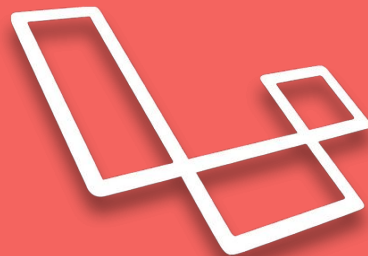# Content
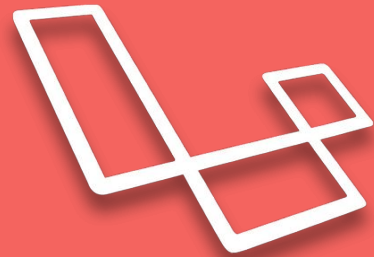
- **Laravel >= 5.5 Eloquent Api Resource**
- **Laravel Passport**
- **Laravel Socialite**

Eloquent Api Resource

- **What Is API:-**

    https://www.youtube.com/watch?v=s7wmiS2mSXY

Eloquent Api Resource
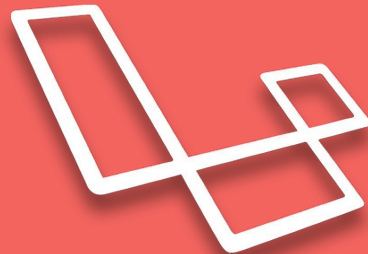
- **What Is Rest (Representational State Transfer) :-**

  It's an architectural style for providing standards between computer systems on the web

  In Rest we are talking about resources (nouns) like (user resource , post resource ,...)

  https://www.codecademy.com/articles/what-is-rest

  https://restfulapi.net/rest-architectural-constraints/

Eloquent Api Resource

- This feature introduced in **Laravel 5.5**

- It's a **transformation layer** that sits between **Eloquent Model** & **Json Response**

  https://laravel.com/docs/master/eloquent-resources#introduction
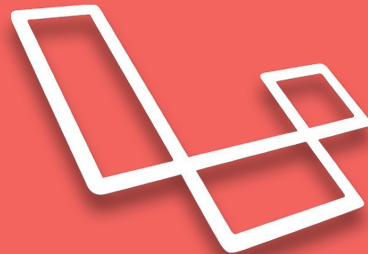
Laravel Passport

- **What Is OAuth (Open Authorization) :-**

    open protocol to allow secure authorization in
    a simple and standard method from web,
    mobile and desktop applications

    https://oauth.net/
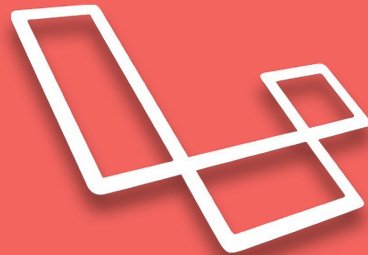
Laravel Passport

- Laravel **Passport** is a package that **implements OAuth** to allow us make **API Authentication**

- Api **don't maintain session state** between requests

- **Grant Type** refers to the way an application gets access token

- The **Grant Type** are essentially a **"mode"** in which the OAuth server will run, **expecting different inputs** and maybe **providing different outputs** (Build Api's You Won't Hate Book Chapter 9 Page 107)
  https://laravel.com/docs/master/passport#installation
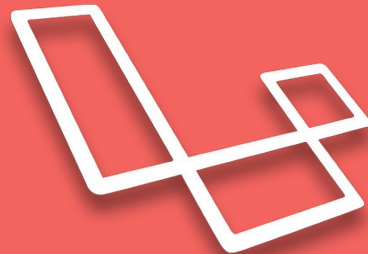
POST ⌄ | http://laravel-preparation.dev/api/oauth/token | Params | **Send** ⌄ | Save ⌄

Authorization | Headers (1) | Body ● | Pre-request Script | Tests | Cookies Cod

Cookies Cod

⦿ form-data ◯ x-www-form-urlencoded ◯ raw ◯ binary

Key	Value	Description	••• Bulk Edit
☑ client_id	2		
☑ client_secret	S2N499WG66O2p2c8BWbjRDv9WR8es7SvIccjX5eX		
☑ username	admin@admin.com		
☑ password	admin		
☑ grant_type	password		
New key	Value	Description	

