Web Programming Tutorials

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Tutorial - 16

Install Laravel and Find out the answers to the following questions.

1. What is a Composer?

Composer is an application-level dependency manager for the PHP programming language that provides a standard format for managing dependencies of PHP software and required libraries.

2. Define Framework and Laravel.

A) Framework:

A framework is a collection of pre-written code and libraries that provide a foundation for building software applications. A framework typically includes reusable code, tools, and best practices that help developers build applications more quickly and efficiently by providing a structured approach to development.

B) Laravel:

Laravel is a PHP web application framework that follows the Model-View-Controller (MVC) architectural pattern. It provides a comprehensive set of features and tools for building modern, maintainable, and scalable web applications. Laravel includes features such as routing, middleware, database migrations, authentication, and templating that help developers build applications faster and with less code.

3. Why use Laravel?

Laravel is a popular PHP framework that offers several benefits for developers. Some of the main reasons to use Laravel for web application development include:

1) **Elegant syntax:** Laravel has an elegant and expressive syntax that makes it easy to write clean and readable code. This can help developers be more productive and write code that is easier to maintain.

2) **MVC architecture:** Laravel follows the Model-View-Controller (MVC) architectural pattern, which helps developers separate the business logic from the presentation layer of their application. This makes it easier to develop, test, and maintain applications over time.

3) **Built-in features:** Laravel includes many built-in features and tools that can help developers build web applications more quickly and efficiently. These features include routing, middleware, authentication, database migrations, and more.

4) **Security:** Laravel has several security features built in, such as protection against SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF) attacks. These security features can help developers build more secure web applications.

5) **Database migrations:** Laravel includes a powerful database migration system that makes it easy to manage database schema changes. This can help developers avoid common issues that arise when making changes to a database schema.

6) **Testing:** Laravel has a built-in testing framework that makes it easy to write and run automated tests for web applications. This can help developers catch bugs and ensure that their applications are working as intended.

4. What are the prerequisites for Laravel 8?

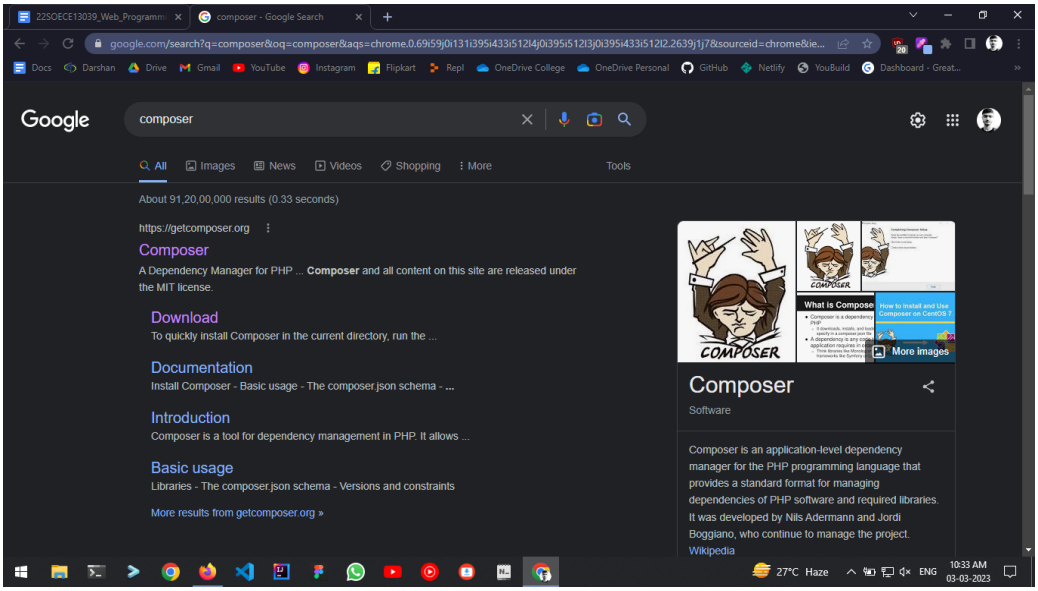
To use Laravel 8, you need PHP version 7.3 or higher, along with the BCMath, Ctype, Fileinfo, JSON, Mbstring, OpenSSL, PDO, Tokenizer, and XML PHP extensions. Additionally, you should have a basic understanding of PHP, web development, and the MVC architectural pattern.

