

As a fresh developer starting with Laravel, here's a complete step-by-step guide to set up your development environment:

Install Required Software

A) Install XAMPP (Web Server Environment)

1. Download XAMPP from <https://www.apachefriends.org>
2. Run the installer

B) Install Composer (PHP Dependency Manager)

1. Download from <https://getcomposer.org>
2. Run the installer
3. Select "Install for all users"
4. When prompted for PHP, browse to: C:\xampp\php\php.exe
5. Check "Add to PATH" option

C) Install VS Code (Code Editor)

1. Download from <https://code.visualstudio.com>
2. Run the installer with default options
3. Recommended extensions to install after setup:
 - Laravel Artisan
 - PHP Intelephense
 - Laravel Blade Snippets
 - PHP Namespace Resolver
 - Prettier - Code formatter
 - Live Server (optional)
 - Laravel Extra Intellisense

D) Install Git (Version Control)

1. Download from <https://git-scm.com>
2. Run installer with these options:
 - Select "Use Git from the Windows Command Prompt"
 - Choose "Checkout as-is, commit Unix-style line endings"
 - Select "Use Windows' default console window"

2. Configure PHP Environment

1. Edit PHP configuration:

- Navigate to C:\xampp\php\php.ini
- Uncomment (remove semicolon from) these lines:

extension=fileinfo

extension=gd

extension=mbstring

extension=openssl

extension=pdo_mysql

2. Restart Apache in XAMPP after making changes

3. Install Node.js (for frontend assets)

1. Download LTS version from <https://nodejs.org>
2. Run installer with default options
3. Verify installation:

node -v

npm -v

4. Create Your First Laravel Project

1. Open command prompt
2. Navigate to your web server directory (usually C:\xampp\htdocs)
3. Run Laravel installer:

composer create-project laravel/laravel my-first-project

4. Wait for installation to complete
5. Navigate into your project:

cd my-first-project

6. Start the development server:

php artisan serve

7. Open browser to <http://localhost:8000> to see Laravel welcome page

5. Additional Recommended Tools

A) Database Management

- **MySQL Workbench:** For database management <https://www.mysql.com/products/workbench/>
- **TablePlus:** Alternative GUI database tool <https://tableplus.com>

B) Testing Tools

- **Postman:** For API testing <https://www.postman.com>

C) Terminal (Optional)

- **Windows Terminal:** Better terminal experience [Microsoft Store]
- **Git Bash:** Comes with Git installation

6. Verify Your Setup

Check all components are working:

1. PHP: `php -v`
2. Composer: `composer --version`
3. Laravel: `php artisan --version`
4. Node: `node -v` and `npm -v`
5. Git: `git --version`