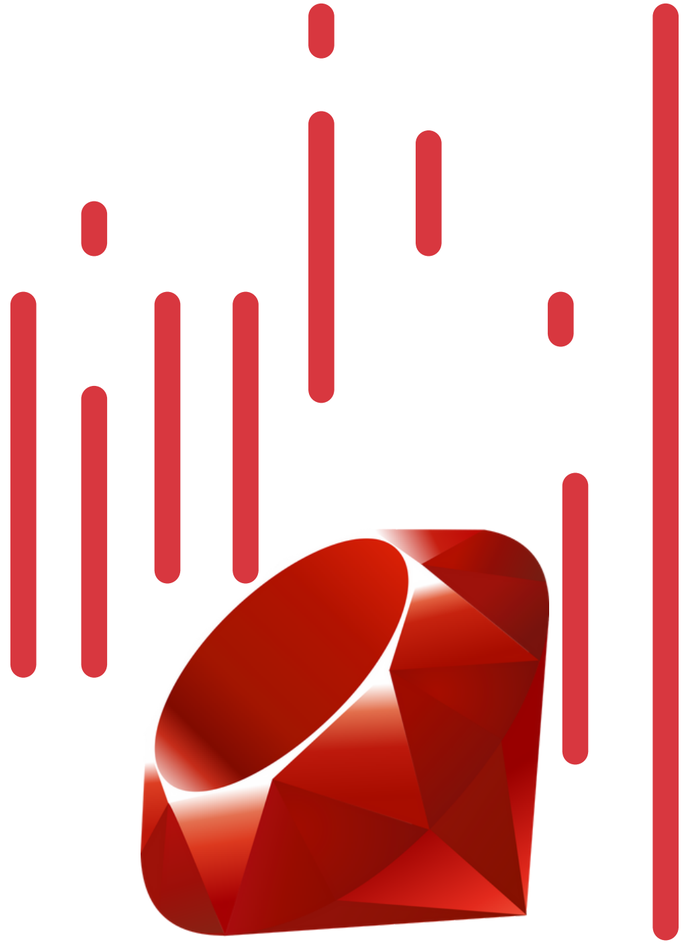
HELLO !

RUBY

DYNAMIC INTERPRETED SCRIPTING LANGUAGE



WHAT'S RUBY

DYNAMIC INTERPRETED SCRIPTING LANGUAGE

Yukihiro Matsumoto aka Matz

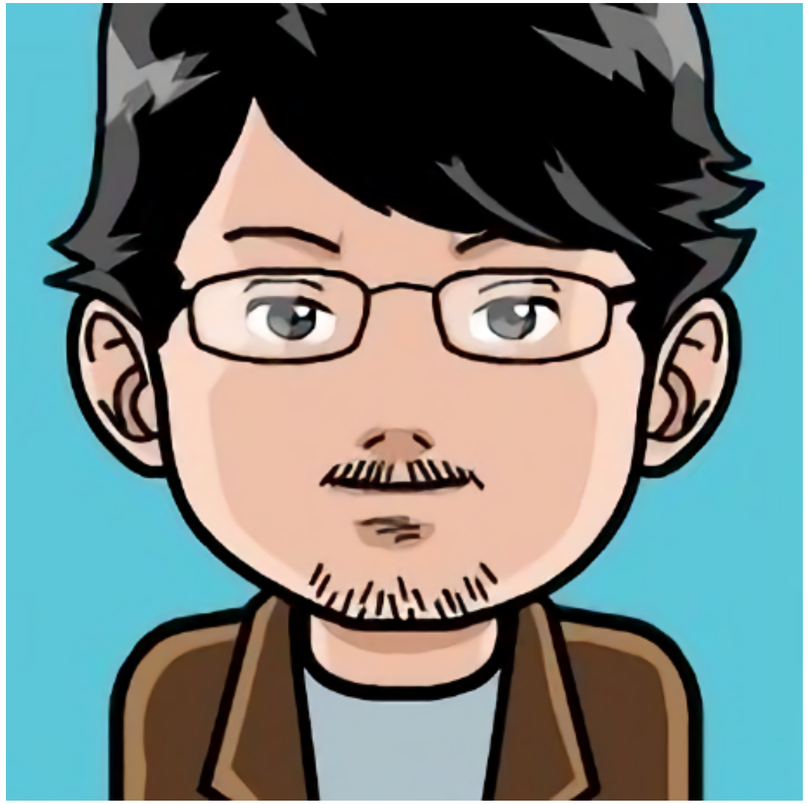
Minimal Syntax like Plain English

Truly Object Oriented

Gems Package Manager

Amazing Developer Ecosystem

WHAT MADE RUBY



Yukihiro Matsumoto

Primarily Influenced by Perl

Smalltalk like Messsage Passing System

The Inner Workings of Emacs and Lisp Language Influenced the Object Model

QUICK LOOK AT RUBY

DYNAMIC INTERPRETED SCRIPTING LANGUAGE

```ruby
# FizzBuzz in Ruby

(1..100).each do |number| # Loop from 1 to 100
  if number % 15 == 0
    # If the number is divisible by both 3 and 5 (i.e., 15), print "FizzBuzz"
    puts "FizzBuzz"
  elsif number % 3 == 0
    # If the number is divisible by 3, print "Fizz"
    puts "Fizz"
  elsif number % 5 == 0
    # If the number is divisible by 5, print "Buzz"
    puts "Buzz"
  else
    # If none of the above conditions are met, print the number itself
    puts number
  end
end
```

