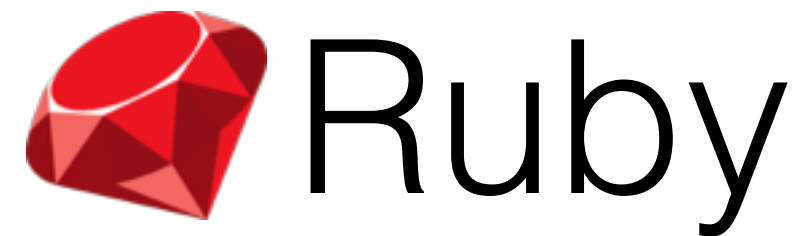


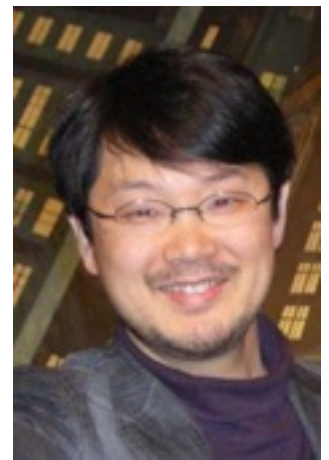
ការបង្កើតគេហទំព័រដោយប្រើប្រាស់

Ruby On Rails



Ruby is a high level programming language and a pure Object-Oriented Programming which is easy to learn and understand.

It was designed and developed in the mid-1990s by Yukihiro Matsumoto "Matz" in Japan.

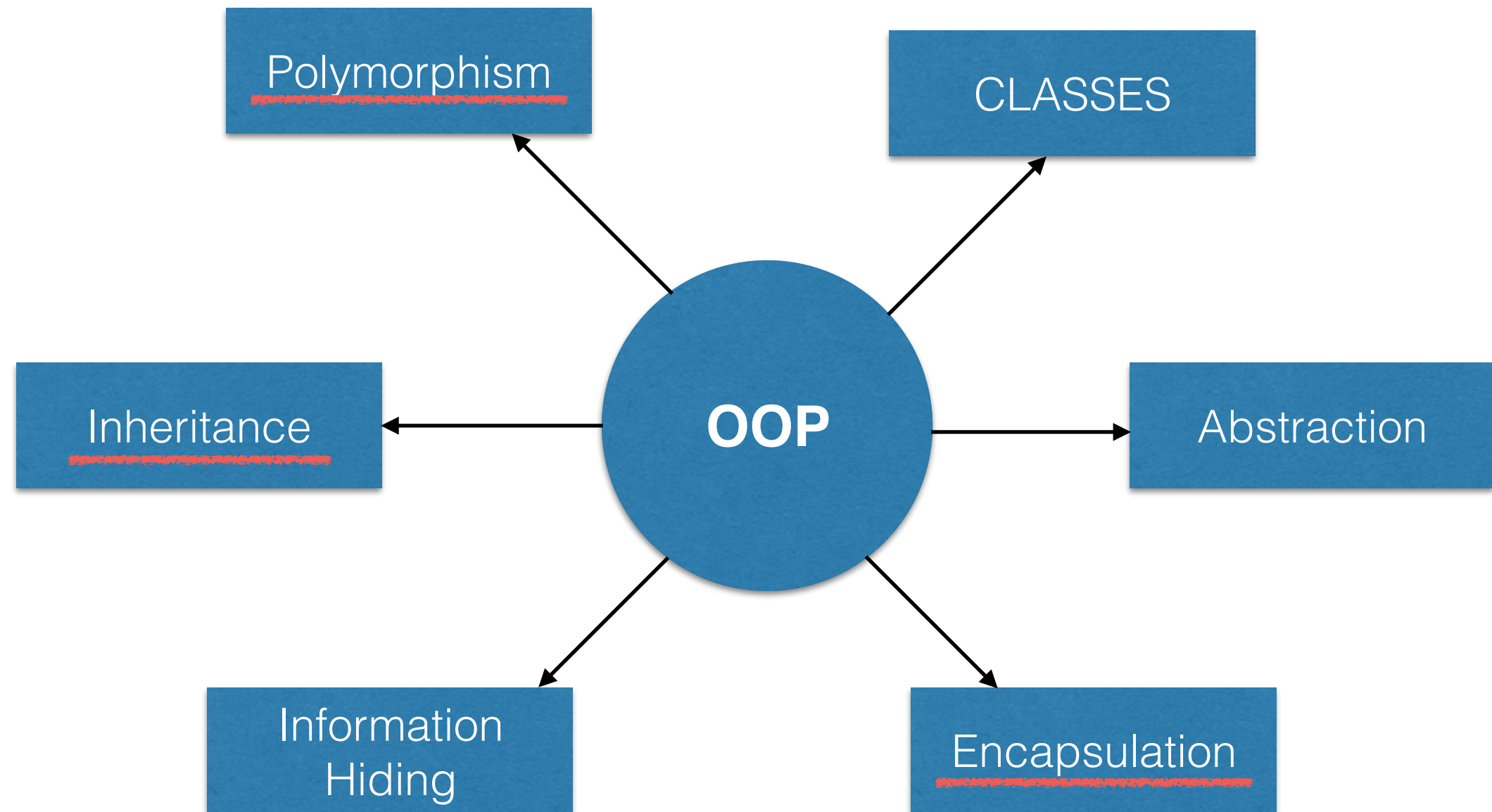


Matz

It's kind of open source and have a huge communities.

