::factory()->createMany([
    [
        'CategoryID' => 1,
        'SubjectName' => 'Human and Computer Interaction'
    ],
    [
        'CategoryID' => 1,
        'SubjectName' => 'User Experience'
    ],
    [
        'CategoryID' => 1,
        'SubjectName' => 'User Experience for Digital Immersive Technology'
    ],
    [
        'CategoryID' => 2,
        'SubjectName' => 'Pattern Software Design'
    ],
    [
        'CategoryID' => 2,
        'SubjectName' => 'Agile Software Development'
    ],
    [
        'CategoryID' => 2,
        'SubjectName' => 'Code Reengineering'
    ]
]);
```

3. Writer

Untuk atribut WriterName diisi dengan menggunakan faker dan atribut lainnya diisi manual.

```
public function definition()
{
    return [
        'WriterName' => fake()->name(),
    ];
}

Writer::factory()->createMany([
    [
        'WriterDesc' => 'Interactive Multimedia Specialist',
        'WriterProfPict' => 'https://i.natgeofe.com/n/548467d8-c5f1-4551-9f58-6817a8d2c45e/NationalGeographic_2572187_square.jpg'
    ],
    [
        'WriterDesc' => 'Software Engineering Specialist',
        'WriterProfPict' => 'https://i.natgeofe.com/n/4f5aaece-3300-41a4-b2a8-ed2708a0a27c/domestic-dog_thumb_square.jpg'
    ],
    [
        'WriterDesc' => 'Interactive Multimedia Specialist',
        'WriterProfPict' => 'https://www.otterspecialistgroup.org/osg-newsite/wp-content/uploads/2017/04/ThinkstockPhotos-827261360.jpg'
    ]
]);
```

4. Article

Untuk semua atribut di dalam Article diisi dengan menggunakan faker dan saya buat sebanyak 6 article.

```
public function definition()
{
    return [
        'SubjectID' => fake()->unique()->numberBetween(1,6),
        'ArticleImage' => fake()->imageUrl(),
        'ArticleContent' => fake()->paragraph(),
        'WriterID' => fake()->numberBetween(1,3)
    ];
}

public function run()
{
    Article::factory(6)->create();
}
```

Model

Saya menggunakan Eloquent agar lebih mudah. Berikut model masing-masing tabel :

1. Category

Di dalam model Category terdapat relasi has many dengan Subject karena 1 Category bisa memiliki banyak Subject.

```
public function subject(){  
    return $this->hasMany([Subject::class, 'CategoryID', 'id']);  
}
```

2. Subject

Di dalam model Subject terdapat relasi belongs to yang menunjukkan bahwa setiap Subject hanya memiliki 1 Category, has many dengan Article karena 1 Subject dapat dibuat banyak Article.

```
public function category(){  
    return $this->belongsTo(Category::class, 'CategoryID', 'id');  
}  
  
public function article(){  
    return $this->hasMany(Article::class, 'SubjectID', 'id');  
}
```

3. Writer

Di dalam model Writer terdapat relasi has many dengan Article karena 1 Writer dapat membuat banyak Article.

```
public function article(){  
    return $this->hasMany(Article::class, 'WriterID', 'id');  
}
```

4. Article

Di dalam model Article terdapat relasi belongs to dengan Writer yang menunjukkan bahwa 1 Article hanya bisa ditulis oleh 1 Writer saja dan belongs to dengan Subject karena 1 Article hanya bisa memiliki 1 Subject saja.

```
public function writer(){  
    return $this->belongsTo(Writer::class, 'WriterID', 'id');  
}  
  
public function subject(){  
    return $this->belongsTo(Subject::class, 'SubjectID', 'id');  
}
```

Controller

Terdapat 4 controller yang menyesuaikan dengan page yang ada di website EduFun, yaitu :

1. Home Controller

Di dalam Home Controller terdapat function home yang isinya mengambil 3 data Article yang terbaru dan menampilkannya di view.

```
public function home() {  
    $newArticle = Article::orderBy('created_at', 'desc')->take(3)->get();  
    return view('pages.home')->with('article', $newArticle);  
}
```

2. Category Controller

Di dalam Category Controller terdapat 3 function yaitu interactive untuk menampilkan Article yang category nya Interactive Multimedia, software untuk menampilkan Article yang category nya Software Engineering dan getArticle untuk mendapatkan 1 Article berdasarkan id.