5. Make a doc file of the installation process.

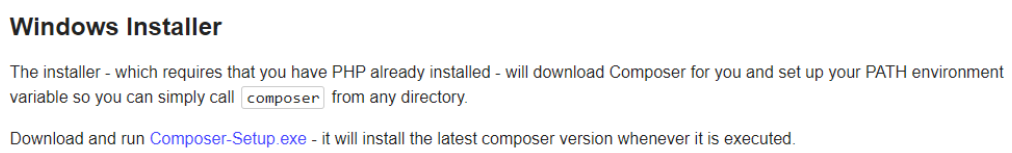
There are two main steps to install Laravel, first you will need Composer and Then you will need to download Laravel.

A) Install Composer

1. Go to Google and search Composer.
2. Click on the Download Link.



3. You will be redirected to the Download page, Click on the Blue Link called “Composer-Setup.exe”, it will start downloading the Composer file.

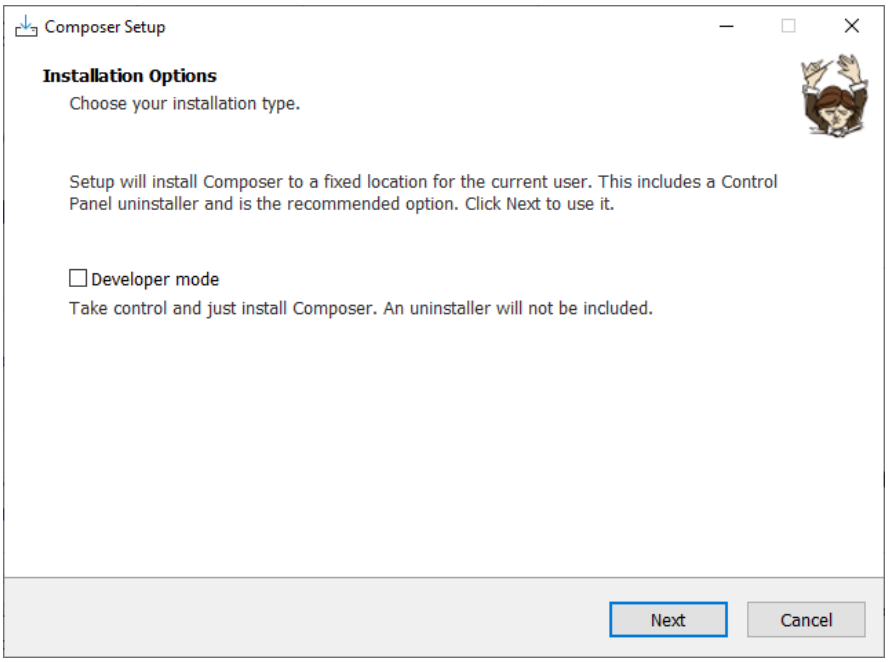


Windows Installer

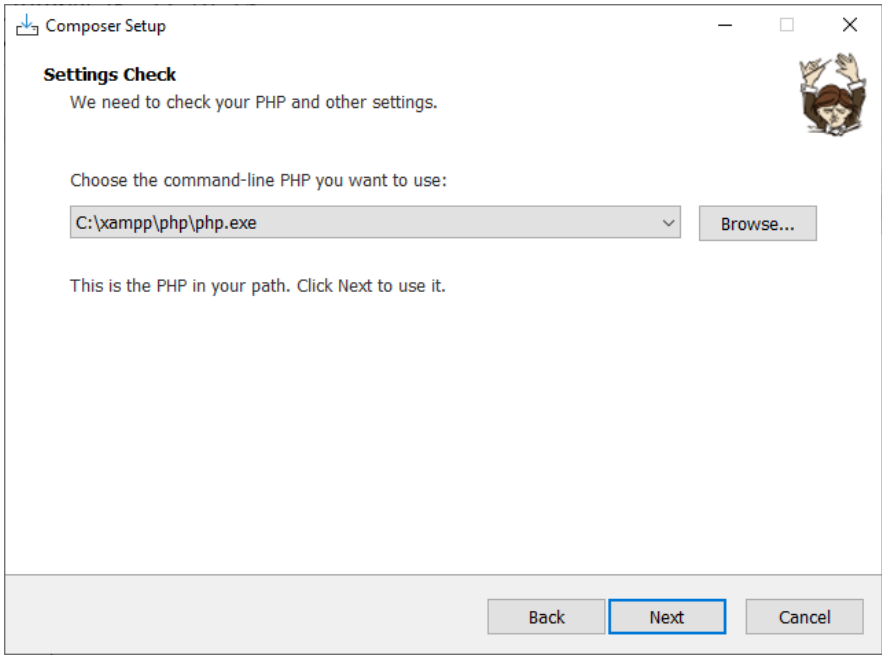
The installer - which requires that you have PHP already installed - will download Composer for you and set up your PATH environment variable so you can simply call `composer` from any directory.

