1. Describe in detail your experience with the Facades in Laravel - what design patterns does a Facade follow?

Laravel Facades is a class, used to access non-static functions of a class as a static function.

Laravel provides a number of Facades for various purposes.

For eg Auth,Cookie,File,Hash,Mail etc.

One of the most common use Facades class is DB

We can use the DB Facades (Illuminate\Support\Facades\DB) for database interaction.

Laravel provides the easiest way to handle database CRUD operation using DB Facades.

Apart from that for database transaction handling also we can use DB Facades.

We can create our own Facades also.

To create Facades we need to use Illuminate\Support\Facades\Facades. Then extends Facade class. Then create a function getFacadeAccessor(). Within this function we need to create an object for the class from which we need to access the non static function as a static function.

2. Describe in detail your experience with Laravel Unit testing?

Unit testing is called Tear one or Level one testing performed by a developer in individual blocks of a software product before integration. It is an essential part of software development, As as a developer if we avoid unit testing we can't guarantee the software product for future problems as well as the full fulfillment of user requirements.

Following are the points that need to be taken care of during unit testing.

　　1. Define a strategy for software unit testing.

　　2. Do regression testing for if we change something in a module then it will not be

　　 affected in other modules.

　　3. Result of code reviews and static analysis

　　4. Provide bidirectional traceability and consistency

5. Summarize and communicate the test result.

3. Describe in detail your experience with Laravel Queues and Horizon?

Laravel queue is used to scheduling tack, so that users no need to wait for a long time and the process will run in background. If we want to insert one million records from a .csv file in a single click, then definitely users have to wait for a long time to process all one million records. In this case we can create a job for one million records by branching them into 1000 records each, then we can queue all the jobs , so that all jobs are executed in

background and users no need to wait , apart from that during bulg email posting also we can use laravel queue.

Laravel Horizon is used to monitor the queue running in background , Horizon provides a dashboard from which we can easily monitor the queue jobs. To get the Horizon dashboard we need to install horizon. If we need to give authentication to Horizon , we need to go to App/Providers/HorizonServiceProvider.php. Under get() method if we specify the email , then using only this email we can access the horizon dashboard. To work with horizon we need to activate horizon using php artisan horizon command. From the horizon dashboard we can easily monitor processed jobs, failed jobs , max wait time,max run time etc.

4. Describe in detail your experience with Laravel Commands?

Laravel provides artisan command line interface that makes the production easy and faster. There are numbers of artisan commands available in laravel which we can find by php artisan list command. To get the help for a particular command we can use php artisan help <command_name>.

Apart from this in command laravel provides user defined artisan commands also.

To create custom command we used php artisan make:command <command_name>

It will create a directory command under the app folder. We will find all files related to command under this directory. Then we need to register the command in the kernel.php file under protected command array. Then we can use this command using php artisan.

5. Describe in detail your experience with Database normalization and its importance?

Normalization is the process of reducing data redundancy in a table and improving data integrity.Normalization involves organizing the columns and tables in the database to ensure that their dependencies are correctly implemented using database constraints.It is used to minimize the duplication of various relationships in the database. It is also used to troubleshoot exceptions such as inserts, deletes, and updates in the table. It helps to split a large table into several small normalized tables.SQL is the language used to interact with the database. Normalization in SQL improves data distribution. In order to initiate interaction, the data in the database must be normalized. Otherwise, we cannot continue because it will cause an exception.Normalization can also make it easier to design the database to have the best structure for atomic elements. Usually, we break large tables into small tables to improve efficiency. If there is no normalization there will be many problems, such as

1.Insert Anomaly: This happens when we cannot insert data into the

table without another.

2. Update Anomaly: This is due to data inconsistency caused by data redundancy and data update.
3. Delete exception: Occurs when some attributes are lost due to the deletion of other attributes.

6. Describe in detail your experience building a full-stack application using VueJS/ReactJS, Bootstrap/Tailwind?

The demand of the single page web application is increasing in the market day by day. React is an open-source JavaScript library framework by which we can build a single page website easily.It is used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. The main purpose of React is to be fast, scalable, and simple which works on user interfaces in the application. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

Bootstrap is a open source front-end development framework for the creation of websites and web apps. Designed to enable responsive development of mobile -first websites.As a framework, Bootstrap includes the basics for responsive web development, so developers only need to insert the code into a pre-defined grid system.Web developers using Bootstrap can build websites much faster without spending time worrying about basic commands and functions. We can use react and bootstrap with laravel to fistage and single page application , so that improves the efficiency of the system.

7. Describe in detail your debugging process with Laravel?

In laravel we need to enable APP_DEBUG=true for debugging. If we get any error we can find out the error from laravel.log file which is present under storage/logs folder. If there is any problem, we can easily find out the error from the laravel.log file. In laravel we can easily debug sql query. If we use ORM , by using toSql() we can find out the query which we are executing.Again for query debugging we can use dd() which will provide sql query along with data in array format. If we use DB Facade, for debugging we can enableQueryLog() and getQueryLog() which will display sql query along with data in array format.

Again laravel provide some method for debugging, such as

Debugbar::info($object);

Debugbar::error('Error!');
Debugbar::warning('Watch out…');

Debugbar::addMessage('Another message', 'mylabel'); etc.

8. What is your current monthly and annual gross salary? If you have a variable component, please add the details (amount and frequency of payout).

CTC: 504000.

9. What is your expected monthly salary?

CTC: 900000.

10. Do you have all the required documents which reflect your current gross salary and variable components?

Yes.

11. What is your notice period and is this period negotiable?

15 to 30 days.

12. Why are you leaving your current role?

For Better opertunity.

13. Do you have fast reliable Wifi so you can work remotely?

Yes

14. Do you have a desk and a space to work from that's quiet to enable you to work from home?

Yes

15. In 300-500 words, tell us what you think about Packt's mission - Does it excite you? Could it be improved?

Packt's mission helps globally how software works with new cutting edge technology, it is a platform which delivers effective learning and information services to IT professionals.As a part of the mission they have published books , videos etc by which professionals can enhance their knowledge to get a job done. The authors present in packt's mission are the professionals with good experiences across the globe.Professionals rely on packt's to build their essential knowledge.Packt' mission is constantly exploring how technology demands and enables us to make butter books and subscribe service and try to build the future of tech publishing together.As per my concern this is a very good environment or platform for professionals where we easily get better knowledge within a single umbrella. As we grow our experience we can also share our ideas or any other technical issues through this mission and we can get connected with different professionals. As an IT professional I want to suggest implementing / uploading posts on various technical issues as well as comment posting from different professionals, this may improve the user to gain more knowledge about any topic.