OOP

Object Oriented Programming



Inheritance is an important concept in oop. it's allow us to reuse the code that we write in another class. sub-class can use methods from the main class.

Example

```
class Animal
  def self.noise
    "some noise ..."
  end

  def self.kind
    "Pet"
  end
end

class Cat < Animal
  def self.noise
    "Moew moew ..."
  end
end
```

```
Cat.noise #out put 'Moew moew ...'
Cat.kind #out put 'Pet'
```

Polymorphism is the process of using an operator or function in different ways for different data input. In practical terms, polymorphism means that if class B inherits from class A, it doesn't have to inherit everything about class A; it can do some of the things that class A does differently. (Wikipedia)

Example

```
class Animal
  def noise
    "Some noise ..."
  end
end

#dog is inherited from animal now it can use all animal methods.
class Dog < Animal
  def noise
    "Woof woof !"
  end
end

dog = Dog.new
dog.noise #out put 'Woof woof !'
```

Encapsulation is the packing of data and functions into a single component.

Example

```
class Animal
  attr_accessor :name

  def initialize(name)
    @name = name
  end
end

animal = Animal.new
#set value to name
animal.name = "Big D"
```

Ruby Syntax

String are used for storing and manipulating text in Ruby. Strings are written between quotation marks. Both single (') and double (") quotes are supported, but quotes at each end of a single string must match (no "strings' or 'strings')!

Example

```
single_quotes = 'some text'  
double_quotes = "some text goes here"
```

Array is a Ruby data type that holds an ordered collection of values, which can be any type of object including other arrays

Example

```
array = ["string", 13, 3.14, true]  
animal = %(dog, cat, fish, tiger)
```

Hashes are collections of key-value pairs. Keys can be anything that's hashable, such as integers, strings, or symbols, but they must be unique for the hash they belong. The values to which keys refer can be any Ruby object.

Example

```
my_hash = { "key1" => "value1", :key2 => true, 3 => [1,2,3] }
```

```
#using
```

```
my_hash["key1"] #out put 'value1'e
```

Loops is a sequence of instruction that is continually repeated until a certain condition is reached. in ruby there are a few loop like 'while loop', 'for loop' and 'until loop'.

Example

```
counter = 3
until counter <= 0
  puts "#{counter}"
  counter -= 1
end
#out put
3
2
1
```


Conditions are features of a programming language which perform different computations or actions depending on whether a programmer-specified boolean condition evaluates to true or false.

There are a few condition like if, unless, elsif and else that we can use in Ruby.

Example

```
puts "work when it false" if true
```

```
puts "work when it false" unless false
```

```
x = 5
```

```
if x > 5
```

```
  print "I am big!"
```

```
else
```

```
  print "I am small!"
```

```
end
```

Block is a chunk of code that lives inside a control statement, loop, method definition, or method call. It returns the value of its last line. In Ruby, blocks can be created two ways: with braces or with a do/end statement.

Example

```
# Blocks that span only one line usually use the braces form  
obj.method { |obj| do_something }
```

```
[1,2,3].each do |number|  
  puts "I like #{number}!"  
end  
#out put  
I like 1!  
I like 2!  
I like 3!
```

lambda

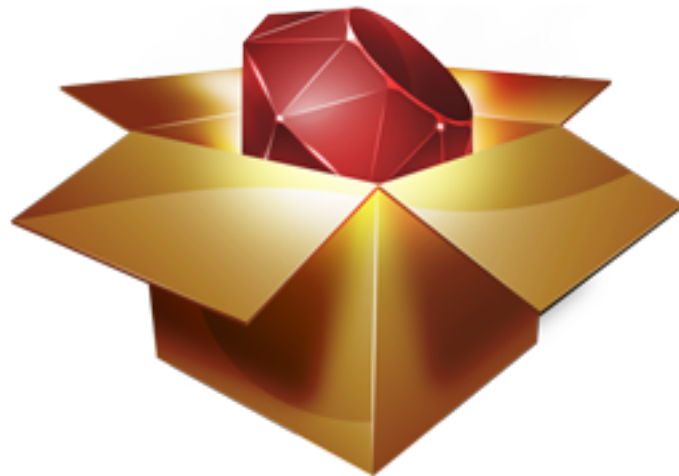
Lambda or Proc is just a function... peculiarly... without a name. They're anonymous. Lambdas in Ruby are also objects, just like everything else! The last expression of a lambda is its return value, just like regular functions.

