



Battle Royale

Merb's Role in the MVC Holy Wars

> whoami

> whoami

- Foy Savas

> whoami

- Foy Savas
- foysavas online (github, irc, twitter, etc)

> whoami

- Foy Savas
- foysavas online (github, irc, twitter, etc)
- Ruby Application Developer

> whoami

- Foy Savas
- foysavas online (github, irc, twitter, etc)
- Ruby Application Developer
- Merb and DataMapper Contributor

> whoami

- Foy Savas
- foysavas online (github, irc, twitter, etc)
- Ruby Application Developer
- Merb and DataMapper Contributor
- Bet Dan Grigsby \$20 we could patch Extlib against some ridiculous edge case bug

Dan, you better pay up.

The Merb Way

SAVAS

Addison-Wesley Professional Ruby Series



THE MERB WAY

THE MERB WAY



FOY SAVAS

道可道非常道
名可名非常名

A way that can be taken rarely stays the way.
A name that can be given rarely stays the name.

Applies to Web Frameworks

Applies to Web Frameworks

- OpenACS

Applies to Web Frameworks

- OpenACS
- JSP

Applies to Web Frameworks

- OpenACS
- JSP
- ASP

Applies to Web Frameworks

- OpenACS
- JSP
- ASP
- Coldfusion

Applies to Web Frameworks

- OpenACS
- JSP
- ASP
- Coldfusion
- Bird's Nests of PHP

Applies to Web Frameworks

- OpenACS
- JSP
- ASP
- Coldfusion
- Bird's Nests of PHP
- Ruby on Rails

Applies to Web Frameworks

- OpenACS
- JSP
- ASP
- Coldfusion
- Bird's Nests of PHP
- Ruby on Rails
- Django

