PHP - DRUPAL INTERVIEW QUESTIONS

*Drupal 8 follows the SMACSS-style categorization. (Scalable and modular Architecture css)*

* Difference between Drupal 7, Drupal 8 and Drupal 9?
* Git commands - How do you resolve conflicts in some files?
* MySQL: - SQL joins, Entity query, query to write joins in Drupal way
* Drush: -
  + How do you enable module and uninstall module using drush?

(Commonly download and install -> drush en module\_name -y)

(Download: drush dl module\_name -à dl alias of pm-download, drush en module\_name )

drush pm-uninstall module\_name -> to uninstall module

* + How do you disable configuration settings using drush?

To enable maintenance mode

drush state:set system.maintenance\_mode 1 --input-format=integer

drush cache:rebuild

To Disable maintenance mode

drush state:set system.maintenance\_mode 0 --input-format=integer

drush cache:rebuild

* + How to uninstall module using drush?

drush pm:uninstall module\_machine\_name

* Composer: -
  + How to install Drupal using composer?

composer create-project drupal/recommended-project: ^9.3 my\_project\_name

* + How to install modules using composer?

composer require drupal/geofield(module\_name)

composer require "drupal/pathauto:^1.0"

* + To enable module: drush pm:enable admin\_toolbar(module\_name)
  + How to remove modules using composer?

composer remove drupal/pathauto

* + Difference between composer.json and composer.lock?

 composer.json file is a rough guide to the dependency versions that Composer should install, the composer.lock file is an **exact** record of the dependency versions that have been installed.

* + Difference between composer install and composer update?

**composer update** will update your depencencies as they are specified in composer.jsonFor example, if you require this package as a dependency:"mockery/mockery": "0.9.\*",and you have actually installed the 0.9.1 version of the package, running composer update will cause an upgrade of this package (for example to 0.9.2, if it's already been released). In detail composer update will:

1. Read composer.json
2. Remove installed packages that are no more required in composer.json
3. Check the availability of the latest versions of your required packages
4. Install the latest versions of your packages
5. Update composer.lock to store the installed packages version

**composer install** will not update anything; it will just install all the dependencies as specified in the composer.lock file. In detail:

1. Check if composer.lock file exists (if not, run composer-install and create it)
2. Read composer.lock file
3. Install the packages specified in the composer.lock file

**When to install and when to update**

1. composer update is mostly used in the 'development phase', to upgrade our project packages according to what we have specified in the composer.json file,
2. composer install is primarily used in the 'deploying phase' to install our application on a production server or on a testing environment, using the same dependencies stored in the composer.lock file created by composer update.
   * Which file is called by composer when composer is installed? composer.lock
   * Which file is called by composer when composer is updated? composer.json

* CSS: -
* How to attach CSS in the module file?

1. \*.libraries.yml -> css has 5 weight (base, layout,theme,state,component)
2. To attach library for #type use yourmodule\_element\_info\_alter(array &$types)

$types[‘#attached’][‘library’][]= ‘your\_module/library\_name’

1. To attach library in form use hook\_form\_alter i.e yourmodule\_form\_alter()

$form[‘#attached’] [‘library’] [] = ‘your\_module/library\_name’

1. To attach library in twig file

{{attach\_library(‘your\_module/library\_name’)}}

* How to call CSS for a particular page?

THEME\_preprocess\_hook i.e mytheme\_preprocess\_basic\_page

1. For front page in .theme file

function bartik\_preprocess\_page(&$variables) {

if ($variables['is\_front']) {

$variables['#attached’] ['library’] [] = 'bartik/css-filling';

}

}

1. For Specific node

function bartik\_preprocess\_node(&$variables) {

$node = \Drupal::routeMatch()->getParameter('node');

if ($node) {

if ($node->id() == 3) {

$variables['#attached']['library'][] = 'bartik/css-filling';

}

}

}

* How to attach CSS in the theme file? -> \*.libraries.yml
* How to attach CSS for a particular form?
* jQuery: -
* How to attach jQuery file in module? \*.libraries.yml
* How to attach jQuery file in theme? \*.libraries.yml
* How to attach jQuery for a particular page?
* How to attach jQuery for a particular form?
* What is Drupal attach behaviors?
* How to create a custom Form in Drupal?
* Theme: -
* What are the required files to create a theme? -> .info.yml
* What are the mandatory parameters involved in theme.info file?

name, type, core/ core\_version\_requirement,base theme required for drupal 9

for module: name, core,type

* How to invoke global CSS and JS files in theme?