Download and run Composer-Setup.exe - it will install the latest composer version whenever it is executed.

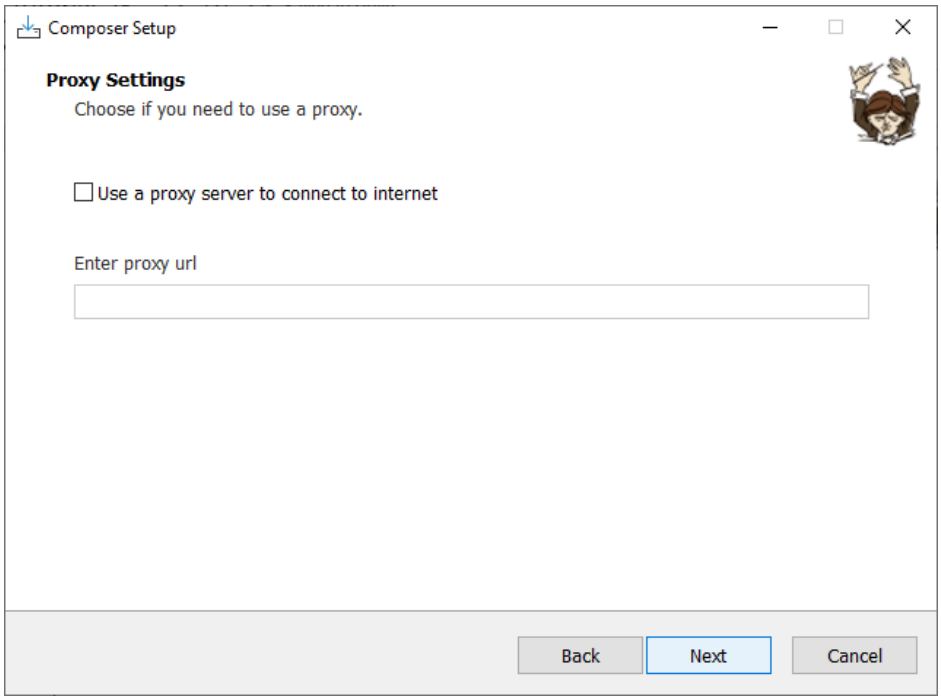
4. Open the Installed File.
5. You will see the following Window. Click on Next.