Applies to Web Frameworks

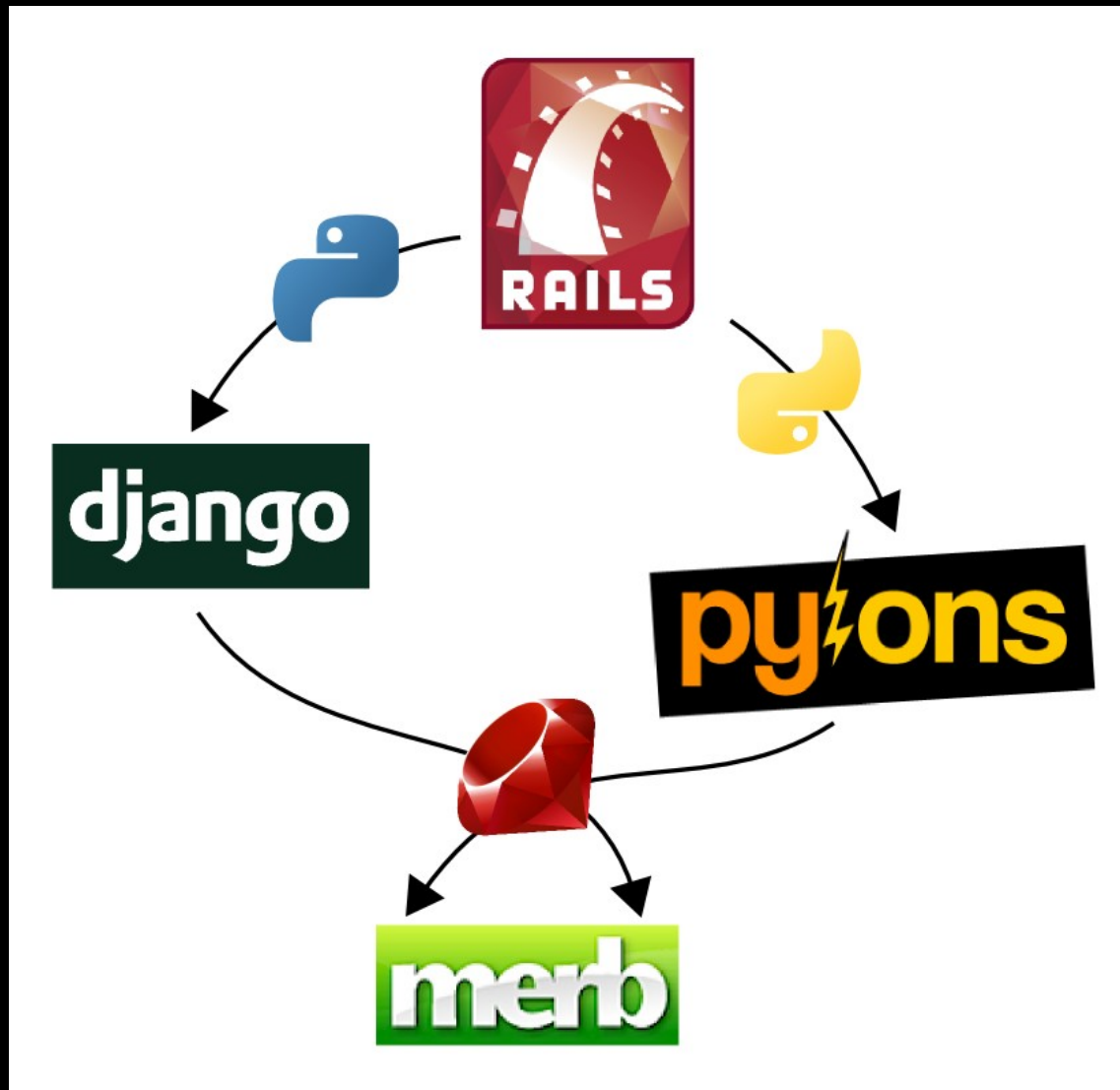


- OpenACS
- JSP
- ASP
- Coldfusion
- Bird's Nests of PHP
- Ruby on Rails
- Django

class << your_mind

So what is Merb?

Merb's Conceptual Lineage





No Worries

that was pretty much made up anyway.

Merb.first

- Created by Ezra of EY
- In under 120 LOC
- Meant to do what Rails was bad at: quick responses
- Mongrel + ERB
- Distributed as a pastie



What is it now?

merb

- High Performance
- Quick to Deploy
- Easy to Scale
- Agile Web Framework
- Available with a full stack
- That's built to be modular so that it can grow with your app

Sounds a lot like Rails

It is.

Awesome

Questions?

Yeah, what would happen if you lock them up in a death match cage – you know, 2 enter, 1 leave style?



Bloody good
question.

Well... they're not human





Humans => Frameworks

- Physical Power
- Fighting Techniques
- Previous Fighting Experience
- Crowd Appeal
- Coaches and Trainers
- Application Performance
- Stack Features
- Proven Production Apps
- Marketability
- Development Team

