

# **Symfony Framework Programming**

## **Audience Symfony Framework Programming Course**

PHP developers who want to develop robust and maintainable Web Applications with the Symfony PHP Framework.

#### **Prerequisites Course Symfony Framework Programming**

Experience with PHP Programming and object oriented development with PHP is required to participate in this course.

## **Realization Training Symfony Framework Programming**

The theory is treated on the basis of presentation slides. The concepts are illustrated with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

#### **Certification Symfony Framework Programming**

The participants receive an official certificate Symfony Framework Programming after successful completion of the course.



# **Content Course Symfony Framework Programming**

In the course Symfony Framework Programming participants learn how to build modern PHP applications with the latest version of the state of the art Symfony Framework.

#### **Symfony Intro**

Symfony has evolved in recent years into one of the most popular PHP frameworks. This is due to the ease of use, the good performance, the dependency injection mechanism and directly deployable components.

### **Symfony's Routing Architecture**

In this course you will learn to install Symfony and prepare an environment for application development. Symfony's routing architecture is discussed, the handling of requests and the generation of responses.

# **Twig Templates**

Attention is paid to Twig templates en template inheritance.

# **Doctrine Object Relational Mapping**

Next the Doctrine Object Relational Mapping implementation is discussed. Using Doctrine PHP classes and their relations can be stored in the database.

#### **Forms and Validation**

Symfony offers many facilities for Forms and these are discussed extensively. Also the validation of forms is treated.

#### **Services**

Attention is paid to service classes, the service architecture and the registration of services with the container.

#### Security

The security facilities that Symfony has to offer, like authentication and authorization with the User Entity class are discussed as well.

#### **Symfony's Kernel**

Also part of the subject matter are advanced subjects like Symfony's kernel, hooking into the routing mechanism and the implementation of dependency injection.

### **Rest API with Symfony**

Finally attention is paid to the creation of a Rest API with Symfony. At the end of the course you will have completed an extensive case study with Symfony and you are able to create robust Web applications with Symfony.

#### Locations



# **Modules Course Symfony Framework Programming**

Module 1 : Symfony Intro	Module 2 : Bundles	Module 3 : Data Access
Why Symfony?	Request and Response Life Cycle	Database configurations
Installing Symfony	Anatomy of a bundle	Generating an entity
Console commands	Generating a new bundle	What is Object Relational Mapping
Namespaces	Best practices	Entity Classes
Controller and Route	Custom bundles versus AppBundle	Using doctrine
How bright is the future?	Creating templates with TWIG	Inserting new Objects
Installation	Controller/View interaction	Adding Columns
Composer and Packagist	Conditional templates	Updating Table Schema
Installing Symfony via Composer	Installing bundles	Database Migrations
The road map	Data fixtures	Migrations Workflow
Checking the installation	Defining and prioritizing features	Nullable Columns
Module 4 : Caching in Symfony	Module 5 : Presentation Layer	Module 6 : Security in Symfony
Caching in Symfony	Asset management	Authentication
Definition of a cache	How templates are organize	Authorization
Caches in a Symfony project	Navigate or not to navigate	User Class
Key players in the	What is Bootstrap?	Dashboard and Security
Reverse proxy cache	Bootstrap configuration	Security is organization
Set expiration for dashboard page	Creating menus	Authentication
Expiration stategies	Rendering the menu	Authorization
Validation strategies	Dashboard template	FOSUserBundle
Doctrine cache	Overriding templates	Security settings
ESI for selective caching	Profile-related templates	Adding FOSUserBundle
Sophisticated bundles	Changing the backend logo	Adding routes
Module 7 : Testing	Module 8 : Forms and Validation	Module 9 : Rest API
TDD and BDD with Codeception	Form Input	What is REST?
Creating a functional test	Filtering	Resource ID's
Developing the missing code	Validating Forms	REST Web Services
Creating the unit tests	Creating Forms	Simple REST Examples
Setting up the database	Save and Redirect	REST Web Service Principles
Recreating the database for test	Flash Messages	Multiple Representations
Creating unit tests	Utilities	Embedded Path Parameters
Writing code to pass test	Validators	Common REST Patterns
Running functional and unit tests	Decorators	Resources URI Access
=	Sub Forms	JavaScript Object Notation (JSON)