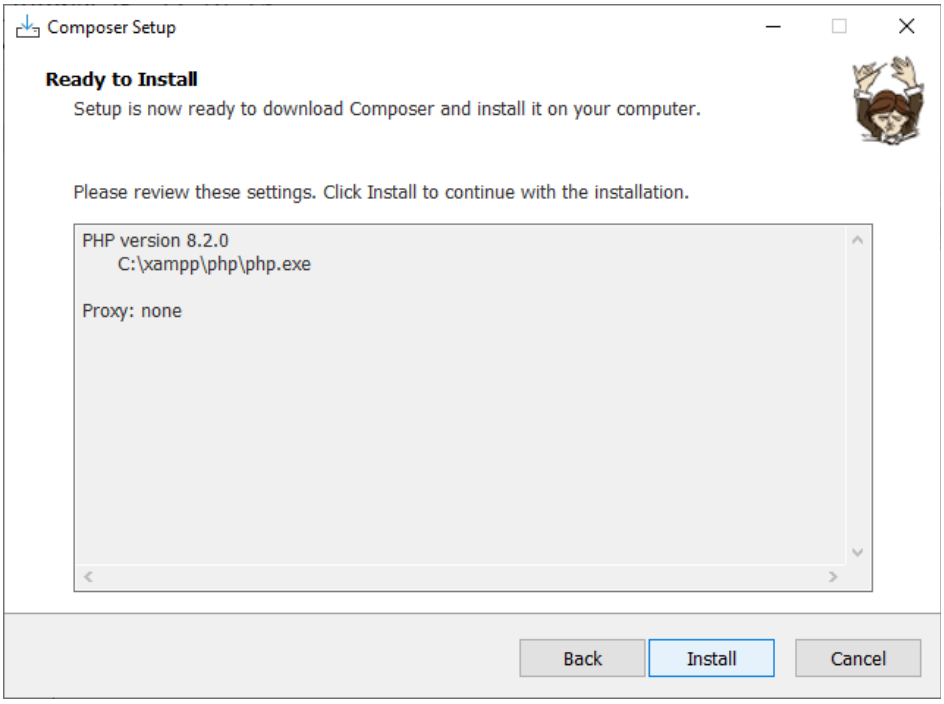
6. Select Your Preferred Php Version and Click on Next.



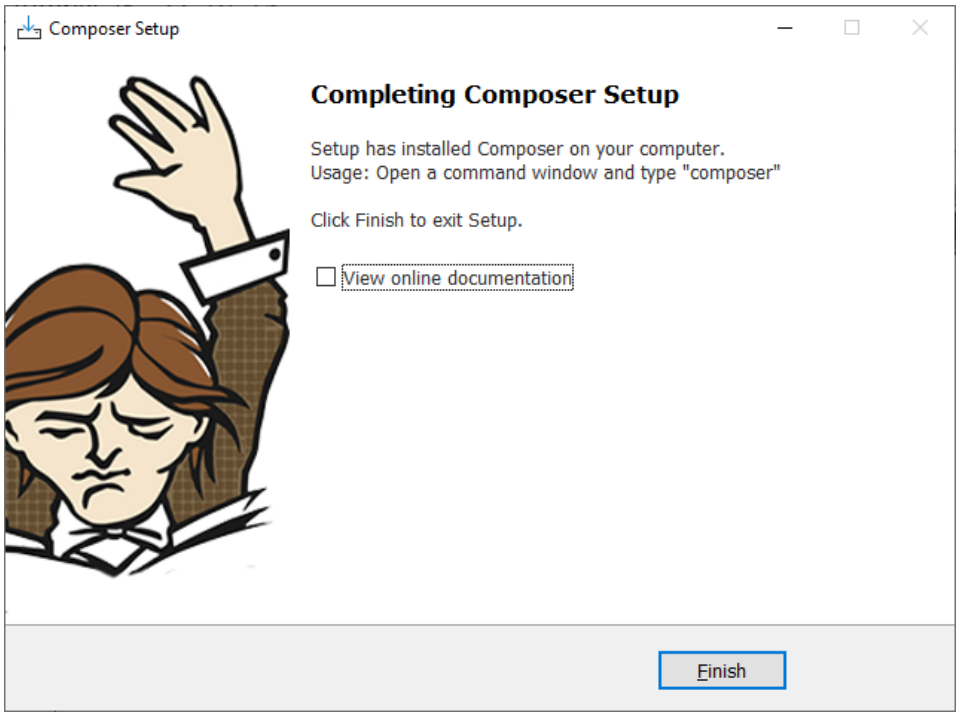
7. If you want to use a proxy then enter your proxy url and click next. Otherwise leave it empty and click on next.



