لإنشاء نظام إدارة مشاريع الفرق باستخدامLaravel ، مع الجداول المطلوبة والربط بينها، اتبع هذه الخطوات التفصيلية:

.1إعداد المشروع وربطه بقاعدة البيانات:

إنشاء مشروع Laravel جديد:

1. افتح المحطة (terminal) وقم بإنشاء مشروع Laravel جديد:

composer create-project --prefer-dist laravel/laravel team project management

بعد إنشاء المشروع، ادخل إلى المجلد:

cd team_project_management

إعداد الاتصال بقاعدة البيانات في ملف :env.

DB CONNECTION=mysql

DB_HOST=127.0.0.1

DB PORT=3306

DB_DATABASE=team_project_management

DB_USERNAME=root

=DB_PASSWORD

أنشئ قاعدة بيانات في PhpMyAdmin بنفس الأسم الذي حددته في env:

قم بتشغيل التطبيق للتحقق من أنه يعمل بشكل صحيح:

php artisan serve

نقوم بتطبيق Authenticationباستخدام

وفق الخطوات التالية

Install the newest version of the package using this command:

```
composer require php-open-source-saver/jwt-auth
```

Next, we need to make the package configurations public. Copy the JWT configuration file from the vendor to confi/jwt.php with this command:

```
php artisan vendor:publish --provider="PHPOpenSourceSaver\JWTAuth\Providers\LaravelServi
```

Now, we need to generate a secret key to handle the token encryption. To do so, run this command:

```
php artisan jwt:secret
```

Inside the <code>config/auth.php</code> file, we'll need to make a few changes to configure Laravel to use the JWT AuthGuard to power the application authentication.

First, we'll make the following changes to the file:

نضيف الدوال التالية الى model user

```
/**
 * Get the identifier that will be stored in the subject claim of the JWT.

*
 * @return mixed
 */
public function getJWTIdentifier()
{
    return $this->getKey();
}

/**
 * Return a key value array, containing any custom claims to be added to the JWT.

*
 * @return array
 */
public function getJWTCustomClaims()
{
    return [];
}

Activate Windows
Go to Settings to activate Windows.
}
```

ننشأ الكونترولر الخاص بال Authentication بالتعليمة التالية php artisan make:controller AuthController ومن ثم نضيف عليه ما يلى

```
namespace App\Http\Controllers;
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Auth;
use Illuminate\Support\Facades\Hash;
use App\Models\User;

class AuthController extends Controller
{
    public function __construct()
    {
        $this->middleware('auth:api', ['except' => ['login','register']]);
```

```
}
public function login(Request $request)
{
  $request->validate([
    'email' => 'required|string|email',
    'password' => 'required|string',
  ]);
  $credentials = $request->only('email', 'password');
  $token = Auth::attempt($credentials);
  if (!$token) {
    return response()->json([
      'status' => 'error',
      'message' => 'Unauthorized',
    ], 401);
  }
  $user = Auth::user();
  return response()->json([
       'status' => 'success',
      'user' => $user,
      'authorisation' => [
         'token' => $token,
         'type' => 'bearer',
```

```
]
    ]);
}
public function register(Request $request){
  $request->validate([
    'name' => 'required|string|max:255',
    'email' => 'required|string|email|max:255|unique:users',
    'password' => 'required|string|min:6',
  ]);
  $user = User::create([
    'name' => $request->name,
    'email' => $request->email,
    'password' => Hash::make($request->password),
  ]);
  $token = Auth::login($user);
  return response()->json([
    'status' => 'success',
    'message' => 'User created successfully',
    'user' => $user,
    'authorisation' => [
      'token' => $token,
```

```
'type' => 'bearer',
    ]
  ]);
}
public function logout()
{
  Auth::logout();
  return response()->json([
    'status' => 'success',
    'message' => 'Successfully logged out',
  ]);
}
public function refresh()
{
  return response()->json([
    'status' => 'success',
    'user' => Auth::user(),
    'authorisation' => [
       'token' => Auth::refresh(),
      'type' => 'bearer',
    ]
  ]);
}
```

نضيف ال routs بالشكل التالي

Add the API routes

To access our newly created methods we need to define our API routes. Navigate to the routes/api.php file and replace the content with the following code:

```
use Illuminate\Http\Request;
use Illuminate\Support\Facades\Route;
use App\Http\Controllers\AuthController;
use App\Http\Controllers\TodoController;

Route::controller(AuthController::class)->group(function () {
    Route::post('login', 'login');
    Route::post('register', 'register');
    Route::post('logout', 'logout');
    Route::post('refresh', 'refresh');

    Activate Windows
});
```

ونتحقق من ما سبق من خلال البوست مان ثم نقوم بتعديل . user Model بإضافة العلاقة بين المستخدم والprojects وأيضا إضافة دالة لحساب عدد ساعات المستخدم الحالى

```
| File | Edit | Selection | View | Go | Run | ... | Userphp - task-6 - Visual Studio Code (Administrator) | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
```

إنشاء الجداول:

إنشاء الجداول باستخدام الـ:Migration

۱. إنشاء جدول :projects مع

php artisan make:modle Project -m

في ملف الـ Migration الذي تم إنشاؤه، قم بإضافة الأعمدة المطلوبة:

والتعديل على project Model

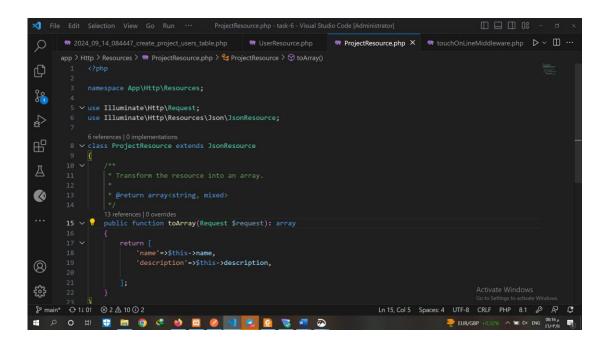
واضاافة العلاقة مع جدول المستخدمين وانشاء دوال للوصول الى احدث مهمة واقدم مهمة

كما نقوم بإضافة maigrationو جدول المهام

بعدها نقوم بانشاء pivot table

```
Edit Selection View Go R 2024_09_14_084447_create_project_users_table.php - task-6 - Visual Studio Code [Administrator]
                                                                  14 082835 create taskts table.php R Task.php
         database > migrations > ** 2024_09_14_084447_create_project_users_table.php
                      public function up(): void
                            Schema::create(table: 'project_user', callback: function (Blueprint $table): void {
                                $table->id();
                                $table->id();
$table->foreignId(column: 'project_id')->constrained()->onDelete(action: 'cascade');
$table->foreignId(column: 'user_id')->constrained()->onDelete(action: 'cascade');
$table->enum(column: 'role', allowed: ['manager', 'developer', 'tester', 'user'])->default(value: 'use $table->integer(column: 'hours')->default(value: 0);
$table->timestamp(column: 'last_activity')->nullable();
$table->timestamps();
d<sub>a</sub>
出
(
                      public function down(): void
8
                           Schema::dropIfExists(table: 'project_users');
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```

ونبدأ بانشاء resourcesلكل مودل



```
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                                         use Illuminate\Http\Resources\Json\JsonResource;
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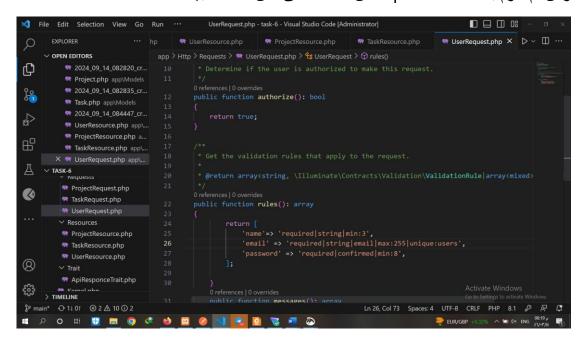
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                                         5 references | 0 implementations
class TaskResource extends JsonResource
          Replacement Project.php app\Models
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public function toArray(Request $request): array

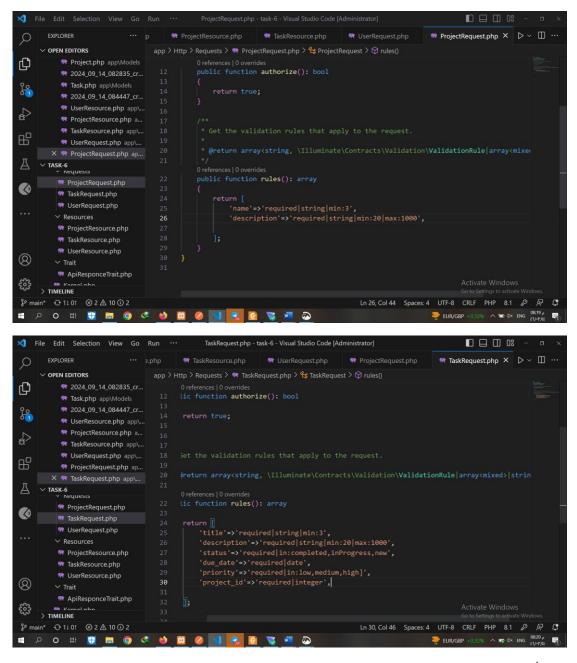
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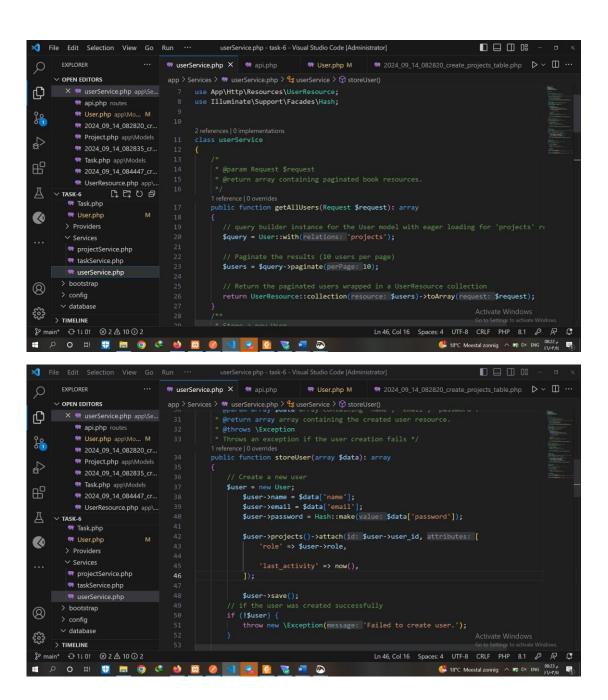
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          TaskRequest.php
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                                                      'description'=>$this->description,
'status'=>$this->status,
                                                       'due_date'=>$this->due_date,
                                                       'project_id'=>$this->project,
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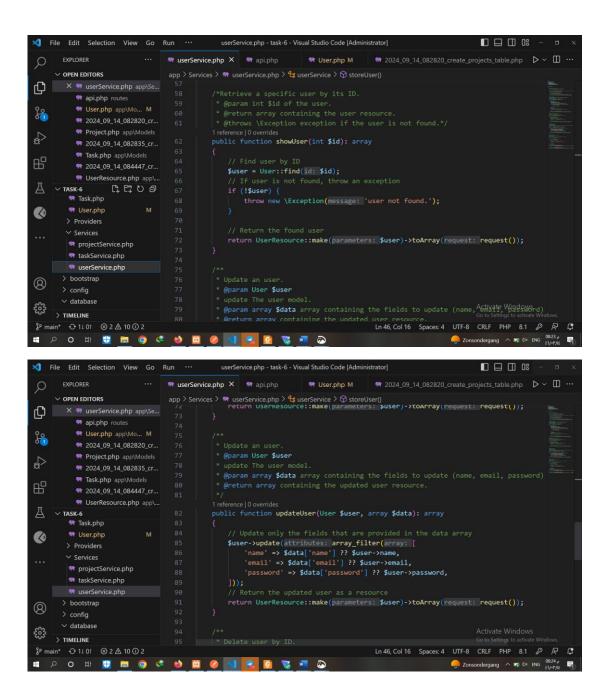
ومن ثم نقوم بانشاء ال requestsمن اجل التحقق من صحة البيانات المدخلة





وننشأ ال services لنضع فيه عمليات ال crud ونخفف التعقيد داخل الكونترولر





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userService.php X api.php
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            api.php routes
                                                       * Delete user by ID.
* @param int $id of user to delete.
* @return void
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            # 2024_09_14_082820_cr...
                                                        * Othrows \Exception an exception if the user is not found
            ♠ Project.php app\Models
$
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public function deleteUser(int $id): void