In .libraries.yml

* How do you host a site, what are the installations and file permission required?
* Views – Custom field plugin, Custom filter plugin, Custom arguments, custom permission, contextual filter, contextual based concepts.
* How to create a custom twig template for node, block? node.html.twig, block.html.twig, page.html.twig
* How do we pass variables to print in twig file? {{kint(page)}}
* Module: - custom module, routing file, controller, services, forms, plugins, custom blocks, views filter plugin, views field plugin
* Module Folder structure: ->

1. mymodule.info.yml (name, type, core)
2. mymodule.routing.yml

mymodule.generate:

path: '/ mymodule /generate/{paragraphs}/{phrases}'

defaults:

\_controller: '\Drupal\mymodule\Controller\MyModuleController::generate'

requirements:

\_permission: 'generate lorem ipsum'

mymodule.form:

path: '/admin/config/development/mymodule'

defaults:

\_form: '\Drupal\mymodule\Form\MyModuleForm'

\_title: 'Lorem ipsum settings'

requirements:

\_permission: 'administer site configuration'

1. mymodule.module
2. mymodule.install
3. mymodule.permission.yml
4. mymodule.links.menu.yml
5. Readme.md
6. /config/install/mymodule.settings.yml
7. /config/schema/mymodule.schema.yml
8. /src/Controller/MyModuleController.php

* Common hook functions, Web services – Rest APIs
* How caching works in Drupal?

Drupal comes with 2 modules by default:

1. Internal Page Caching
2. Internal Dynamic Page Cache

* What are forms in Drupal?

ConfigBaseform (Site-information), ConfirmFormBase (to confirm the action form like delete), FormBase (Generic form)

* How to integrate Drupal with third-party solutions and services?
* How API works in Drupal?
* What functionality you have worked on Drupal?
* PHP functions and array functions in php?
* What is autoload.php?

Autoloading is the process of automatically loading PHP classes without explicitly loading them with the require(), require\_once(), include(), or include\_once() functions. For libraries that specify autoload information, Composer generates a vendor/autoload.php file. You can include this file and start using the classes that those libraries provide without any extra work. You can even add your own code to the autoloader by adding an [autoload](https://getcomposer.org/doc/04-schema.md" \l "autoload) field to composer.json. After adding the [autoload](https://getcomposer.org/doc/04-schema.md" \l "autoload) field, you have to re-run this command: php composer.phar dump-autoload. This command will re-generate the vendor/autoload.php file

* What are the methods of Form?

getFormId(), buildForm(array $form, FormStateInterface $form\_state ),

validateForm(array &$form, FormStateInterface $form\_state ),

submitForm(array &$form, FormStateInterface $form\_state )

* How to create custom forms?

1. Create custom\_form.info.yml -> specify the parameter such as name: Form Name, type: module, core,description etc.
2. Create custom\_form.routing.yml
   1. custom\_form:
      1. path: ‘/custom\_form/form’
      2. defaults:
      3. \_form: ‘\Drupal\custom\_form\Form\CustomForm’ (controller)
      4. \_title: ‘Custom Form Title’
   2. requirements:
      1. \_permissions: ‘access content’
3. Create controller in custom\_form(module folder)\src\Form\CustomForm.php
   1. has namespace Drupal\custom\_form\Form
   2. use Drupal\Core\Form\FormBase;
   3. use Drupal\Core\Form\FormStateInterface;
   4. getFormId(), buildForm(array $form, FormStateInterface $form\_state ),
   5. validateForm(array &$form, FormStateInterface $form\_state ),
   6. submitForm(array &$form, FormStateInterface $form\_state )

* Retrieve 5th highest salary from xyz table without using limit offset?

Select \* from table t1 Where(N-1) = (Select t2.salary from table t2 where t2.salary >= t1.salary)

* Creating view, blocks, update and assign JIRA task?
* What is Drupal behavior?
* Array fetch, Associate and Reverse array differeXnce?
* Drush and Composer commands?
* How to take php variable in JS files?
* How write cookies and session in php?
* . module file
* Custom block path
* Custom module files
* How to set variable in twig?

