Homework

Q1. What is Laravel pattern?

Answer: Laravel pattern is MVC use for providing a structure approach to accessing and managing data in an application.

Q2. What is M, C, V?

Answer: M=Model, V=View, C=Controller.

Q3. What is query builder ?

Answer: Query builder is

Q4. What is Laravel Eloquent?

Answer: Laravel Eloquent is PHP framework that provides easy way to communicate with database.

Q5. What is .env file

Answer: .env file is a that we use for connect with database.

Q6.What is migrations?

Answer: Migration is a set of instruction that define that define when you want to make your database schema.

Q7. What is Seeder?

Answer: Seeder provide a simple method to seed test data into database using seeder classes.

Q8. What is file.blade.php ?

Answer: file.blade.php is default templating engine for the Laravel framework.

Q9. What is Factory?

Answer: Factory are classes that extend Laravel’s base factory class and define de definition method.

Q10. What is API?

Answer: API serve as a connector or a bridge that lets one application communication with the other and exchange data with each other.

Q11. What is end-point, method, request?

Answer:

* end-point refers to the URL or path that client use to interact with application’s functionality.
* Method is a function that belong to a class.
* Request is a data sent by client to your API.
* Handle error validation display custom error pages for various HTTP status codes.
* Respond is function used to create and return a response from your application.

Q12. Which method to use when I want to create new Post?

Answer: When we want to create new post we use method Post.

Q13. Why you need to use Resource and Request and getAttribute ?

Answer:

* Resource use for referring to any entity that can be accessed over the web.
* Request is an action or message sent by a client to a server in order to retrieve a specific resource.
* getAttribute is a metod or function used to retrieve the value of a specific attribute associated with an HTML element or an object in programming.

Q14. What is compact()?

Answer: Compact() is a function that use to create an array by removing any element with null, false, or empty values.

Q15. List down at least 10 query builder and Laravel Eloquent?

Answer:

* Query builder
* SQLAIchemy(Python)
* Knex.js(JavaScript/Node.js)
* Doctrine DBAL(PHP)
* Laravel Query Builder (PHP)
* Jooq(Java)
* Dapper(C#/.Net)
* Sequel(Ruby)
* Slick(Scala)
* Hibernate Query Language (HQL)
* Micronaut Data (Java/Kotlin/Groovy)
* Laravel Eloquent
  + Model-Database Mapping
  + CRUD Operations
  + Relationship Handling
  + Query Building
  + Eager Loading
  + Scope
  + Mutators and Accessors
  + Mass Assignment Protection
  + Events and Observes
  + Soft Deletes

Q16. Why we need to use wherehas?

Answer: we need to use wherehas to allow you to filter models based on the existence or properties of related models.

Q17. Please give example of Column Types at 10 difference don't forget to description?

Answer:

* Integer: an integer column stores whole numbers without decimal places.
* String: a string column stores textual data, such as names, addresses, or descriptions.
* Boolean: a Boolean column represents logical values, either true or false.
* Date: a date column stores calendar dates without time components such as birthdates, event dated, or deadline.
* Time: a time column represents a point in time within a 24-hour clock.
* DateTime: a datetime column stores both date and time component. It includes specific point in time, including the date, hour, minute, and second.
* Float: a float column stores floating-point numbers, which are numbers with decimal place.
* Decimal: a decimal column is used to store precise decimal numbers with a fixed number of digits before and after the decimal point.
* Text: a text column stores large amounts of variable-length textual data. It stores long-form content, such as articles, blog posts, or user comments.
* Enum: an enum column represents a predefined set of values.

Q18. can you descript about this $table->integer('age')->nullable()->default(0);

Answer:

* $table: refers to the table instance on which the column is being defined.
* Integer(‘age’): specifies that we are defining a column named ‘age’ with an integer data type.
* ->nullable(): is method indicates that the ‘age’ column can have a NULL value.
* ->default(0): is method sets a default value for the ‘age’ column.

Q19. Can you tell me why when we use file api.php and web.php ? explain?

Answer:

* Api.php file in Laravel is specifically designed for defining routes and handling API-related functionality. Also we use for separation of concerns, API-specific Middleware, consistent URI prefixing, stateless API Requests, JSON response Handling.
* Web.php file in Laravel is specifically used for defining routes and handling web-related functionality. Also we use for Web-specific Middleware, Handling HTML views, Form Submission, Web-Specific Routing Features.

Q20. What is relationship Laravel ? Please give example:

-one to one

-one to many

-many to many

Answer: In Laravel, relationship define the associations between database tables/models.

* one to one relationship. Example: User and Profile
* one to many relationship. Example: User and Post
* many to many relationship. Example: User and Role

Q21. .can you explain me why we need to use Route::apiResource in route api and Route::resource in route web

Answer: Route::apiResource is method use for convenient way to define RESTful API routes for a resource controller. And use for consistent Naming Conventions, standard CRUD Operations,

Reduced code duplication, Simplified routing, Improve Maintenance.

Route::resource is method use to define routes for a resource controller in the web routes file(web.php). And use for standard CRUD operation, consistent Naming conventions, Reduced code duplication, simplified routing, improved maintainability.

Q22. Can you explain this command "php artisan route:list" and "php artisan install:api"

Answer:

* php artisan route:list to displays a list of all registered routes in your application, provide detailed information, such as route, HTTP method, URL…
* php artisan install:api is not default Lara

Q23. Can you explain me about redirect and route name ?

Answer:

* Redirecting: is the process of sending an HTTP response that instructs the browser to navigate to a different URL.
* Route Names: provide a way to assign a unique name to a specific route in your application.

Q24. Route:: Prefix(‘product’)->group(function(){

Route::get('/product/list',[ProductController::class,'index'])->name('product.list');

Route::post('/product/create',[ProductController::class,'store'])->name('product.create');

Route::get('/product/show/{id}',[ProductController::class,'show'])->name('product.show');

Route::put('/product/update/{id}',[ProductController::class,'update'])->name('product.update');

Route::delete('/product/delete/{id}',[ProductController::class,'destroy'])->name('product.destroy');

}

Q25. what does is difference between "php artisan migrate" and "php artisan migrate:fresh"?

Answer:

* Php artisan migrate: used to run any pending database migrations.
* Php artisan migrate:fresh: goes a step further than migrate by not only running pending migrations but also dropping all tables from the database and then re-running all migrations from scratch.

Q26. why we need to use this ?

protected $fillable = [

'name',

'email',

'password',

];

Q27. Why we need to use this?

protected $hidden = [

'password',

'remember\_token',

];

Answer: We need to use this property in eloquent model to specify which attributes should be hidden when the model is converted to an array or JSON format.

Q28. Q28. Why we need to use

protected $casts = [

'email\_verified\_at' => 'datetime',

];

Answer: We need to use this property in Eloquent models allows you to define how specific attribute should be cast when retrieving and setting their values

Q29. Why we need to use SoftDeletes?

Answer: we need to use softDelete feature in Laravel for deleting records from database table instead of permanently removing them.

Q30. What is file composer.json?

Answer: file composer.json is curcial component of the composer dependency management tool in PHP.

Q31. What is README.md?

Answer: README.md is a commonly used file in software projects that serves as a documentation or information file.