**Introduction to Laravel PHP Framework - Industry Use**

* **What is Laravel?**

Laravel is an **open-source PHP framework** used for building **modern, scalable web applications**. It follows the **Model-View-Controller (MVC)** architectural pattern and provides built-in tools for **authentication, routing, database management, and security**.

✅ **Developed by**: Taylor Otwell  
✅ **First Release**: 2011  
✅ **Latest Version**: Laravel 11 (2024)  
✅ **Built on**: PHP, Composer

* **Why Use Laravel in the Industry?**

Laravel is **widely used in the industry** because of its **simplicity, security, and scalability**. It helps developers build **enterprise-level applications** quickly with clean and efficient code.

**🔹 Key Features of Laravel for Industry Use**

**1️ :-- MVC Architecture:**

* Laravel follows **MVC (Model-View-Controller)**, making code **structured and maintainable**.
* **Example:**

Route::get('/users', [UserController::class, 'index']);

Here, the route calls the index() function in UserController, which interacts with the User model.

**2️ :-- Eloquent ORM (Object-Relational Mapping):**

* **Easier database operations** without writing raw SQL queries.
* Example: Fetch users from the database:

$users = User::all();

**3️ :-- Blade Templating Engine:**

* **Faster and cleaner** than traditional PHP.
* Example: resources/views/welcome.blade.php

<h1>Welcome, {{ $name }}</h1>

**4️ :-- Artisan CLI (Command Line Interface):**

* Automates **database migrations, testing, and model creation**.
* Example: Create a model

php artisan make:model Product

**5️ :-- Security Features:**

* Laravel has **built-in protection** against **SQL injection, XSS (Cross-Site Scripting), and CSRF (Cross-Site Request Forgery).**
* **Example: CSRF Protection** in forms

<form method="POST">

@csrf

<input type="text" name="name">

<button type="submit">Submit</button>

</form>

**6️ :-- Routing System:**

* Laravel makes it easy to define **clean, SEO-friendly URLs**.
* Example: Defining a route

Route::get('/home', function () {

return view('home');

});

**7️ :-- Authentication and Authorization:**

* Built-in user authentication system:

php artisan make:auth

**8️ :-- RESTful API Development:**

* Laravel supports **API development** with Resource Controllers and **JWT authentication**.
* Example:

Route::apiResource('products', ProductController::class);