{% set name = ‘Drupal’ %}, {# this is for comment #}

* How to create branch using GIT? git branch branch\_name , git checkout -b branch\_name
* How to remove branch using GIT?
* How caching and site optimization works?
* Dynamic Routing
* Hooks and scores
* Event Handler command in jQuery
* Benefits of JS over jQuery
* Custom module requirements in detail?
* Which hook have you used in custom module?
* How to read XML file?
* Event dispatcher
* There are articles for which it has tags attached, how would you use in Drupal? What filters can you use here?
* Page view vs Block view?
* If there’s a block and you’ve to use it 5 times in a single page, how would you do?
* How to render block in twig?
* What are contextual filters?

Allows you to filter content based on the dynamic information that Drupal provides instead of setting a static filter value, it provides you with more convenience by fetching values from variables either programmatically or from the URL. Eg. Showing content by logged in user.

* Have you implemented Ajax, explain how?
* What is Drupal?
* Have you used Drupal attach behavior?
* Custom module-> What are the folder that you’d use?
* How will you set permissions? Admin -> People -> Permissions based on the user and role
* Routing Questions.
* Default port of http and MySQL? 80, 3306
* What are the cross joins and inner joins?
* Which project have you worked on?
* Tell me briefly about you work in those projects?
* What are 5 contextual layers of Drupal?

Data(nodes), Modules, Blocks and Menus, User and Permissions, Themes and templates

* What is the difference between Drupal 7 and Drupal 8?
* Which is Drupal’s latest version? 9.3.3
* How to print a PHP variable in twig file?
* How to create custom block?
* Can we have a custom form inside a custom block?
* How to create custom table in database?
* What are hooks and what are preprocessors?
* Which hooks and preprocessors have you used and why?
* What are the mandatory files while developing a custom module?
* What is the use of services.yml file? -> define core services and environment-specific settings within the configuration files, eliminating the need of swap functionality
* Have you use configuration synchronization?
* Drupal is based on which PHP framework? Symfony Framework
* Which function is used while creating custom form and which class does it extends? Buidform, FormBase
* Difference types of sorting functions in PHP?
* How to reverse an array without using any predefined method?

<?php

$array = array(1, 2, 3, 4);

$size = sizeof($array);

for($i=$size-1; $i>=0; $i--){

echo $array[$i];

}

?>

* How to update the record in the table?
* How to do the indexing in MySQL?
* How to find 5th maximum salary?
* HTML difference tags and elements?
* CSS: Difference between visibility-hidden and display: none?

display:none means that the tag in question will not appear on the page at all (although you can still interact with it through the dom). There will be no space allocated for it between the other tags.

visibility:hidden means that unlike display:none, the tag is not visible, but space is allocated for it on the page. The tag is rendered, it just isn't seen on the page.

* jQuery/JS: What are selectors?
* How do you give color to paragraph using jQuery?
* WordPress to Drupal migration?
* Custom Module, Forms, Block, controller
* Contribute module used in project caching
* Contextual filter and Relationships in Views

Relationships – Built relationships between users and nodes, two content types, content types and taxonomies etc.

When we need access to some data associated with your base table in other tables, we use relationships for example content is the base table and we want to data of author/user from the user table who has created the content. In this scenario we use relationships in views.

* Composer, Drush commands, RestAPI and services.
* Multilingual and Multisite setup
* GIT commands?
* OOPs, SQL queries, jQuery
* PHP functions, types of arrays
* Advantages and Features in Drupal?
* How to create custom block using custom module?
* How to add libraries like JS in module and twig?
* How to create custom module and theme?
* What is the dependency injection in Drupal?
* Explain how caching works in Drupal?
* SEO modules name?
* Drupal Cron
* What is Ctools and Panels?
* How to create custom form and custom block?
* Explain PDO?
* Event subscription?
* Have you worked on Multisite or Multilingual environment in Drupal 8?
* In which version of Drupal do you have experience?
* View modes and form modes?
* How to login admin without knowing credentials?
* Rest API
* SMTP or mail module for sending mail and notifications
* Namespace in php
* Associate arrays?
* Where we use render arrays?

Associative array which conforms to the standards and data structure used in Drupal’s Render API.

Hierarchical associative array is a structured array that provides(probably nested) data to be rendered and properties describing how should data be rendered.

Provides flexibility in extending, slightly altering or completely overriding parts of the page.

Render arrays consist of two types of key/value pairs: properties and child elements.

