

Laravel Project – TDD Approach

Setup Local Working Environment:

1. To create a project using Laravel Framework, we first must download an environment where we will be running the Project. In this setup, I am using Laragon as my working environment as it simplifies the setup for PHP, MySQL and Apache.

- You can download the working environment on this link <https://laragon.org/docs/install.html> and follow the steps on the site to setup Laragon. This will download the latest version of PHP, MySQL and Apache.

Once successful, you can start Laragon by clicking on the Start All button.



* Start All – will start all the services you need when creating a website. It will start the Apache, MySQL, and PHP setup for you.

* Database – will be for managing your database creation.

* Terminal – will open a terminal for you, it is just like a cmd console window.

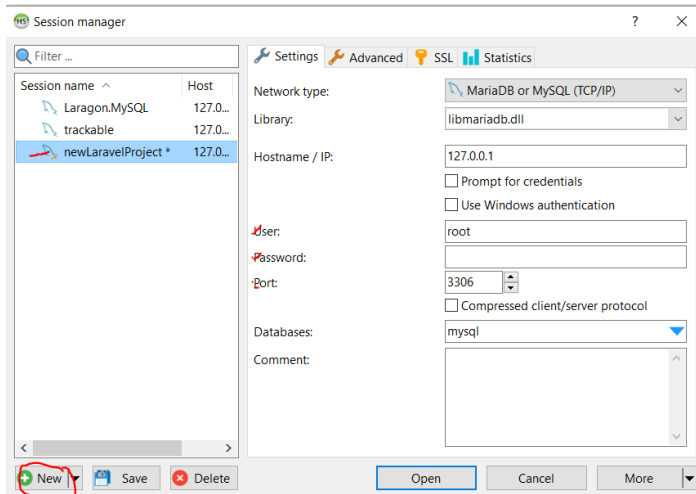
* Root – will take you to your project folders root.

2. After downloading Laragon, you will also need to download composer. Composer is a package that manages dependencies of PHP and you can download it here on this link <https://getcomposer.org/download/>, just follow the instructions in the site on how to download and install for Windows or Mac.

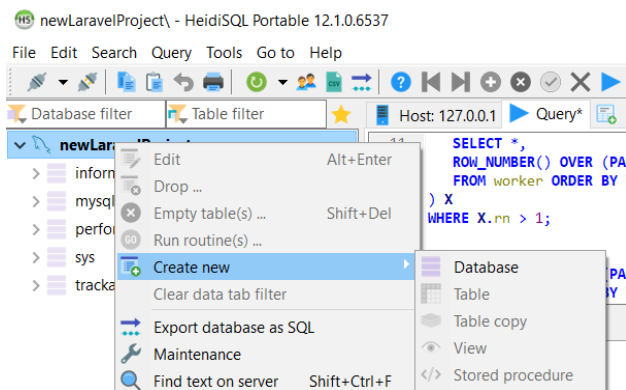
3. We also need to have a code editor to write our code, for this one I am using Visual Studio code and you can download it using this link <https://code.visualstudio.com/download>

Project Setup Database

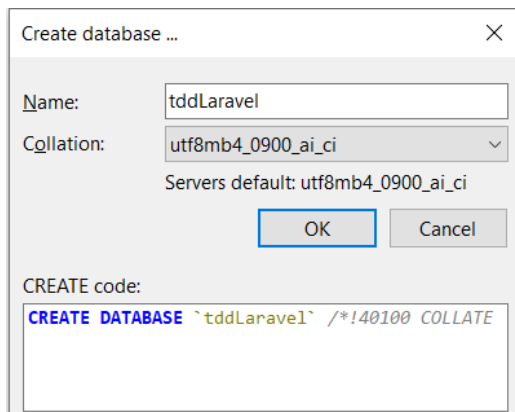
1. When doing project, I prefer to first setup my database environment for the project. To setup the environment settings, just click on Database in Laragon and a new window will appear. To create a new setting of database, just click on new and type in the name of your setting.
2. For this one, will be using the default which is root for the user and blank for the password and port is 3306. But in real word, the username should not be root and password should not be blank. Once finish, click on Open and confirmed "Yes" to save the settings.



3. The next step is to create a database for the environment we have setup, right click on the name of the Project and select create new then database.



4. A new window will appear and you just need to type in the name of your Database. For the collation, we can leave it as is and then click on "OK"



Project Setup Laravel

1. On Laragon, click on terminal and a window console will appear. To check if composer was successfully installed, just run `composer -v` on the terminal. Running this command will show you the version of composer you have downloaded.
2. The next step is to clone this repo on your root folder in Laragon.
Type: `git clone [http://127.0.0.1:8000]`.
3. Once cloning of the project is finished, go to `.env` and update this information:

```
DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=<the name of your database>
DB_USERNAME=root
DB_PASSWORD=
```

After updating this information, go to your terminal and type this commands:

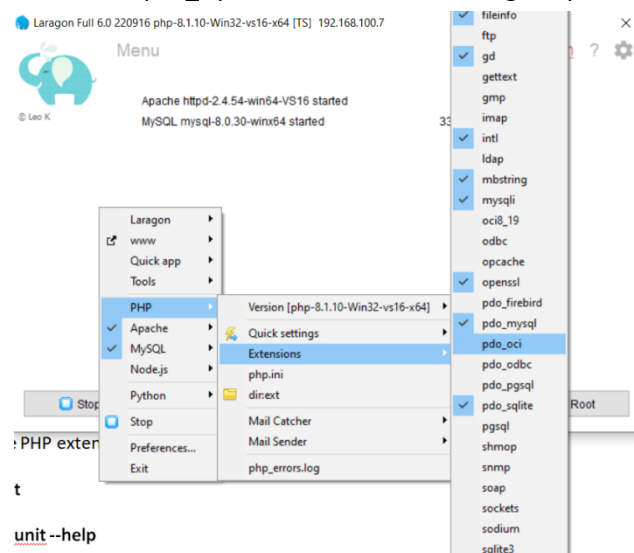
```
php artisan optimize:clear
```

```
php artisan serve
```

if no errors where encountered, you can go to this link <http://127.0.0.1:8000/> or the url provided by the terminal.

Enable PHP Extensions

1. To enable PHP extensions, go to Laragon Window and right click on the mouse. Select -> PHP -> Extensions and click on `pdo_sqlite`. After that restart Laragon by clicking the stop and running it again.



Running a test unit

Run `.\vendor\bin\phpunit` or `php artisan test` on your Laragon console terminal.