

# 1 Yii Training Example Course Structure

The following description provides an example Yii Training course structure. This is only an example of the material that can be part of the course. It may vary dependent on the size and skills of the team and also depends on the estimated time frame for the course. The more time the course will take the more topics can be covered.

## 1. Introduction

- Why/when to use a framework and why/when not?
- What is Yii Framework?
- Where do I find information about Yii?

## 2. PHP Basics (if necessary)

- Object Oriented Programming (OOP)
- Namespaces
- Autoloading
- Composer

## 3. Key Concepts

- Framework overview
- Introduction into Yii concepts
  - Components
  - Properties
  - Events
  - Behaviors
  - Configurations
  - Aliases
  - Service Locator and Dependency Injection (DI)
- Application structure
  - Controllers
    - \* Actions
    - \* Request Filters (e.g. Access Control)
  - Models
  - Views
  - Modules
  - Configuration, bootstrapping
- Request handling lifecycle in Yii
  - Entry script
  - Routing
  - Request and Response
  - Sessions and Cookies
- Helpers
- I18N and Data Formatting

#### 4. Yii Features

- Database Programming
  - Defining Database Schema and Database Migrations
  - Database Connection
  - SQL
  - Query Builder
  - Active Record
- Forms and input validation
  - Simple forms
  - AJAX validation, client validation
  - tabular input
- Frontend development
  - Assets
  - Widgets
  - Themes, Widgets
  - Ajax, Javascript (The Yii way)
  - Bootstrap and jqueryUI
- Backend development (REST API)
- Caching
- Security
  - directory structure
  - access control, RBAC
  - SQL Injection
  - XSS
  - CSRF

#### 5. Development with Yii

- How to prepare your IDE
- Code generation with Gii
- How to extend framework classes
- How to write extensions
- Writing modular applications
- Unit and functional testing

#### 6. Deployment to production

- Configuration
- Logging
- Caching, Profiling
- Composer and how to upgrade