**Laravel php artisan command**

🧱 **Project Setup / Environment**

| **Command** | **Description** |
| --- | --- |
| php artisan serve | Starts the local development server at http://127.0.0.1:8000 |
| php artisan key:generate | Generates a new APP\_KEY in .env file for encryption |
| php artisan config:cache | Combines all config files into one cached file for faster loading |
| php artisan config:clear | Clears cached configuration |
| php artisan cache:clear | Clears the application cache |
| php artisan route:clear | Clears the cached routes |
| php artisan view:clear | Clears all compiled Blade views |
| php artisan optimize | Optimizes the framework for better performance |
| php artisan optimize:clear | Clears all cache (config, route, view, event) at once |
| php artisan storage:link | Creates a symbolic link between public/storage and storage/app/public |
| php artisan down | Puts the application into maintenance mode |
| php artisan up | Brings the application out of maintenance mode |

**Database & Migrations**

| **Command** | **Description** |
| --- | --- |
| php artisan migrate | Runs all pending migrations to update the database schema |
| php artisan migrate:rollback | Rolls back the last batch of migrations |
| php artisan migrate:reset | Rolls back **all** migrations |
| php artisan migrate:refresh | Rolls back all migrations and re-runs them |
| php artisan migrate:fresh | Drops all tables and re-runs migrations from scratch |
| php artisan make:migration create\_table\_name\_table | Creates a new migration file |
| php artisan db:seed | Runs all seeder classes to populate data |
| php artisan db:seed --class=UserSeeder | Runs a specific seeder class |
| php artisan migrate --seed | Runs migrations and then seeds data |
| php artisan tinker | Opens Laravel’s interactive shell to run PHP code or Eloquent queries directly |

⚙️ **Model, Controller, and Resource Generation**

| **Command** | **Description** |
| --- | --- |
| php artisan make:model Student | Creates a new Eloquent model |
| php artisan make:model Student -m | Creates model with a migration file |
| php artisan make:model Student -mc | Creates model with migration and controller |
| php artisan make:controller StudentController | Creates a controller |
| php artisan make:controller StudentController --resource | Creates a RESTful resource controller (with CRUD methods) |
| php artisan make:controller StudentController --resource --model=Student | Creates a RESTful resource controller (with CRUD methods) for model |
| php artisan make:controller Api/StudentController --api | Creates an API controller (no create/edit views) |
| php artisan make:request StoreStudentRequest | Creates a form request class for validation |
| php artisan make:resource StudentResource | Creates an API resource for transforming JSON output |
| php artisan make:policy StudentPolicy | Creates a policy class for authorization |

💾 **Database Seeding & Factories**

| **Command** | **Description** |
| --- | --- |
| php artisan make:seeder StudentSeeder | Creates a new seeder class |
| php artisan make:factory StudentFactory | Creates a factory for generating fake data |
| php artisan db:seed | Runs the seeder(s) to populate tables |
| php artisan migrate:fresh --seed | Rebuilds DB and seeds it instantly |

🧩 **Routes & Middleware**

| **Command** | **Description** |
| --- | --- |
| php artisan route:list | Displays all registered routes |
| php artisan make:middleware CheckAdmin | Creates a new middleware class |
| php artisan make:provider EventServiceProvider | Creates a new service provider |
| php artisan make:event UserRegistered | Creates an event class |
| php artisan make:listener SendWelcomeEmail | Creates an event listener |

🧑‍💻 **Auth & User Management (Laravel Breeze / Jetstream / UI)**

| **Command** | **Description** |
| --- | --- |
| php artisan make:auth | (Laravel <6) Generates auth scaffolding |
| php artisan ui bootstrap --auth | (Laravel UI) Generates Bootstrap-based auth scaffolding |
| php artisan breeze:install | Installs Laravel Breeze starter kit |
| php artisan jetstream:install livewire | Installs Jetstream with Livewire support |

🔍 Debugging / Information

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| --- | --- |
| php artisan list | Lists all available Artisan commands |
| php artisan help migrate | Shows help for a specific command |
| php artisan about | Displays environment, Laravel version, and PHP info |
| Command | Description |
| php artisan list | Lists all available Artisan commands |
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