Ruby on Rails

Tecnologias de Informação - Desenvolvimento / Programação

Live Training (também disponível em presencial)

- **Localidade:** Imprimir Curso
- **Data:** 18 Dec 2023
- **Preço:** 1950 € (Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes.)
- **Horário:** Laboral das 09h30 - 16h30
- **Nível:** Intermédio
- **Duração:** 30h

Sobre o curso

This Ruby on Rails course explains how to use Ruby on Rails to create dynamic websites. After completing this training course you would be able to use Ruby on Rails on your projects. This course covers a range of topics such as Rails framework, ActiveRecord, MVC, Building Database driven Ruby applications, creating a content management system (CMS), developing contact us forms, developing web forms and handling form data using Ruby on Rails and lots more.

At the end of this course, students will be able to:

- Understand the Rails Framework
- Use ActiveRecord
- Use Ajax in Rails applications
- Deploy Web applications to Application / Web servers (e.g. tomcat)
- Work with Object-oriented principles and MVC
- Use Ruby for e-business applications
- Build dynamic database-driven web sites

Programa

Ruby Programming Language

- Introduction to Ruby on Rails
- Tools

- Ruby Programming Basics

Ruby on Rails Framework

- Rails Introduction
- Ruby Object Oriented Programming (OOP)
- Ruby on Rails Scaffolding
- Ruby on Rails Controllers
- Ruby on Rails Views
- Handling Form Views

Ruby on Rails with Database

- Models & Ruby Database

Advanced Ruby on Rails

- Ajax with Rails
- Agile Rails Development
- Testing Ruby on Rails applications
- Ruby on Rails Security

Part 1: Ruby Programming Language

Introduction to Ruby on Rails

- What is Ruby Programming Language
- Ruby on Rails web application framework
- Example of Rails Apps
- History of Rails
- Model
- View
- Controller
- Ruby background
- Ruby installation and documentation

Tools

- Command Line
- Text Editor
- Git
- Gems
- Rake
- Test Frameworks

- Deploying a Rails application

Ruby Programming Basics

- Working with different datatypes
- Defining Constants
- Using Operators
- Expressions
- Strings, symbols, and numbers
- Introduction to Arrays
- Working with Hashes
- Generator and Predicate Ranges
- The if Statement
- Using the else / elsif Statements
- Using the unless Statement
- Understanding Modifiers
- The case Statement
- Loops and conditional expressions
- While & Until loops
- Methods and Arguments

Part 2: Ruby on Rails Framework

Rails Introduction

- The Architecture
- the Model-View-Controller pattern
- Rails project structure
- Scaffolding for jumpstart
- Putting Ruby on Rails
- Creating a Controller / an Action / a View
- Adding HTML in The View
- Passing Data from an Action to a View
- Using Sessions
- Accessing user data via form controls
- Using data in Controls
- Working with Modules
- Applying Controls to Modules
- Rails Application Directory
- Server Script
- Console Script

Ruby Object Oriented Programming (OOP)

- Create a Class
- Constructor and destructor
- Objects
- Classes
- Core Ruby
- Common Standard Library Classes
- Scope
- Blocks
- Modules
- fields & methods
- access control like public, protected, private
- class variables
- Ruby inheritance
- Polymorphism
- Garbage collection
- Exceptions and flow control

Ruby on Rails Scaffolding

- What is Scaffolding
- Modifying Scaffolding

Ruby on Rails Controllers

- What are Controllers
- Routing
- URL Generation
- Cookies
- Sessions
- Talking Between Actions
- Filters

Ruby on Rails Views

- What are Views
- RHTML
- Pagination
- Layouts
- Partial Page Templates

Handling Form Views

- Forms
- Text Field & Area Tags
- Date & time Fields
- Selection Lists
- Radio Buttons & Checkboxes
- File Upload
- Links

Part 3: Ruby on Rails with Database

Models & Ruby Database

- Database access using Active Record
- Query your data using the query language in Active Relation
- Use validations and callbacks to enforce data integrity
- building databases for ActiveRecord
- Creating ActiveRecord models
- Attributes
- Date-Time Fields
- Primary Keys
- Model Relationships
- One-to-One 1-1 Relationships
- One-to-Many 1-n Relationships
- Many-to-Many n-n Relationships
- Basic Searches
- Advanced Searches
- Table-naming conventions
- Displaying data from the database
- Connecting to a database
- Create and Name the Model and Controller
- Adding & Editing records to the database

Part 4: Advanced Ruby on Rails

Ajax with Rails

- What is AJAX or
- Nature of Ajax interaction
- Rails Ajax helpers and RJS

Agile Rails Development

- Rails conventions.
- Create web apps using an iterative (agile) development style
- Agile coding practices such as refactoring, DRY, and so on

Testing Ruby on Rails applications

- Rails testing units
- Testing Models
- Testing Controllers
- Security in Rails

Ruby on Rails Security

- Overview
- SQL Issues
- CSS Issues