

Updated on 12/08/2025

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# **Typo3 Extension Workshop**

2 days (14 hours)

#### Presentation

TYPO3 is a highly extensible, enterprise-oriented open-source CMS. With Extbase/Fluid, you create clean, maintainable extensions.

Our "Typo3 Extension Workshop" course teaches you how to model your data, build front-end plugins, integrate PSR-14 and hooks, secure and industrialize your developments (tests, CI).

You'll also be able to package and publish your extensions in the TER and prepare your projects for the current LTS release.

On completion, you will be able to package and publish your extensions in the TER and prepare your projects for the current LTS release.

As with all our training courses, this one uses the latest stable version v13.4.16 of TYPO3 13 LTS.

# Objectives

- Design a complete Extbase/Fluid extension
- Configure TCA, TypoScript, routing and caching
- Integrate PSR-14, hooks and Scheduler tasks
- Set up tests and CI
- Publish on Packagist/TER in LTS compliance

# Target audience

- PHP developers
- TYPO3 integrators

## **Prerequisites**

- Solid grounding in PHP, Composer and Git
- HTML/CSS/JS and SQL knowledge

# Typo3 Extension Workshop program

#### Getting started with TYPO3 & the extension framework

- TYPO3 ecosystem and extension use cases
- Extbase & Fluid architecture: plugins, controllers, actions
- Project initialization via Composer and typo3conf/ext/ structure
- TypoScript & Site Configuration
- Workshop: creating a minimal extension with Extension Builder

#### Modeling data: Domain Model, DB & TCA

- Domain Model design and repositories
- DBAL Doctrine: schema, migrations & ext\_tables.sql
- TCA: back-office forms, field types, validation
- DataHandler: life cycle & key hooks
- Workshop: declaring a table, configuring TCA and a BO CRUD

### Front-end rendering: Fluid, ViewHelpers & cache

- Fluid templates: layouts, partials, sections
- Native & custom ViewHelpers
- Plugin list/detail, pagination, RouteEnhancers
- Caching strategies and PSR-7 middleware
- Workshop: listing & displaying a detail with Fluid

### Integrations & events, tasks & CLI

- PSR-14 events: listeners & subscribers
- Hooks: DataHandler, content rendering, TypoLink
- Scheduler & CLI commands
- XLF localization & translation management
- Workshop: intercepting a PSR-14 event

# Security, quality & testing

Hardening: CSP, CSRF, XSS, BE/FE rights

- Standards PSR-12, PHPCS, static analysis
- Unit & functional testing
- CI (GitHub Actions) and code reviews
- Workshop: writing and executing a functional test

#### Packaging, performance & publication

- composer.json (type: typo3-cms-extension), versioning
- Config TSconfig/PageTS, assets & AssetCollector
- Optimization: OPcache, TYPO3 caches, images
- TER & Packagist publishing, v13 LTS compatibility
- Workshop: packaging & publishing on a private repository

# Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced IT technology, or to acquire specific business knowledge or modern methods.

# Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

# Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

# Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

### Validation

At the end of the session, a multiple-choice questionnaire is used to check that skills have been correctly acquired.

### Certification

A certificate will be awarded to each trainee who completes the training course.