DRUPAL 8 ADVANCED

Duration: 30 hours – 5 full days

Prerequisite - Participants must have a good understanding of HTML5, CSS3, JAVA SCRIPT, PHP and MYSQL

Course Objectives

You have experience working with Drupal, but you want to take it to the next level. This course will offer a deep dive into the configuration techniques you'll need to build a fully functioning Drupal site. We'll cover a set of modules that are essential to large-scale sites and cover topics ranging from managing media and content moderation to configuring an advanced search interface.

You'll also learn about concepts like Configuration Management that are key to maintaining a successful Drupal site.

Lab Setup Details :

Hardware requirement:

CPU :   I4/I5 , **Hard Disk** : 50GB , **RAM :**8 GB

Software requirement:

- XAMPP https://www.apachefriends.org/download.html (DOWNLOAD VERSION 5.6.31)
- MSOFFICE 2010
- NOTEPAD++ https://notepad-plus-plus.org/download/v7.5.1.html (DOWNLOAD VER 7.5.1)
- SUBLIME TEXT3 https://www.sublimetext.com/3
- Visual Studio Code https://code.visualstudio.com/download
- PDF READER https://adobe-reader.en.softonic.com/download
- DRUPAL 8 https://www.drupal.org/download
- DRUPAL 7 https://www.drupal.org/project/drupal/releases/7.56
- DEV ACQUIA SETUP FOR WINDOW https://dev.acquia.com/downloads
- Browser Google Chrome OS Window 10

 Course Outline

Module - 1

IMPORTANT CONCEPTS

- Key Features of Drupal 8
- Languages & tools behind Drupal
- Drupal 8 Architecture
- Drupal Installation on Local Machine & On production server
- Creating Content in Drupal
- Editing Content
- Menu Settings

- URL Path Settings
- Authoring Information
- Publishing Options
- Deleting Content
- Finding Content

Q&A Session

Module - 2

THEME, MENU & CONFIGURATION

- How a Drupal Theme Works?
- Finding a New Theme
- Installing a Theme
- The Administration Theme
- Configuration Options
- Ordering the Menu
- Adding an Item to a Menu
- Adding a Content Item to a Menu
- Adding a Menu Item for an External Page
- Creating a New Menu

Module - 3

USING BLOCKS IN DRUPAL 8

- Blocks
- Making Blocks Appear on Pages
- Finding the List of Available Blocks
- Re-Arranging Blocks
- Reassigning and Deactivating Blocks
- Configuring Blocks
- Using Blocks from Contributed Modules
- Creating Custom Blocks
- Creating Custom Content type for the Block

Module - 4

USER MANAGEMENT

- Users, Roles, and Permissions
- User Accounts
- Configuring User Account Settings
- Creating Roles
- Assigning Permissions
- Creating User Accounts
- User Generated Accounts
- Resetting User's Passwords
- Understand the access control of Drupal.

- Protect access to a block.
- Protect access to a page.

Q&A Session

Module - 5

IMPORTANT CORE MODULES IN DRUPAL

- Contributed Modules
- How to Download, Install, and Configure a Module
- Configuring Modules and Setting Permissions
- Enabling Other Modules
- Disabling a Module Upgrading a Module
- Uninstalling a Module
- Views
- Panels
- Path auto

Module - 6

BLOGGING

- Enabling Blogs
- Creating a Blog Entry
- Displaying Blog Entries
- Adding a List of the Most Recent Blog Entries
- Forums
- Setting Up Your First Forum
- Polls
- Creating Your First Poll

Module - 7

FORMS (CONTACT FORM & WEB FORM

- Creating Contact Form
- Using Contact Form DB module
- Displaying the Contact Form Record
- Modifying the Display of Contact Form Records
- Installing The Web Form Module
- Creating a Web form
- Manage the validation and submission of a form.
- Customizing Your Form
- Forms AJAX.
- Change the presentation of a form.
- Exports data into csv

