# Contributing Guide

Hi! I'm really excited that you are interested in contributing to Canvas. The following guide will help you get your environment set up to begin making changes.

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## Before you get started

- Make sure the [Vue DevTools](https://chrome.google.com/webstore/detail/vuejs-devtools/nhdogjmejiglipccpnnnanhbledajbpd?hl=en) extension is installed in your Chrome browser

- Add the following function from [Caleb Porzio](https://calebporzio.com/bash-alias-composer-link-use-local-folders-as-composer-dependancies/) to your `~/.bashrc`, `~/.bash\_profile` or `~/.zshrc`:

```bash

composer-link() {composer config repositories.local '{"type": "path", "url": "'$1'"}' --file composer.json}

```

## Development Setup

### Git

Fork the project on [https://github.com/cnvs/canvas](https://github.com/cnvs/canvas) to your own account. Then clone the fork with the following command:

```bash

git clone https://github.com/your-account/canvas.git

```

In an adjacent directory from where you cloned the repo, create a new Laravel project with the following command:

```bash

composer create-project --prefer-dist laravel/laravel blog

```

### Database

The fastest way to get a database up and running is to issue the following command:

```bash

touch database/database.sqlite

```

Now update your `.env` file to reflect the new database:

```php

DB\_CONNECTION=sqlite

```

### Authentication

> Note: It's assumed we're developing on Laravel 6.\* since that's the current LTS

From your Laravel app, create the authentication system and run the following commands:

```bash

composer require laravel/ui

php artisan ui vue --auth

php artisan migrate

```

### Directories

From your Laravel app, link the local version of Canvas using the `composer-link()` function:

```bash

composer-link ../canvas/

composer require cnvs/canvas @dev

```

### Installation

Now that the projects are linked, run the following installation steps:

```bash

php artisan canvas:install

php artisan storage:link

php artisan canvas:ui

```

Statistics are a core component to the app, so it's best to have a large dataset in place when developing. To generate some, add the following snippets to your Laravel app:

Create a new class named `CanvasTrackingDataSeeder` and add this to the `run()` method:

```php

\Illuminate\Support\Facades\DB::table('canvas\_views')->truncate();

\Illuminate\Support\Facades\DB::table('canvas\_visits')->truncate();

factory(\Canvas\View::class, 2500)->create();

factory(\Canvas\Visit::class, 2500)->create();

```

In the `run()` method of the `DatabaseSeeder`:

```php

$this->call(CanvasTrackingDataSeeder::class);

```

Create a new factory named `ViewFactory` and add this definition:

```php

$factory->define(\Canvas\View::class, function (\Faker\Generator $faker) {

$timestamp = today()->subDays(rand(0, 60))->toDateTimeString();

return [

'post\_id' => \Canvas\Post::all()->pluck('id')->random(),

'ip' => $faker->ipv4,

'agent' => $faker->userAgent,

'referer' => $faker->url,

'created\_at' => $timestamp,

'updated\_at' => $timestamp,

];

});

```

Create a new factory named `VisitFactory` and add this definition:

```php

$factory->define(\Canvas\Visit::class, function (\Faker\Generator $faker) {

$timestamp = today()->subDays(rand(0, 60))->toDateTimeString();

return [

'post\_id' => \Canvas\Post::all()->pluck('id')->random(),

'ip' => $faker->ipv4,

'agent' => $faker->userAgent,

'referer' => $faker->url,

'created\_at' => $timestamp,

'updated\_at' => $timestamp,

];

});

```

You can now run `php artisan db:seed` and you will have a substantial amount of views for each post.

### Developing

Instead of making and compiling frontend changes in the package, then having to re-publish the assets in the Laravel app again and again, we can utilize a symlink:

```bash

# remove the existing assets from the Laravel app

rm -rf public/vendor/canvas/\*

# go inside the empty directory and create a symlink

cd public/vendor/canvas

ln -s ../../../../canvas/public/\* .

```

Once you've made your changes, [create a pull request](https://github.com/cnvs/canvas/compare) from your fork to the `develop` branch of the project repository.