Body | Cookies | Headers (12) | Test Results

Status: 200 OK | Time: 1543 ms | Size: 2.17 KB

Pretty | Raw | Preview | JSON ⌄ | ⇥ | 📋 🔍

```json
1  {
2      "token_type": "Bearer",
3      "expires_in": 86400,
4      "access_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImp0aSI6IjU3YWViZjQ3ZGRkOTc3MDMxNTNlZWM2NzVlODI3NWYyZmU3ZDg5ZDcxOWM1Y2NjNGMzYzcyNGQ2YmMyNjA1ZjBiNDUyNjU1ZWM4ZTc1MTNkIn0
          .eyJhdWQiOiIyIiwianRpIjoiNTdhZWJmNDdkZGQ5NzcwMzE1M2VlYzY3NWU4Mjc1Zj JmZTdkODlkNzE5YzVjY2M0YzNjNzI0ZDZiYzI2MDVmMGI0NTI2NTVlYzhlNzUxM2QiLCJpYXQiOjE1MjMxMjg4NTcsIm5iZiI6MTUyMzEyODg1NywiZXhwIjoxNTIzMjE1MjU
          3LCJzdWIiOiIxIiwic2NvcGVzIjpbXX0.snMprok9XVLvkI8KR_iPCSTe0ycSruCX88j7hQD3yPRe_r5TzBhS_iey81tADWvlFMfHNW-C71Kwxrquq4-Tz0X8Jp_RDkXFjN17HhZ9a3jdScjh8RrFrbZPhePAupmunmp3TyZBFv8MYPtSX1SA1E_H6z_8tb7x
          -VmpQHXWSFmMttITEuC81x7K3HX7ro_sr1DXWvdzyh7841RlnpmQeTNXcgrLJKkhqsme2M
          -HLrQjvT5RjRTUr8pmXvg7kyoPQJ8CHR_b9nqotuzaX0hLdcNOjc4pkEO82MLbZgWguIpFqBY4E9YtsQMQG12nq74_wulY16kjyU0AZD3AU69KJUlFl0oTjZhG1CPZenOkIA2J
          -ZscGIXRNg6l0ZWVVDwBfDvaSb5kaDM9Tc0OGnkT6g16e1NbJe5iwc1en8MueOTq39SThnjs-GKIBc53LHSxlKl4tt-HFl270AnStu9rZ4Hpej39z3YjEe2K75zR_3OuLIgYS3oJ6P6KsLBCu1kJ4PHUmyA9L-D69RTaaasVsVOAs-yeFt
          -BB4M_6RfnaS1hZCmTZx24EOnzXmlhEUVFB_-_92VrF01zl5hNMlOgz7k0Ql1nGyunGBQgCyg-A5EvxFazj2pZLb5rLKVf76Q_bWV8Yss1-vJf4Bd7CzowZOvv4fIHUGiiGXTow01NOyE",
5      "refresh_token": "def5020008d2b15daf90e4b7f9b506bba803aac451566cd76963799450e202d40c41743aa4bd1f6bf696edaab4ba0cf20e86ae7aa5ba21adaa8b3d9daafebd7bc3706c08953c85b1f94e8ddce00b57ff2974dcfd38b97f57714ce5c1d8
          5ff224cd88324d4ca24e8ee5205bbb1567b07c93152f484e5ba0cc9bed4dd3b4ae39cbc8d8d7669aec258900549a62d27d7bca0de9b2cda68784b04cab8d192d53999994ec615c156cbccf6581cbd87d6ce486f057f246d785bc279543b472a5d3b369cc
          ba5b4a0667651bbe6921a6f5649240324024b79ec99e7dd133e4d2dfc8e59b84b1b99e715adab2344435f1d61bb74d671571327e0f54a3097363572c4e1b46cc8af8ea6d1be65e51ba384b8a89ff7cf868be868f49dad1dfac91e1901ab052ea2e4226ac0
          1a2239fe04f69068c97a64be337b0e0f90f735c735a306d78b78c2585801b8730ea365066c224fb981e8dd1f05eb6e1090370e1f99c3bf0e1a17d549"
6  }
```

