

## **Ruby on Rails Programming**

#### **Audience Ruby on Rails Programming Course**

The course Ruby on Rails Programming is intended for developers who want to develop applications with the new state of art framework Ruby on Rails or Rails.

#### **Prerequisites Course Ruby on Rails Programming**

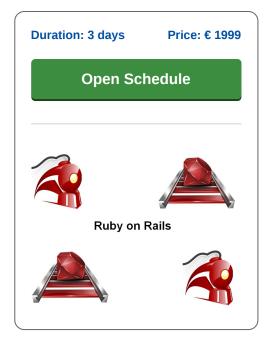
Basic programming experience and knowledge of the Ruby Programming language is required. Knowledge of web standards such as HTTP and HTML is an advantage.

#### **Realization Training Ruby on Rails Programming**

The theory is discussed on the basis of presentation slides. The concepts are illustrated with demos. The theory is interspersed with exercises. The course material is in English. The course times are from 9.30 up and to 16.30.

#### **Certification Ruby on Rails Programming**

Participants receive an official certificate Ruby on Rails Programming after successful completion of the course.



### **Content Course Ruby on Rails Programming**

In the course Ruby on Rails Programming, participants learn to develop Web applications with the Model View Controller (MVC) Framework Ruby on Rails. Rails is a framework for pragmatically developing a full-blown web application. Rails applications are based on the principle of convention over configuration. Templates can be generated automatically for many parts of the application, after which the template code can be further extended.

#### Rails Intro

The Ruby on Rails Programming course starts with an explanation of the directory structure of Rails applications. Also discussed are using the Ruby Console, the principles of Rails Routing and installing Ruby Gems.

#### **Rails Models**

Then attention is paid to how Ruby Model classes can be generated and how these maps on database tables. Explained is how Database Migrations are created from the model classes that can create database tables with create queries. Many applications require the CRUD (Create, Read, Update and Delete) Pattern which is treated as well.

#### **Forms**

User input in Web Applications mostly comes from Forms and the Ruby on Rails Programming course discusses Form Creation with the Forms Builder and form helpers. Form validation and handling of errors are also covered.

#### **Active Record**

Next attention is paid to Object Relational Mapping in Ruby on Rails with Active Records. In the application, the developers usually then do not have to write SQL statements, since the SQL statements are generated by the Framework.

#### **Action View**

Also covered is how views are created in Ruby on Rails based on templates controlled by Action Controllers. Explained is how View paths can be modified with Prepend and Append.

#### **Advanced Topics**

Finally, some advanced topics are discussed such as security, the creation and handling of Rest APIs, as well as caching, performance and troubleshooting.



# **Modules Course Ruby on Rails Programming**

Module 1 : Rails Intro	Module 2 : Rails and MVC	Module 3 : Forms
Ruby on Rails Stack	Model to Database	Using Form Builder
Rails Environments	Generating Models	form_with Helper
Rails Configuration	Database Migrations	Validations
Convention over Configuration	Database Interaction	Displaying Errors
Installing Ruby Gems	CRUD Pattern	full_messages_for
Development Server	Creating Routes	form_tag Helpers
Default Page	Resourceful Routing	Edit Actions
Ruby Console	routes Command	Destroy Actions
Rails Routing	Creating Links	Types of templates
Project Folders	link_to Helper	ERb template
Generating Controllers	redirect_to and render	Builder template
Embedded Ruby in View	Strong Parameters	Rendering
ERB Templates	Associating Models	Adding Styling
Module 4 : Active Record	Module 5 : Action View	Module 6 : Advanced Rails
Active Record Pattern	Action Controllers	Rails Security
Object Relation Mapping	Action View	Authentication
Naming Conventions	Templates and Layouts	Input Validation
Schema Conventions	Partial Layouts	Preventing XSS
Active Record Models	Request Passing	Dedicated Accounts
Validations	View Paths	Rails and REST
Callbacks	Prepend View Path	map.resources
ActiveRecord Migrations	Append View Path	RESTFul Operations
Active Record Associations	Helpers	Generating REST Actions
Scaffolding	Localized Views	Logging and Troubleshooting
Query Interface	Advanced Helpers	Caching and Performance
Dynamic Finders	Session Management	Cache Fragments
Ordering and Grouping	UserControl	Batch Processing
Joins	XML and Active Resource	Background Processing