RUBY ON RAILS

THE WEB FRAMEWORK THAT HELPED BUILD UNICORNS

WHAT'S RAILS

A REBEL

David Heinemeier Hansson

Opinionated Model-View-Controller Framework

Considered a Rebel in the Web-Dev space

Helped Build Unicorns like GitHub, Airbnb and Shopify

Batteries Included Framework

HOTWIRE

HTML OVER THE WIRE

STRADA:

Web views in native applications to communicate more seamlessly with the mobile app layer

STIMULUS:

Stimulus is a JavaScript framework designed to augment HTML by automatically connecting elements to JavaScript objects.

TURBO:

Turbo is designed to make navigation and form submissions faster without reloading the page again.

WORLD ON RAILS

HOW IS RAILS USED IN THE REAL WORLD

GitHub

As Main Backend Technology

Airbnb

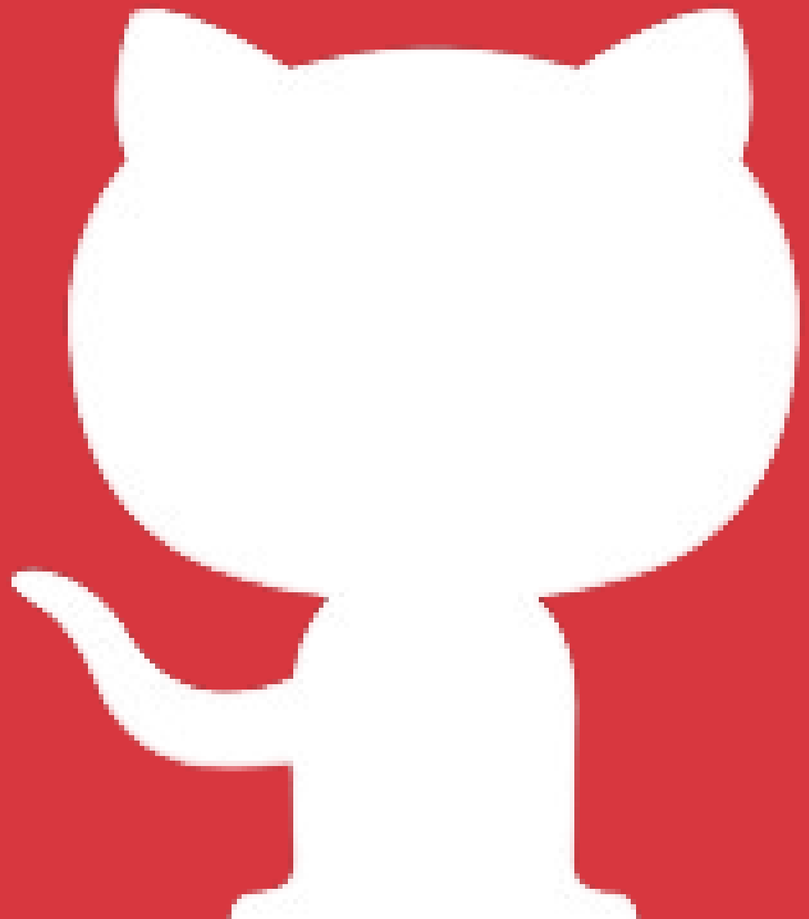
One of the early adopters of RoR

Shopify

Utilized RoR's scalable architecture

GITHUB

FOUNDED IN 2008



- Utilizes RoR as it **main backend technology**
- RoR includes a **robust testing mechanism.**
- RoR maintains a win-win relationship with GitHub by:
  - **Actively contributing to Rails**
  - Keeping RoR updated

AIRBNB

FOUNDED IN 2008

- One of the early adopters of RoR
- RoR's **convention-over-configurations** expedited the process
- Various builtin in features such as **Active Record framework** and **Rails migrations** simplified the development process for Airbnb

SHOPIFY

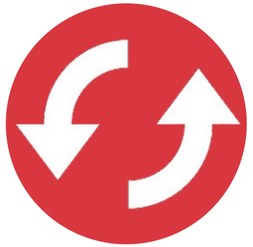
FOUNDED IN 2006

- Also utilized RoR's **convention-over-configuration** principle
- RoR's **scalable and modular architecture** helped Shopify handle its sudden spike in users at the time of its launch

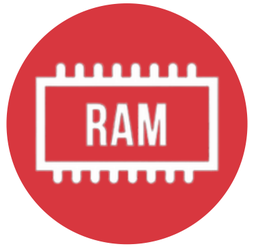
LIMITS ON RAILS

CAUSE NOTHING'S PERFECT

Performance



Concurrency



Memory Usage

Tight Coupling

Deployment and Scalability

PERFORAMANCE

- Ruby performance is often cited as a limitation, especially for CPU-intensive applications.
- It is slower compared to compiled languages like C or C++, or even some other interpreted languages like Java and C# under certain conditions.