Example

```
l = lambda { "I'm Anonymous function." }  
puts l.call #out put 'I'm Anonymous function.'
```

```
l = lambda do |name|  
  if !name.nil?  
    "Hello #{name} !"  
  else  
    "Hello there !"  
  end  
end  
puts l.call("Ninja") #output: Hello Ninja
```

Ruby Gems



RubyGems is a package management framework for Ruby

Ruby Community





Ruby on Rails, or **Rails**, is a web application framework written in Ruby. Rails is a model–view–controller (MVC) framework, providing default structures for a database, a web service, and web pages.

Rails was created by David Heinemeier Hansson (DHH) in 2003 and released Rails as open source in July 2004.

Some of the famous website that using rails



twitter.com



github.com



shopify.com

Rails Commands is a tool that interaction console to help you r development speed more faster.

Some basics rails commands

rails new name

rails server

rails generate scaffold name attribute:type

rake db:create

bundle install

rake routes

Rails Folders Structure

app

app/assets

app/controllers

app/helpers

app/mailers

app/models

app/views

config

lib

db

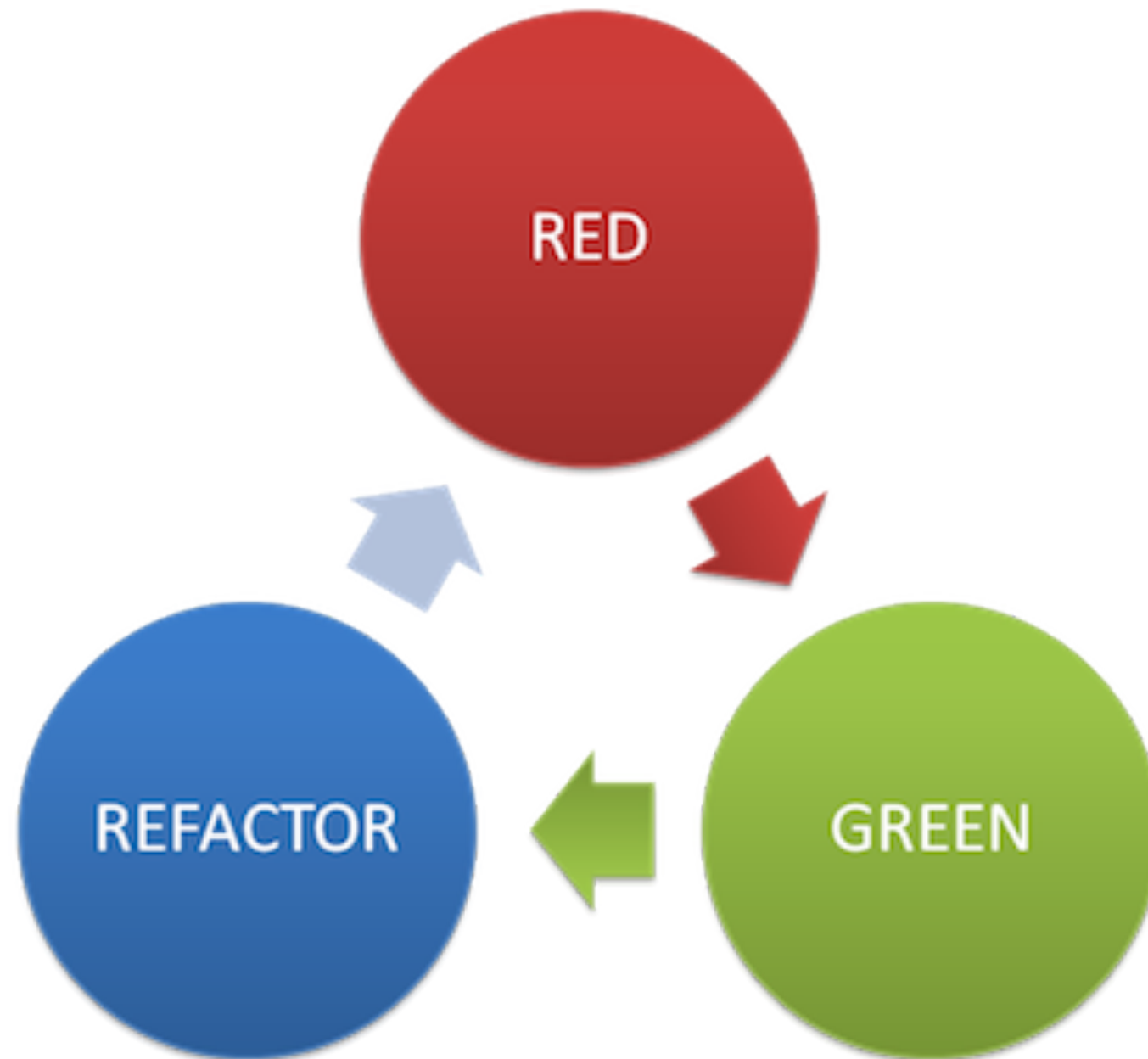
vendor

Gemfile

Modal View Controller



Test Driven Development & Behaviour Driven development



Hosting & Deployment

Fully-automated PaaS
platform as a service

OR

Virtual Private Server

Q & A

What next ?

Let's Start Ruby On Rails
Study Group?