*/\* To render an ordered (ol) or unordered (ul) list \*/*

$render = [

'#theme' => 'item\_list',

'#list\_type' => 'ul',

'#items' => [

'item 1',

'item 2',

'item 3',

],

];

$render = [

'#theme' => 'responsive\_image',

'#responsive\_image\_style\_id' => 'your\_responsive\_style\_id',

'#uri' => $file -> getFileUri(),

];

## **Based on requirement from Egnyte:**

* How to optimize existing web pages, CSS and JS for implementing site performance in Drupal 8?
* How to implement website performance in Drupal?
* What are technical SEO best practices for site-speed optimization?
* What are views and Drupal API’s?
* What are industry tools for site performance?
* How to upgrade Drupal 8 to Drupal 9?
* What is Drupal 8 configuration management, including config-split, Multisite Drupal implementations?
* How to create custom module?
* Jira related questions.

## **Interview questions asked in Egnyte interview:**

* Tell me about your experience
* Difference between HTML and HTML5?
* Do you know about CSS box model?
* What are HTML5 tags?
* Will you be able to structure HTML design provided?
* Scale yourself for HTML5, CSS3 and JS/jQuery?
* What is node?
* How to create custom block type in admin?
* What is content type and how to create it?
* What was your role in current project?
* Tell some factors for optimizing your site?
* What do you understand by term SEO?
* Difference between CSS and CSS3?
* Any display properties you know in CSS3?
* Reviews on our site egnyte.com
* How will create git new branch to add some new feature?
* Have you worked on Pantheon server?
* Do you have experience in creating custom theme?
* How modules are categorized?
* Do you have experience in building template design?
* WordPress vs. Drupal?
* Do you have knowledge of 301 redirects, did you use module?
* What is Composer and Drush? Their commands?
* Twig debug comment in console what does that mean or indicate?
* If it is the production (for cybage.com) site why showing these comments?

## **Drupal Based Question from Innocraft:**

* How to approve user registration in Drupal 8?
* What are nodes and entity?
* What is taxonomy?
* What is vocabulary?
* Difference between vocabulary and taxonomy?
* What are views?
* How do you sort nodes in views if you have title, author, and date as fields as per user convenience?
* After how many times of login access is denied and you get a blocked message in Drupal?
* Display modes in Drupal 8 and it’s difference (View and form)?
* What is the difference between configuration form and normal form mode?
* How to check the activity log of nodes added having fields title, published date, etc.?
* How to create custom block using code?
* Given arr[] and kth element number, how will you find the smallest element in the arr[] smaller than kth element?(array functions in php)
* How to create custom table in using code?
* Consider, we have 10 nodes displayed in views using title, if I change one of its titles what will happen, will it render again or not?
* How do you create branch in GIT?
* What all commands do you know about GIT?
* Can **git branch** create a new branch?
* In a team, you are two members, your teammate has a local file to commit at his end and you have committed the files in master branch what will happen, will it create a conflict or affect your master branch?
* There are 10 users that are blocked and we need to give access to one of them, how will you do it? How will you give access to them?
* If a user is not able to access his account by putting credentials what might be the scenario and how to resolve it?
* How does configuration management and synchronization work?
* Have you created custom theme or custom module?
* Caching related questions
* Config related questions
* Tell me about your work experience

## **Drupal based interview from Lawzia Tech**

* Tell me about your work experience?
* Are you familiar with CCK module and paragraphs module?
* How will you secure your website in Drupal?
* Which template engine does Drupal use?
* Which version of Drupal you have worked on?
* What are the advantages or twig template engine?
* What is the current stable version of Drupal?
* Which database you use?
* Are you familiar with GIT versioning tool?
* Do you have knowledge of HTML5/CSS3?

## **Interview Questions asked by GEP worldwide**

* Tell me about yourself
* Have you done custom module or theme development?
* Do you work as a full stack developer?
* Tell some Drupal core modules?
* Have you worked on Drupal 7?
* Difference between Drupal 7 and Drupal 8?
* How Drupal 8 makes site secure?
* Any Symfony components you know?
* Do you know about Drush and composer?
* Have you done migration from Drupal 7 to Drupal 8?
* Have you created any frontend design?
* Do you know about configuration management?
* Which versioning tool do you use?
* Tell me some Drush commands?
* Have you created custom forms?
* Tell me mandatory fields in .info.yml file for theme?
* How you add css/js files in theme?
* What is preprocessor?