CONCURRENCY

- Ruby's concurrency model, due to its Global Interpreter Lock (GIL), can be a bottleneck for multi-threaded applications.
- This makes it challenging to fully utilize the capabilities of multi-core processors for parallel execution.

MEMORY USAGE

- Ruby applications can consume a significant amount of memory, especially for larger applications
- This is partially due to its object-oriented nature and garbage collection mechanism.

TIGHT COUPLING

- Rails encourages a certain structure for web applications, which can lead to tight coupling between components.
- This can make it challenging to isolate parts of the application for independent scaling or replacement.

DEPLOYMENT AND SCALABILITY

- While deploying Rails applications has become easier over time, it can still be more complex compared to simpler frameworks or languages.
- Scalability requires a good understanding of both Ruby and Rails, as well as the deployment environment.

SCRIPT ON RUBY

Do you even UTF-8 bro?

- A script that let's you convert char to UTF-8 Binary
- Uses flags to convert into all sorts of types such as Hex, Octal and ASCII.
- It was made as a joke, don't take this too seriously.

PROJECT ON RAILS

TWEET AHEAD

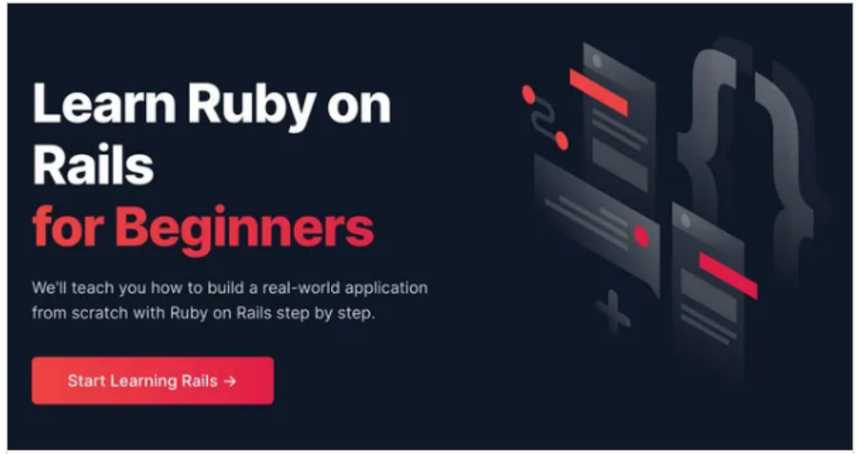
- Simple Web-App That allows you to schedule your tweets
- Features Good, Reliable and most importantly Secure User authentication.
- Let’s you connect to multiple twitter accounts.

WHERE TO LEARN MORE?

gramantin/awesome-rails: A curated list of awesome things related to Ruby on Rails

A curated list of awesome things related to Ruby on Rails - gramantin/awesome-rails

GitHub



Learn Ruby on Rails for Beginners course

Learn how to build a real-world application from scratch with Ruby on Rails step by step.

GoRails

Ruby on Rails | The Odin Project

The Odin Project empowers aspiring web developers to learn together for free

theodinproject.com

Your paragraph text

REFERENCES

- Getting Started with Rails — Ruby on Rails Guides. (n.d.). Ruby on Rails Guides. https://guides.rubyonrails.org/getting_started.html
- Learn enough to be dangerous. (n.d.). Learnenough.com. https://www.learnenough.com/blog/companies-using-ruby-on-rails#2. GitHub
- Learn Ruby on Rails | Codecademy. (n.d.). Codecademy. https://www.codecademy.com/learn/learn-rails
- Video by Fireship: https://www.youtube.com/watch?v=UYm0kfnRTJk
- Matz google tech talk: https://www.youtube.com/watch?v=oEkJvvGEtB4
- https://www.netguru.com/blog/pros-cons-ruby-on-rails
- https://pangea.ai/blog/tech-stack/best-practices-ruby
- https://www.reddit.com/r/ruby/comments/si29i3/what_are_the_downsides_of_ruby/
- The Ruby Story: https://twobithistory.org/2017/11/19/the-ruby-story.html#fnref:2

I Hope to See Ruby

- Helps World Programmers
  - to be Productive
  - to Enjoy Programming
  - to be Happy