# Ruby Reflection

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# What is metaprogramming?

Wikipedia: "Metaprogramming is the writing of computer programs that write or manipulate other programs (or themselves) as their data"

# What is reflection?

Wikipedia: "The process by which a computer program can observe and modify its own structure and behavior at runtime."

# Big picture

The full power of Ruby is available at almost any context.

# Basics

self Default Object

.class Class of an object

.methods Methods of an object

.instance_variables

.class_variables

Singleton Class  a = Array.new; def a.size; puts "hello
world";end;a.size

# Evals

eval  Interpret a string of Ruby code

instance_eval  Changes self for a block

class_eval  equivalent to class C; block...; end;

# Gets/Sets/Sends

instance_variable_get/set  a.instance_variable_set :@variable, value

class_variable_get/set

const_get/set  Array.const_set :A, "hallow" Array::A

send  a.send :method_name, args

# Methods

Class#remove_method
    undef  opposite of def
method_missing  Catchall

# BasicObject

New in 1.9. BasicObjet: an Object with no methods, class, or instance variables.

http://ruby-metaprogramming.rubylearning.com/html/

Questions