## **Interview Questions asked by Iksula.**

* Tell me about yourself?
* What all things you have done in Drupal 8/9 development till now?
* What is dependency injection, have you used it?
* Have you created services in Drupal?
* How will you compare and list the data having two different values?Example: I have a transaction content type with 2 fields credit and debit I want to display those content whose credit value and debit value are not equal?
* Do you use versioning tool? Difference Between git revert and git reset? What all commands you have used on daily basis?
* Do you know Drush? Difference between config import cim and config export (cex)
* How do you rate yourself in MySQL?
* I have employee table with name and salary col I want the name of employee having 2nd highest salary?  **SELECT** **name**, salary **FROM** Employee **ORDER** **BY** salary **DESC** LIMIT 1, 1;

SELECT name, salary FROM Employee Emp1 WHERE (3) = (SELECT Count (DISTINCT (Emp2.salary)) FROM Employee Emp2 WHERE Emp2.salary >= Emp1.salary )

* Are you good in Jquery?
* How will you change site logo?
* How will you change site email?
* How to create taxonomy? What does it do?
* Tell me some entities?
* Difference between bundle and entities?
* How will you categorize content based on taxonomy in a content type with example?Feedback: good site building knowledge, git knowledge, have to work on custom module, custom Form, custom block, slightly MySQL

## **Interview Questions asked by Specbee**

* Difference between contextual filter and filter?
* What is contextual filter?
* Tell me about yourself?
* You have created content type in local repository how will you push it to dev or live?
* I have added manually the module info in composer.json file how will you install it? What is the command?
* What are the mandatory requirements in theme.info yml file? Are you sure base\_theme is required?
* What is hook\_theme\_suggestions?
* If I have 100 config files, how will you export it?
* Do you know services and dependency injection?
* Reason for switch in Drupal?
* Reason for job switch?
* Current ctc, Expected ctc?
* What all components you are comfortable with in site building?

## **Topics to look into:**

* Twig template related question and examples
* Integrating third party API
* Create custom form, custom module
* Designing template.
* how to access the variable form .module file to custom form in drupal 9?
* Advantages of Drupal
* Disadvantages of Drupal
* Render arrays

## **COGNIZANT**

What is page.html.twig?

What is html.html.twig?

.htaccess

index.php -> bootstrapping

class vs interface?

Abstract class vs interface? Which one is better?

Multiple inheritance

How to implement multiple inheritance?

PHP framework

Requirement to install drupal?

settings.php file

Twig debug

View mode?

Taxonomy

Fieldformatter

Date pop

What is yaml stands for? What is the use?

Configuration management?

How to add dropdown taxonomy in content type

Profile folder in drupal

Folder structure in drupal

Custom module theoretical knowledge?

Validation of form

## Lokmat

Where we create function and how to call function in a twig file?

How to set 301 redirects in drupal ? (Hint: .htaccess)

Difference between display modes(View and form mode)?

Conceptual layer?

* Data or nodes
* Block and menus
* User and Permissions
* Modules
* Themes or templates.

How do you resolve website encountered issue?

How to retrieve data from avg of marks from array if array consist name of students and marks using loops or conditions not by functions?

What is unit testing? Have you written test cases? Which library you use for unit testing?

What does requirement gathering means?

## QED42

What does entityTypemanager do? How can you retrieve data using entityTypemanager instead of database query?

## TCS

What is debug module in drupal 8?

What is views?

What is content types?

What are nodes?

Difference between nodes and blocks?

Configuration management

Worked on twig template?

AWS cloud

## KGL

About yourself?

About experience?

About project?

Drupal entity type, bundle, content

Custom module

If I have modules/xyz and add abc.info.yml then what will be its machine name.

Why core or core version is mentioned in metadata .info.yml file

Custom Block

Custom Plugin

Installation Profile purpose to provide us with pre-configured basic file so that we don’t have to dump it.

Annotations e.g @Block

Caching works

Configuration management and why it is important part in drupal?

Oops concept – interface, abstract class, inheritance, static, final, const keyword.

PHP support which inheritance, how to achieve multiple inheritance

Can we instantiate abstract class? What does instantiate mean?

Abstract class methods are not overridden which error will it cause on page load

Define class, traits

Feedback: Be curious to learn Drupal and be strong with PHP core oops concept.