



Course Overview

Ruby on Rails, or simply Rails, is a web application framework written in Ruby under MIT License. Rails is a model-view-controller (MVC) framework, providing default structures for a database, a web service, and web pages. It encourages and facilitates the use of web standards such as JSON or XML for data transfer, and HTML, CSS and JavaScript for display and user interfacing. In addition to MVC, Rails emphasizes the use of other well-known software engineering patterns and paradigms, including convention over configuration (CoC), don't repeat yourself (DRY), and the active record pattern.

Ruby on Rails 4.0 training allows you to build full featured, high quality, object oriented web apps. Ruby on Rails is a full stack open source web application framework which is best optimized for sustainable productivity. This course teaches the complete process of creating a dynamic database driven applications on the Rails framework.

Audience Profile

This course is ideal for any individual who wants to learn development using Ruby on Rails technology. However, this course is best suited for Web Developers interested in expanding the skillset and anyone who wish to learn Ruby on Rails app development.

Pre-requisites

Ruby on Rails training program attendees must have good working knowledge of any object oriented programming language like C++, Java, or Python.

At Course Completion

After completing this course, students will have a fundamental understanding of how to:

- Understanding the MVC architecture: MVC or Model View Controller architecture enables the application data to be clearly distinguished from its presentation.
- Database Access Library: Data handling in Ruby on Rails database is greatly simplified with this access library called Active Record.
- Other Libraries: To simplify coding for general programming tasks, Ruby on Rails has various other libraries to perform sessions management, validations etc.
- AJAX Library: Ruby on Rails contains an extensive AJAX functions library, which is used to generate code in AJAX.
- Components: Storing reusable code and modularizing templates is quite simple in the Rails framework.
- Customized URL: Create custom URLs that are search engine friendly using the Rails framework.
- Error Handling: Debug applications using detailed error logs.
- Programming Conventions: This framework does not use XML configuration files. Instead, it consists of programming conventions which are incorporated to specify certain configuration parameters.

Ruby on Rails Programming

Course Duration: 40 Hours

Course Outline

- **What is Ruby on Rails**
 - Introduction to Rails
 - Why Use Rails
 - MVC Architecture
- **Installation**
 - Installation of Ruby
 - Installation of Rails
 - Installation of MySQL Database Server
- **Getting Started**
 - Creating a Project
 - Introduction to bundler
 - Access Project
 - Generate Controller and View
 - File Structure
 - Server Request
 - Routes Handling
- **Controllers Views and Dynamic Content**
 - Rendering templates
 - Redirect actions
 - View Templates
 - Instance Variables
 - Generating links
 - Passing the URL Parameters
- **Database Migration**
 - Introduction to Database
 - Creating Database
 - Configure Project
 - Use of Rake
 - Introduction to Migration
 - Generating Migration
 - Running Migration
 - Migration Methods

- **Model and Active Record**
 - Introduction to Active Record
 - Generating Model
 - Rails Console
 - Creating Record
 - Updating Record
 - Deleting Record
 - Finding Record
 - Querying Record
 - Named Scope
- **Controller and CRUD**
 - Basic CRUD
 - CRUD Index
 - CRUD Show
 - Form Basics
 - CRUD New
 - Strong Parameters
 - CRUD create
 - CRUD edit
 - CRUD delete
- **Layouts and Partial**
 - Introduction to Layouts
 - Partial Layout
- **Managing Assets**
 - Introduction to Assets Pipeline
 - Managing Style sheet and JavaScript
- **Forms**
 - Introduction to Forms
 - Using Rails Forms Helpers
 - FormErrors
- **Data Validation**
 - Introduction to Validation
 - Validation Methods
 - Using Validation

- **User Authentication**

- Introduction to Authentication
- Secure Password
- Implementing Authentication in Rails