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**Learning Style: On Demand**

**Technology:**

**Difficulty: Beginner**

**Course Duration: 5 Hours**

## Ruby Fundamentals



### About this course:

The Ruby: Fundamentals is a programming language course which provides hands on experience to the candidates on the fundamental components of the Ruby programming language. The course provides a lab intensive, hands-on programming environment, and helps the candidates to explore object-oriented

aspects of Ruby and best practices for developing robust applications with Ruby.

This fundamental course provides a great learning experience for beginner programmers to understand the basics of Ruby programming language. The course enables the students to write a simple code in Ruby and develop the concepts that ultimately help in creating real-world applications using Ruby programming language.

### **Course Objective:**

- Learn the syntax of Ruby programming language
- Understand and implement arrays, hashes and regular expressions
- Learn IO and exceptions
- Understand modules
- Describe Common Gateway Interface (CGI)
- Develop and implement network programming

### **Audience:**

- Individuals experienced with other programming languages such as C++, Java and Perl
- Ruby on Rails developers
- QA engineers

### **Prerequisite:**

- The course requires the students to have sound knowledge of working with Java.
- The students should be able to understand and demonstrate object oriented programming with Java 7 SE and Java 8.

### **Course Outline:**

#### **Chapter 01 - Getting Started**

- **Topic A: History and Installation - Part 1**
- History and Installation - Part 2
- History and Installation - Part 3
- **Topic B: Conventions and Best Practices - Part 1**
- Conventions and Best Practices - Part 2
- Conventions and Best Practices - Part 3

#### **Chapter 02 - Classes and Methods**

- **Topic A: Classes - Part 1**
- Classes - Part 2
- Classes - Part 3
- **Topic B: Methods - Part 1**
- Methods - Part 2

- Methods - Part 3
- **Topic C: Object Oriented Programming - Part 1**
- Object Oriented Programming - Part 2
- Object Oriented Programming - Part 3

## **Chapter 03 - Variables and Data Structures**

- **Topic A: Variables - Part 1**
- Variables - Part 2
- Variables - Part 3
- **Topic B: Arrays and Structs - Part 1**
- Arrays and Structs - Part 2
- Arrays and Structs - Part 3
- **Topic C: Hashes - Part 1**
- Hashes - Part 2
- Hashes - Part 3

## **Chapter 04 - Loops and Enumerable Methods**

- **Topic A: Loops - Part 1**
- Loops - Part 2
- Loops - Part 3
- **Topic B: Map, Inject, and Permutation - Part 1**
- Map, Inject, and Permutation - Part 2
- Map, Inject, and Permutation - Part 3

## **Chapter 05 - Finishing Touches**

- **Topic A: File Operations - Part 1**
- File Operations - Part 2
- File Operations - Part 3
- **Topic B: Input and Output - Part 1**
- Input and Output - Part 2
- Input and Output - Part 3
- **Topic C: RubyGems - Part 1**
- RubyGems - Part 2
- RubyGems - Part 3