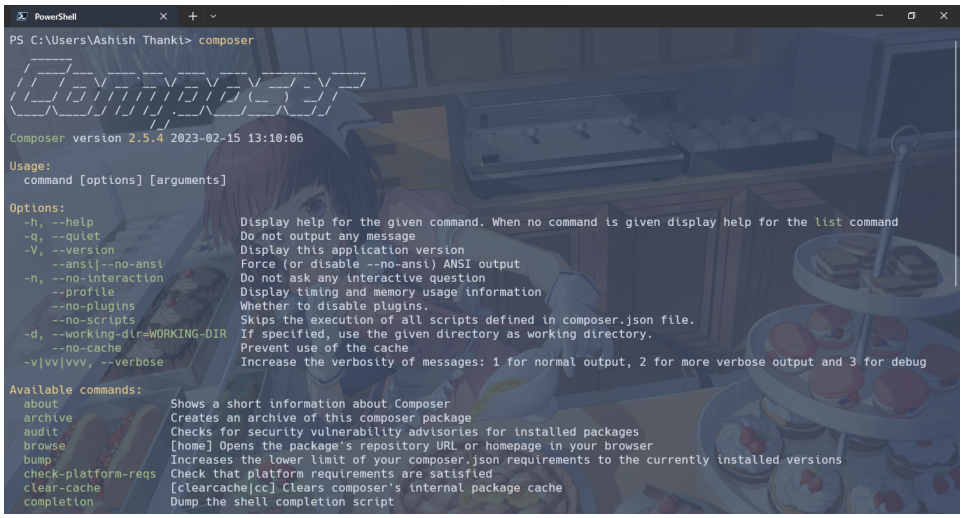
8. Click on the Install Button.



9. Wait for it to be installed, once it has completed the installation process, it will show you the following screen. Click on Finish.

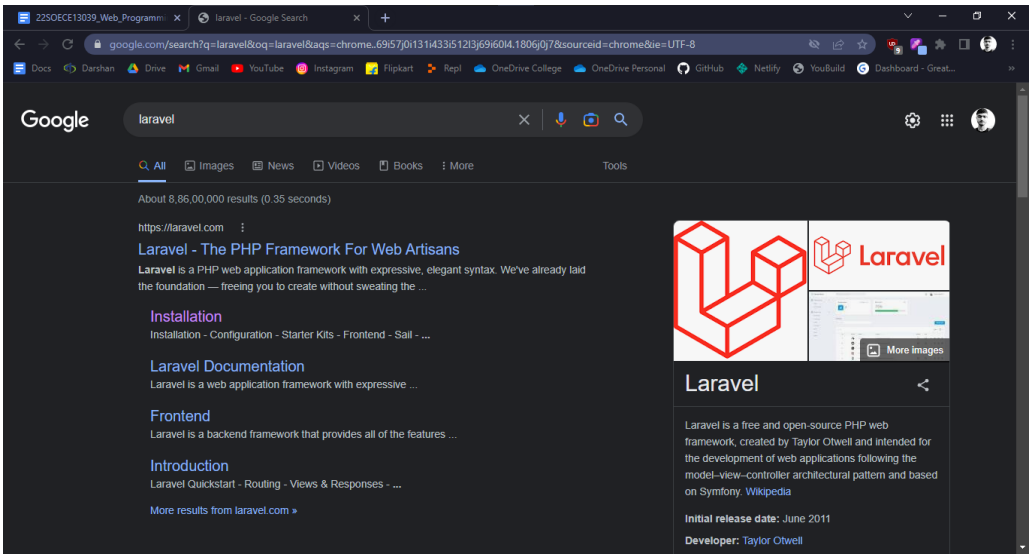


10. To Check if the Composer is successfully installed or not, go to your terminal and type composer and hit enter. If you see the following output then the Composer is installed Successfully.



