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University of Gujrat

Advance Web Engineering

Assignment 02

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Submitted To

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RESTful API in Laravel

# Code

### In database/migrations/create\_books\_table file,

<?php

use Illuminate\Database\Migrations\Migration;

use Illuminate\Database\Schema\Blueprint;

use Illuminate\Support\Facades\Schema;

return new class extends Migration

{

    /\*\*

     \* Run the migrations.

     \*

     \* @return void

     \*/

    public function up()

    {

        Schema::create('books', function (Blueprint $table) {

            $table->id();

            $table->string('name');

            $table->string('author');

            $table->date('publish\_date');

            $table->timestamps();

        });

    }

    public function down()

    {

        Schema::dropIfExists('books');

    }

};

### In EmailController.php file,

<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;

class EmailController extends Controller

{

    public function sendEmail(Request $request)

    {

        $this->validate($request, [

            'email' => 'required|email',

            'subject' => 'required',

            'message' => 'required'

        ]);

        $data = array(

            'email' => $request->email,

            'subject' => $request->subject,

            'message' => $request->message

        );

        dd($data);

        Mail::to($request->email)->send(new ContactMail($data));

        return 'Email has been sent';

    }

}

### In Models/Books.php file,

<?php

namespace App\Models;

use Illuminate\Database\Eloquent\Factories\HasFactory;

use Illuminate\Database\Eloquent\Model;

class Books extends Model

{

    use HasFactory;

    protected $table = 'books';

    protected $fillable = ['name','author','publish\_date'];

}

### In BookController.php file,

<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;

use App\Models\Books;

class BookController extends Controller

{

    public function index()

    {

        $books = Books::all();

        return response()->json($books);

    }

    public function store(Request $request)

    {

        $book = new Books;

        $book->name = $request->name;

        $book->author = $request->author;

        $book->publish\_date = $request->publish\_date;

        $book->save();

        return response()->json([

            "message" => "Book Added."

        ], 201);

    }

    public function show($id)

    {

        $book = Books::find($id);

        if(!empty($book))

        {

            return response()->json($book);

        }

        else

        {

            return response()->json([

                "message" => "Book not found"

            ], 404);

        }

    }

    public function update(Request $request, $id)

    {

        if (Books::where('id', $id)->exists()) {

            $book = Books::find($id);

            $book->name = is\_null($request->name) ? $book->name : $request->name;

            $book->author = is\_null($request->author) ? $book->author : $request->author;

            $book->publish\_date = is\_null($request->publish\_date) ? $book->publish\_date : $request->publish\_date;

            $book->save();

            return response()->json([

                "message" => "Book Updated."

            ], 404);

        }else{

            return response()->json([

                "message" => "Book Not Found."

            ], 404);

        }

    }

    public function destroy($id)

    {

        if(Books::where('id', $id)->exists()) {

            $book = Books::find($id);

            $book->delete();

            return response()->json([

              "message" => "records deleted."

            ], 202);

        } else {

            return response()->json([

              "message" => "book not found."

            ], 404);

        }

    }

}

### In routes/api.php file,

<?php

use Illuminate\Http\Request;

use Illuminate\Support\Facades\Route;

use App\Http\Controllers\BookController;

Route::middleware('auth:api')->get('/user', function (Request $request) {

    return $request->user();

});

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

Route::get('/books/{id}',[BookController::class, 'show']);

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

Route::put('/books/{id}',[BookController::class, 'update']);

Route::delete('/books/{id}',[BookController::class, 'destroy']);

### In database/seeders/BooksSeeder.php file,

<?php

namespace Database\Seeders;

use Illuminate\Database\Seeder;

use App\Models\Books;

class BooksSeeder extends Seeder

{

    public function run()

    {

        $faker = \Faker\Factory::create();

        for ($i = 0; $i < 50; $i++) {

            Books::create([

                'name' => $faker->sentence,

                'author' => $faker->name,

                'publish\_date' => $faker->date,

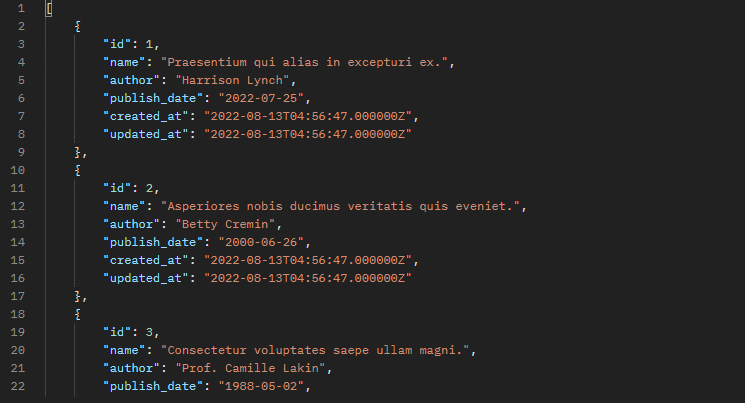
            ]);

        }

    }

}

# Screenshots of Frontend



Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated