Authentication & Authorization

Overview

The Event Booking System API enforces **authentication for event management** while allowing **attendee registration without authentication**.

Authentication Use Case Summary

- **Event Management (CRUD)**: Requires authentication.

- **Attendee Registration**: Open to the public; does not require authentication.

Laravel Passport Integration Guide

Step 1: Install Passport

```
composer require laravel/passport
```

Step 2: Migrate and Install

```
php artisan migrate
php artisan passport:install
```

This generates encryption keys and client secrets.

Step 3: Add Passport Service in App\Models\User

```
use Laravel\Passport\HasApiTokens;

class User extends Authenticatable
{
    use HasApiTokens, HasFactory, Notifiable;
}
```

Step 4: Register Passport Routes in `AuthServiceProvider`

```php
use Laravel\Passport\Passport;

public function boot()
{
    Passport::routes();
}
```

Step 5: Configure Auth Guard in `config/auth.php`

```php
'guards' => [
    'api' => [
        'driver' => 'passport',
        'provider' => 'users',
    ],
],
```

Protected vs Public Routes

Protected Routes Example (Authenticated Users Only)

```php
Route::middleware('auth:api')->group(function () {
    Route::apiResource('events', EventController::class);
});
```

Public Routes (No Auth Required)

```php
Route::post('attendees', [AttendeeController::class, 'store']);
```

Token-Based Authentication Flow

1. **User Registers/Login:**

   - POST `/api/register` or `/api/login`

   - Returns a bearer token.

2. **Authenticated Request:**

Include token in headers:

```
Authorization: Bearer {token}
```

   ○

3. **Token Expiry & Refresh:**

   ○ Optionally set up token refresh logic.

Security Tips

- Use HTTPS in production.

- Expire tokens after reasonable periods.

- Use `scopes` for fine-grained access control.

Optional Enhancements

- **Rate Limiting**: Throttle event creation.

- **Role-based Access Control (RBAC)**: Admins vs Managers.

- **Social Login Integration**: Google/Facebook OAuth via Passport bridges.