

Intro to Ruby Programming

GoSkills online course syllabus

Wednesday, April 16, 2025

Skill level

Beginner

Lessons

41

Accredited by

CPD

Pre-requisites

None

Video duration

2h 39m

Estimated study time

21h for all materials

Instructor

John Elder

Introduction

- 1** **Course Introduction**
What to expect from this course.
- 2** **Install Sublime and Git Bash**
How to install Sublime Text and Git Bash Terminal for your development environment.
- 3** **Install Ruby**
Installing Ruby is easy with RubyInstaller.org
- 4** **Hello World and c9 Transition**
In this lesson we'll create our first Ruby program!

Ruby Programming Basics

- 5** **Comments and Errors**
How to comment code and deal with errors.
- 6** **Arithmetic Operators**
How to do basic math with Ruby.
- 7** **Floats and Integers**
Understanding the difference between floats and integers and when to use each.

- 8 Comparison Operators
How to compare two or more items with Ruby.
- 9 Variables
Storing information in variables is easy!
- 10 Assignment Operators
How to assign items to variables (and other things).
- 11 Getting User Input with Gets
Allowing the user to interact with your program.
- 12 Conditional Statements
How to use if/else/elsif statements in Ruby.
- 13 Multiple Conditional Comparison Operators
Sometimes you need to compare more than two things, here's how.
- 14 String Manipulation
Modifying a string is simple with these string manipulation tips.

Intermediate Ruby Concepts

- 15 Arrays
What are arrays and how do we create and use them?
- 16 Multi-Dimensional Arrays
An array of other arrays is multi-dimensional.
- 17 While Loops
Using while loops in Ruby.
- 18 Until Loops
Looping until a condition is met using until loops.
- 19 For and Each Loops
Understanding for and each loops, and when to use them.

20 FizzBuzz!
Fizzbuzz! is a popular interview question/quiz. Let's build it!

21 Hashes
What is a hash, and how do you create and use it?

22 Hash Manipulation
Adding and removing items from a hash.

23 Methods
Understanding methods in Ruby.

24 Methods Part 2
More on methods...

25 Random Numbers
How to generate random numbers with Ruby.

Advanced Ruby Concepts

26 Classes
What is a class and how do we use them?

27 Classes Part 2
More on classes and how to use them.

28 Instance Variables
What is an instance variable and how is it different from a regular variable?

29 Class Getters
What is a getter and how do we use it?

30 Class Setters
How to create a class setter and why you should.

31 Understanding Attr_accessor
Let Ruby create your getters and setters automatically with attr_accessor.

- 32** **Class Inheritance**
Inheriting information from other classes.
- 33** **Opening a File**
How to open another file in your Ruby file.
- 34** **Open a File into an Array**
We'll learn to output the contents of a file into an array.
- 35** **Open File Modes**
There are several "modes" for opening files. Learn them all here.
- 36** **Write to a File**
We'll learn to write and append data to a file.
- 37** **Adding Third-party Functionality with Gems**
How to install and use a third-party gem in your program.

Fun with Ruby - Build a Math Flashcard Game!

- 38** **Building a Flashcard Game**
Let's use what we've learned to build a math flashcard game!
- 39** **Flashcard Addition Method**
How to handle the addition flashcards.
- 40** **Flashcard Subtraction, Multiplication, Division Methods**
How to handle subtraction, multiplication and division flashcards.
- 41** **Creating a Menu**
Allow the user to choose which type of flashcard game to play with a menu.

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