Module - 8

USING CONTENT TYPE

- The Basic Page and Article Content Types

- Defining a Custom Content Type
- Creating a Custom Content Type
- Other Field Types
- Radio Buttons
- Check Boxes
- Select Lists
- File Uploads
- Text Area
- Numeric Fields and Other Field Types
- Formatting the Output of a Custom Content Type

Q&A Session

Module - 9

ABOUT VIEW MODULE

- Installing the Views Module
- Creating Your First View
- Creating Page View
- Creating Block View
- Putting Security & Permission to View
- Views Settings
- Basic Settings
- Fields
- Field Overriding
- Filters
- Contextual Filters
- Display Settings.
- Relationships.
- View specific templates
- Advance filtering & operation on views

Module - 10

CUSTOM MODULE DEVELOPMENT

- Basic Module Development
- .info file
- module file
- The routing system
- How Drupal handles routing
- How to match a URL to a page?
- Custom module development (module development workflow, routing, configuration programming)
- Implementation of hooks (practice on some common hooks)
- Form API (Complete form api development demo eg user registration form)
- Create your own forms programmatically with Form API.
- Using the create () and __construct ()
- Create dynamic URLs
- Adding menu links, contextual links, action links, and task links
- Entity – Programmatically entities manipulation (create, delete, update.)
- Modify a form generated by Drupal or another module without touching the source code of this form (hook_form_alter).

Q&A Session

- **Module - 11**

DRUPAL THEMING

- The Standard Drupal Theme Files
- Modifying the Base Theme
- Creating a Horizontal Menu
- Setting up Mega Menu
- Principles of the theme layer: functional separation / presentation
- TWIG
- Render Arrays
- Theming the Footer
- Theming Nodes
- Theming Blocks
- Changing Site name and Logo
- Tools for Helping You Theme Your Site Session
- Custom Theme development
- Principle of Configuration Management: YAML files, import / export
- Create a form in the back office of Drupal
- Adding your own configuration
- Twigs rendering dynamic data fetched from the database.
- Declare its own formatting as a template
- Creating Custom filter in the Drupal

Q&A Session

- **Module - 12**

USING DRUSH IN DRUPAL 8

- Introduction to Drush
- Overview of Drush
- Download and Install modules through Drush.
- Create Users/Multiple Users with Drush.
- Using Important Drush Commands
- Development of custom drush command

- **Module - 13**

REST API

- Rest API. Programming and implementation of REST web services with example on GET, PUT, POST, DELETE. (Can be tested on postman)

- **Module - 14**

API CACHE

- How Drupal handles the cache
- Different types of cache
- API cache: keys, contexts, tags and max-age

- The different cache modules: Internal Cache Page, Internal Dynamic Page Cache and Big Pipe
- Auto-placeholdering and lazy builders

Q&A Session

- **Module - 15**

DRUPAL ADVANEMENT

- Using Drupal Composer
  - o Drupal Installation using Composer
  - o Module Installation using Drupal Composer
- Drupal Commerce, Drupal lightening & Drupal Commons
- Batch API
  - o How Drupal's Batch API works
  - o Uses of the batch API in Drupal
  - o Use Case of Batch API
  - o How to Use Batch API in Drupal 8?
  - o Examples Batch API in Drupal 8

- Cron automated tasks
  - o How to set up cron job
  - o Where can we use?
  - o Enabling cron
  - o Disabling "automated cron"
  - o Schedule Automated Tasks
  - o Cron Development
- Queue dev
- Drupal Console

Q&A Session

Module - 16

- **BACKUP, RESTORE, MIGRATION & MAINTENANCE**

- Restoring a Backup
- Backing Up the File System
- Checking the Log Files
- Recent Log Entries
- Status Report
- Checking for Updates
- Approving Requests for User Accounts
- Securing & Maintaining your Drupal Website
- Migration – Drupal 7 to Drupal 8

Module - 17

- **DRUPAL Deployment using DEVOPS culture, Case Studies & Live Project Exposure**