B) Install Laravel

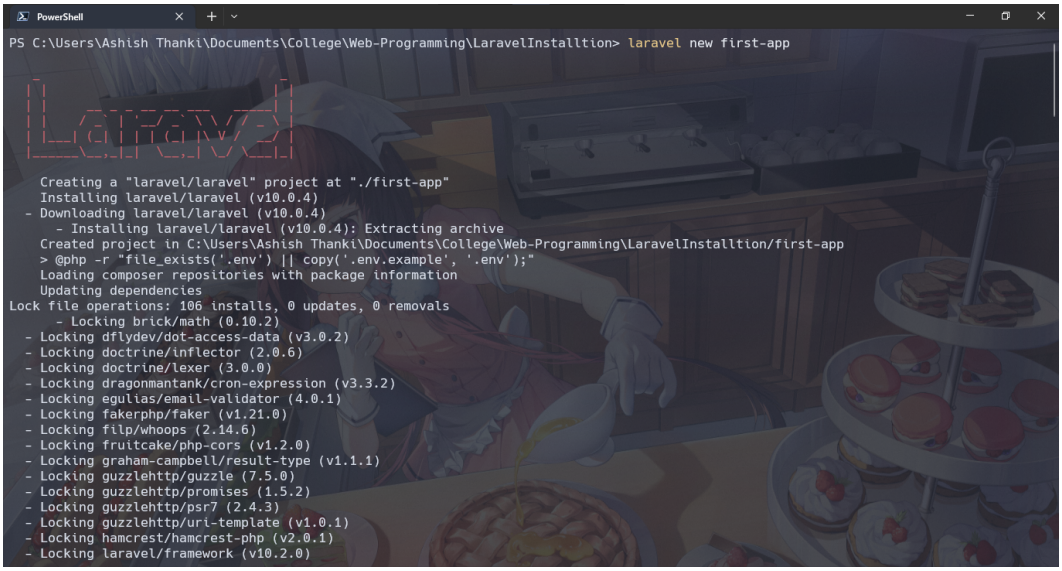
1. Go to Google and search Laravel.
2. Click on the Installation Link



3. Install Laravel Globally using Composer.

4. Now Open terminal to your desired Directory.
5. Run the Following Command:

```
laravel new project-name
```

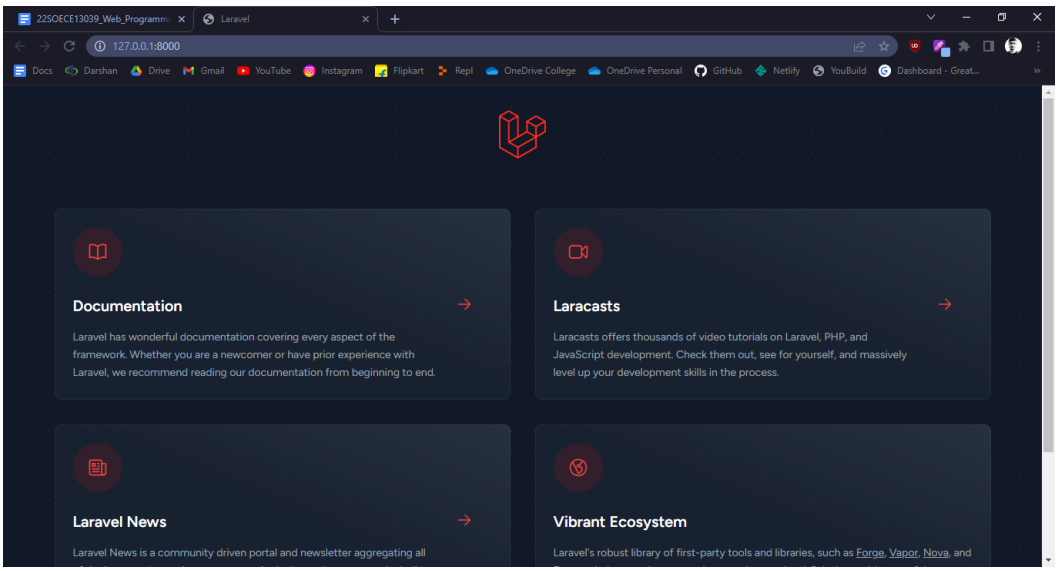


6. Wait for it to Create the Project, once it is completed you should see the following:

7. Now Change your directory to the Created Project directory and run the following Command:

```
php artisan serve
```

8. Go to the Provided Localhost URL:



6. Can we Install Laravel Without a Composer?

No, you cannot install Laravel without Composer. It is a dependency manager for PHP that is used to install and manage dependencies required by Laravel and other PHP packages. Laravel itself is built on top of many other PHP packages, and Composer makes it easy to manage these dependencies. Therefore, to install Laravel, you must have Composer installed on your system.