↑ Task.php app\Models

出
                                                           // Find the user by ID
$user = User::find(id: $id);
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                                                           // Delete user
$user->delete();
          * taskService.php
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public function TaskFilteringByStatus(): void{
    $tasks = Project::whereRelation(relation: 'getTheTasksThroughPgoalest' w/Faddwys:
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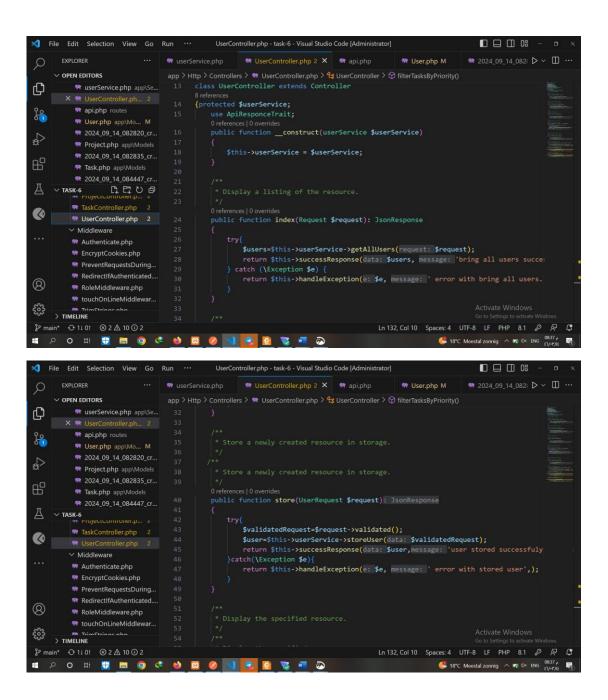
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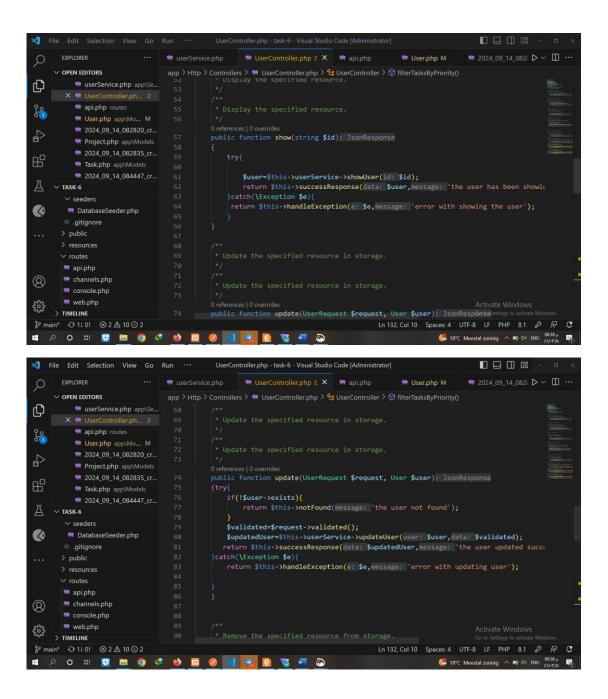
ننشأ دوال تحقق فلترة المهام حسب الأولوية والحالة

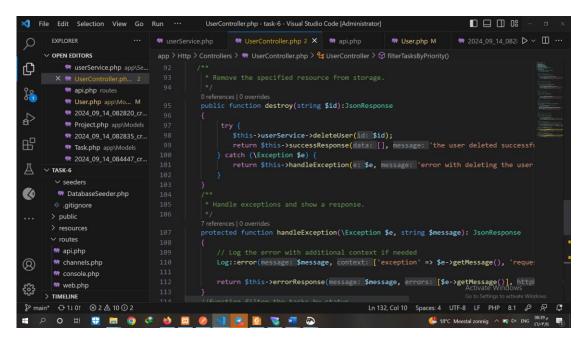
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                                                public function deleteUser(int $id): void
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                                                    $user = User::find(id: $id);
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           Project.php app\Models
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                                                        throw new \Exception(message: 'user not found.');
品
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public function TaskFilteringByStatus(): void{
$tasks = Project::whereRelation(relation: 'getTheTasksThroughProject', column:
          rojectService.php
                                                public function TaskFilteringByPriority(): void{
    $tasks = Project::whereRelation(relation: 'getTheTasksThroughProject', column:
          userService.php
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```

وبنفس الطريقة ننشأ services لكل من ال services وبنفس الطريقة ننشأ ونقوم بانشاء الكونترولر بالتعليمة التالية

Php artisan make:controller User controller







وبنفس الطريقة من اجل الtask ,Project

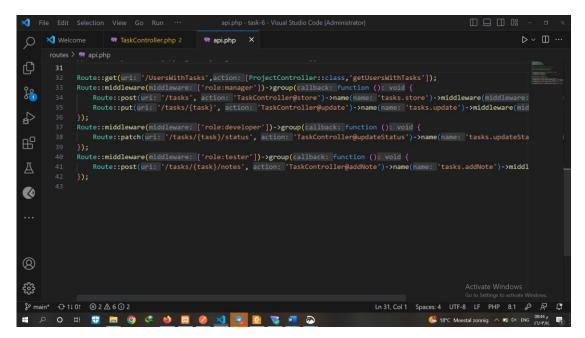
نقوم بانشاء ميدلوير من اجل حساب عدد ساعات المستخدم الحالي

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出
                                                                                                                                                                                        public function handle(Request $request, Closure $next): Response
  A
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                                                                                                                                                                                                                      $request->users()->updateExistingPivot($request->user_id, [
  (
                                                                                                                                                                                                                                          'hours' => Auth::user()->touchOnline()
                                        TrimStrings.php
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                                         ₩ ValidateSignature.php
                                         ₩ VerifyCsrfToken.php

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                                        ProjectRequest.php
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وأخيرا نضيف ال routs



وأخيرا نختبر المشروع عن طريق البوستمان