

1) What is Laravel?

Laravel is an open-source widely used PHP framework. The platform was intended for the development of web application by using MVC architectural pattern. Laravel is released under the MIT license.

Therefore, its source code is hosted on GitHub. It is a reliable PHP framework as it follows expressive and accurate language rules.

2) What is the latest Laravel version?

The latest Laravel version is version 8, which was released on September 8th, 2020.



3) Define composer.

It is an application-level package manager for PHP. It provides a standard format for managing PHP software dependencies and libraries.

4) What is HTTP middleware?

HTTP middleware is a technique for filtering HTTP requests. Laravel includes a middleware that checks whether application user is authenticated or not.

5) Name aggregates methods of query builder.

Aggregates methods of query builder are: 1) max(), 2) min(), 3) sum(), 4) avg(), and 5) count().

6) What is a Route?

A route is basically an endpoint specified by a URI (Uniform Resource Identifier). It acts as a pointer in Laravel application.

Most commonly, a route simply points to a method on a controller and also dictates which HTTP methods are able to hit that URI.

7) Why use Route?

Routes are stored inside files under the /routes folder inside the project's root directory. By default, there are a few different files corresponding to the different “sides” of the application (“sides” comes from the hexagonal architecture methodology).

8) What do you mean by bundles?

In [Laravel](#), bundles are referred to as packages. These packages are used to increase the functionality of Laravel. A package can have views, configuration, migrations, routes, and tasks.

9) Explain important directories used in a common Laravel application.

Directories used in a common Laravel application are:

- App/: This is a source folder where our application code lives. All controllers, policies, and models are inside this folder.

- Config/: Holds the app's configuration files. These are usually not modified directly but instead, rely on the values set up in the .env (environment) file at the root of the app.
- Database/: Houses the database files, including migrations, seeds, and test factories.
- Public/: Publicly accessible folder holding compiled assets and of course an index.php file.

10) What is a Controller?

A controller is the “C” in the “MVC” (Model-View-Controller) architecture, which is what Laravel is based on.

11) Explain reverse routing in Laravel.

Reverse routing is a method of generating URL based on symbol or name. It makes your Laravel application flexible.

12) Explain traits in Laravel.

Laravel traits are a group of functions that you include within another class. A trait is like an abstract class. You cannot instantiate directly, but its methods can be used in concrete class.

13) Explain the concept of contracts in Laravel.

They are set of interfaces of Laravel framework. These contracts provide core services. Contracts defined in Laravel include corresponding implementation of framework.

14) How will you register service providers?

You can register service providers in the config/app.php configuration file that contains an array where you can mention the service provider class name.

15) Where will you define Laravel's Facades?

All facades of Laravel have defined in Illuminate\Support\Facades namespace.

16) State the difference between get and post method.

Get method allows you to send a limited amount of data in the header. Post allows you to send a large amount of data in the body.

17) List default packages of Laravel 5.6.

Default packages of Laravel 5.6 are: 1) Envoy, 2) Passport, 3) Socialite, 4) Cashier, 5) Horizon, and 6) Scout.

18) What is service container in Laravel?

Service container is a tool used for performing dependency injection in Laravel.

19) How can you enable query log in Laravel?

You can use enableQueryLog method to enable query log in Laravel.

20) Explain the concept of events in Laravel.

An event is an occurrence or action that help you to subscribe and listen for events that occur in Laravel application. Some of the events are fired automatically by Laravel when any activity occurs.

21) Explain dependency injection and their types.

It is a technique in which one object is dependent on another object. There are three types of dependency injection: 1) Constructor injection, 2) setter injection, and 3) interface injection.

22) What are the advantages of using Laravel?

Here are important benefits of Laravel:

- Laravel has blade template engine to create dynamic layouts and increase compiling tasks.
- Reuse code without any hassle.
- Laravel provides you to enforce constraints between multiple DBM objects by using an advanced query builder mechanism.
- The framework has an auto-loading feature, so you don't do manual maintenance and inclusion paths
- The framework helps you to make new tools by using LOC container.
- Laravel offers a version control system that helps with simplified management of migrations.

23) Explain validation concept in Laravel.

Validations are an important concept while designing any Laravel application. It ensures that the data is always in an expected format before it stores into the database. Laravel provides many ways to validate your data.

Base controller trait uses a ValidatesRequests class which provides a useful method to validate requests coming from the client machine.

24) What does ORM stand for?

ORM stands for Object Relational Mapping

25) How can you reduce memory usage in Laravel?

While processing a large amount of data, you can use the cursor method in order to reduce memory usage.

26) List available types of relationships in Laravel Eloquent.

Types of relationship in Laravel Eloquent are: 1) One To One 2) One To Many 3) Many To Many 4) Has Many Through, and 5) Polymorphic Relations.

27) Name the Template Engine utilized by Laravel.

Blade is a powerful template engine utilized by Laravel.

28) Name databases supported by Laravel.

Laravel supports the following databases:

- PostgreSQL
- SQL Server
- SQLite
- MySQL

29) Why are migrations important?

Migrations are important because it allows you to share application by maintaining database consistency. Without migration, it is difficult to share any Laravel application. It also allows you to sync database.

30) Define Lumen

Lumen is a micro-framework. It is a smaller, and faster, version of a building Laravel based services, and REST API's.