GET ∨ | http://laravel-preparation.dev/api/users | Params | Send ∨ | Save ∨

Authorization | Headers (2) | Body | Pre-request Script | Tests | Cookies Code

	Key	Value	Description	⋯	Bulk Edit	Presets ▼
☑	Accept	application/json				
☑	Authorization	Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImp0aSI6IjY...				
	New key	Value	Description			

Body | Cookies | Headers (12) | Test Results | Status: 200 OK | Time: 1285 ms | Size: 2.12 KB

Pretty | Raw | Preview | JSON ∨ | ⇄

```
1  {
2      "data": [
3          {
4              "object": "User",
5              "id": "8mqg63w6p9pzyox4",
6              "name": "First Name",
7              "slug": null,
8              "email": "student@mail.com",
9              "confirmed": false,
10             "profile_image": null,
11             "avatar_image": null,
12             "gender": null,
13             "birth": null,
14             "social_auth_provider": null,
15             "social_id": null,
16             "social_avatar": {
17                 "avatar": null,
18                 "original": null
19             },
20             "created_at": {
21                 "date": "2018-03-09 15:09:35.000000",
22                 "timezone_type": 3,
23                 "timezone": "UTC"
```
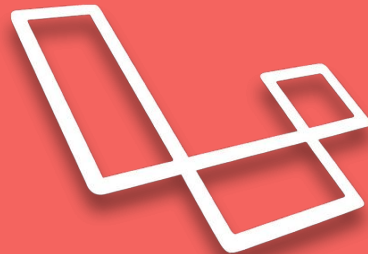
Laravel Socialite

- Laravel **Socialite** is a package that provides **authentication** to **OAuth providers** like (Facebook , Twitter , …)

  https://laravel.com/docs/5.6/socialite#introduction
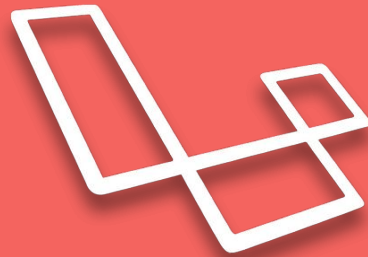
Lab 3 (part 1)

- Install Laravel **Passport**

- Make two endpoints (**api/posts GET** , **api/posts POST**) to **get all posts** and another one to **store a single post**

- Add **Authentication middleware** on the two endpoints

- In the **api/posts GET** you must use **Eloquent Api Resource with pagination** , in the response each post must include the post creator info using **UserResource**

- Apply **Eager Loading** when getting **all posts** to include the **user relation** to enhance performance

Lab 3 (part 2)

- Install Laravel Socialite

- Allow login with facebook & google + and store user info for both providers , make sure when logout and login again to not duplicate the records

  Hint :- make another table for social authentication accounts if it will help you (Again it's your decision to wither make it or not) , also i think in this approach you will need to check the multi guard authentication

- Bonus :- when i login with email & password ,make two buttons that allow me to connect my facebook or google + account , and after i connect one of the accounts or both , the buttons are changed to be show facebook info for example to show the connected social account info
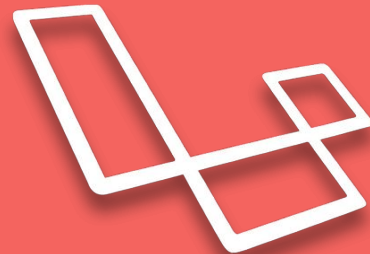
Thank You
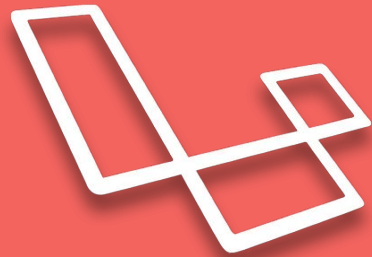
- **These slides are based on**
Laravel Up & Running Book
http://shop.oreilly.com/product/0636920044116.do

Taylor Otwel Talk At Laracon Online March-2017

Matt Stuffer Talk At Laracon Online March-2017

Laravel Documentation
https://laravel.com/docs/master

Author

Ahmed Mohamed Abd El Ftah Intake 36 Graduate

- **Gmail :-** ahmedabdelftah95165@gmail.com
- **LinkedIn :-** https://goo.gl/b5j8aS
- **Github :-** https://github.com/Te7a-Houdini