```
public function interactive(){  
    $subject = Article::whereHas('subject', function ($q) {  
        $q->where('CategoryID', 1);  
    }->get();  
  
    return view('pages.category')->with('article', $subject)->with('category', 1);  
}  
  
public function software(){  
    $subject = Article::whereHas('subject', function ($q) {  
        $q->where('CategoryID', 2);  
    }->get();  
  
    return view('pages.category')->with('article', $subject)->with('category', 2);  
}  
  
public function getArticle($id){  
    $article = Article::find($id);  
  
    if($article){  
        return view('pages.detail')->with('article', $article);  
    }  
    else {  
        abort(404, 'Article Not Found');  
    }  
}
```

3. Writers Controller

Di dalam Writer Controller terdapat function writer yang isinya mengambil data writerList dan allArticle untuk ditampilkan di page Writers.

```
public function writer(){  
    $writerList = Writer::all();  
    $allArticle = Article::all();  
    return view('pages.writers')->with('writers', $writerList)->with('articles', $allArticle);  
}
```

4. About Us Controller

Di dalam About Us Controller terdapat function about yang isinya hanya menampilkan page About Us.

```
public function about(){
    return view('pages.about');
}
```

Route

Terdapat 6 endpoint di dalam Route, yaitu :

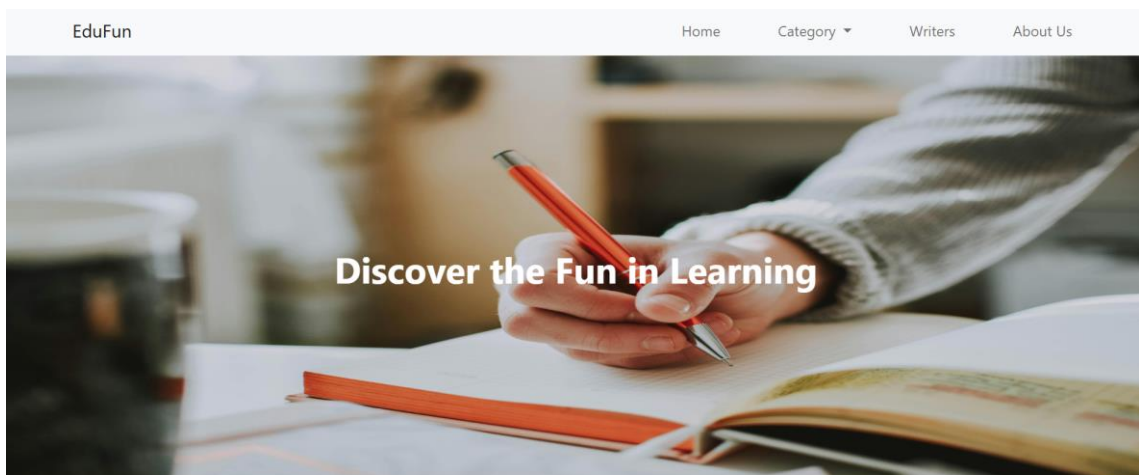
1. ' / ' untuk mengarahkan ke halaman Home.
2. ' /aboutUs ' untuk mengarahkan ke halaman About Us.
3. ' /category-interactive ' untuk mengarahkan ke halaman yang Category nya itu Interactive Multimedia.
4. ' /category-software ' untuk mengarahkan ke halaman yang Category nya itu Software Engineering.
5. ' /article/{id} ' untuk mengarahkan ke halaman Article Detail yang berdasarkan id.
6. ' /writers ' untuk mengarahkan ke halaman Writers.

```
Route::get('/', [HomeController::class, 'home'])->name('home');
Route::get('/aboutUs', [AboutUsController::class, 'about'])->name('about');
Route::get('/category-interactive', [CategoryController::class, 'interactive'])->name('interactive');
Route::get('/category-software', [CategoryController::class, 'software'])->name('software');
Route::get('/article/{id}', [CategoryController::class, 'getArticle'])->name('getArticle');
Route::get('/writers', [WritersController::class, 'writer'])->name('writer');
```

View

Berikut 5 view yang dibuat, yaitu :

1. Home



2. Category

EduFun

HomeCategory ▾WritersAbout Us

Interactive Multimedia

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Human and Computer Interaction

by Mrs. Gladyce Kunde

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3. Article Detail

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4. Writers

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HomeCategory ▾WritersAbout Us

Our Writers



Mrs. Gladyce Kunde
Interactive Multimedia Specialist

recusandae


Human and Computer Interaction

by Mrs. Gladyce Kunde

06 November 2024 00:35

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Anna Metz
Software Engineering Specialist

5. About Us

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About Us

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