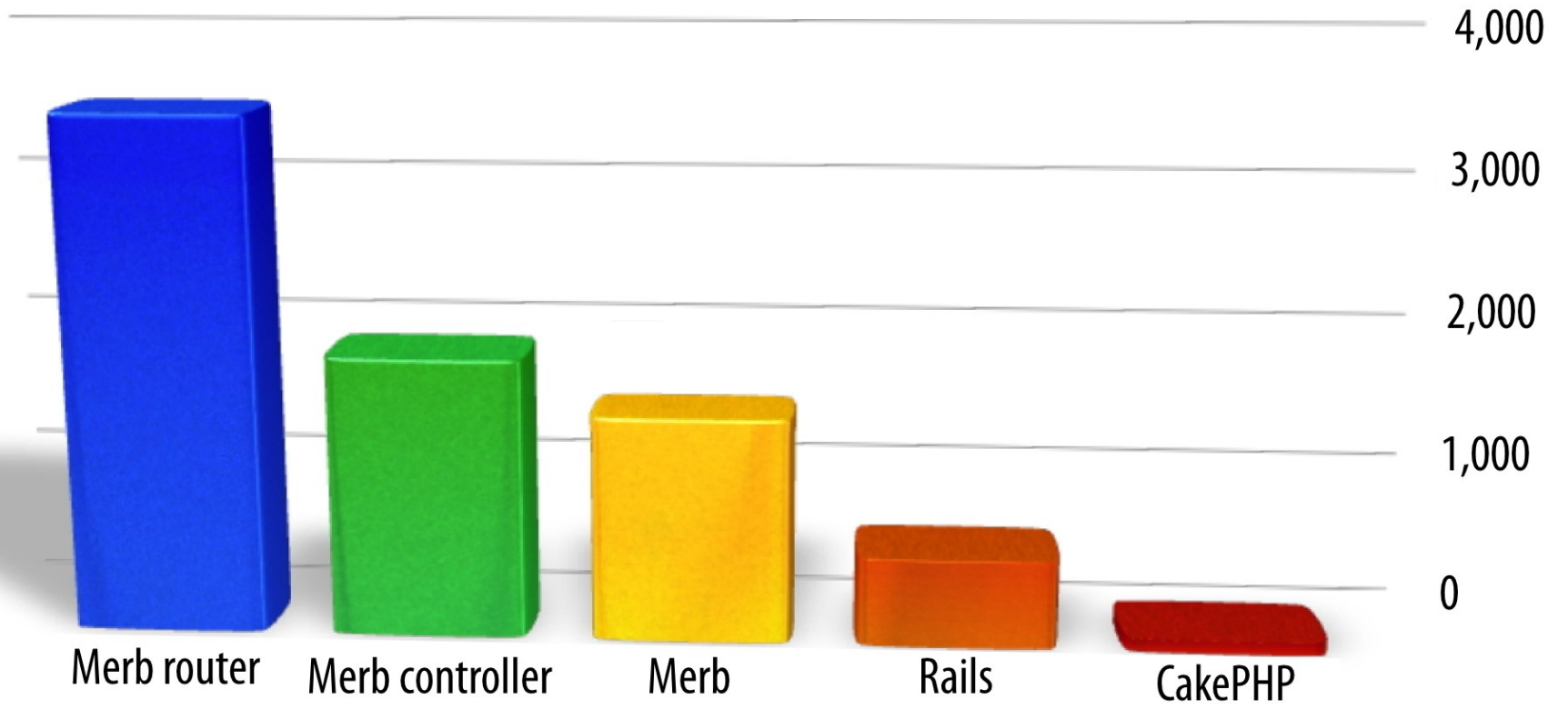


{



Application Performance

■ Merb router ■ Merb controller ■ Merb ■ Rails ■ CakePHP



requests per second

Rails & Merb

Eat Cake For Breakfast



But Merb Still Blazes Ahead





60

55

5

50

10

45

15

40

20

35

25

30

CENCOR

7 JEWELS

SHOCKRESISTANT

SWISS MADE

27 30 3

24 6

21 9

18 12

15



Symbol#to_proc

Symbol#to_proc

- Commonly used in Rails
 - all over ActionPack and ActiveRecord
 - `filter_chain.select(&:before?).map(&:method)`

Symbol#to_proc

- Commonly used in Rails
 - all over ActionPack and ActiveRecord
 - `filter_chain.select(&:before?).map(&:method)`
- Considered evil in Merb due to performance costs.
 - but also because its been a non-standard not-so-readable idiom
 - Merb doesn't stop you from using it in your own apps, but recognizes micro-performance adds up especially at the framework level

1000

1000

FEDERAL RESERVE NOTE

AE 77665544 B

E5



THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE

Mary Ellen Peterson
Treasurer of the United States

A 2

SERIES 1996



THE UNITED STATES OF AMERICA



AE 77665544 B

Robert E. Rubin
Secretary of the Treasury

A 100

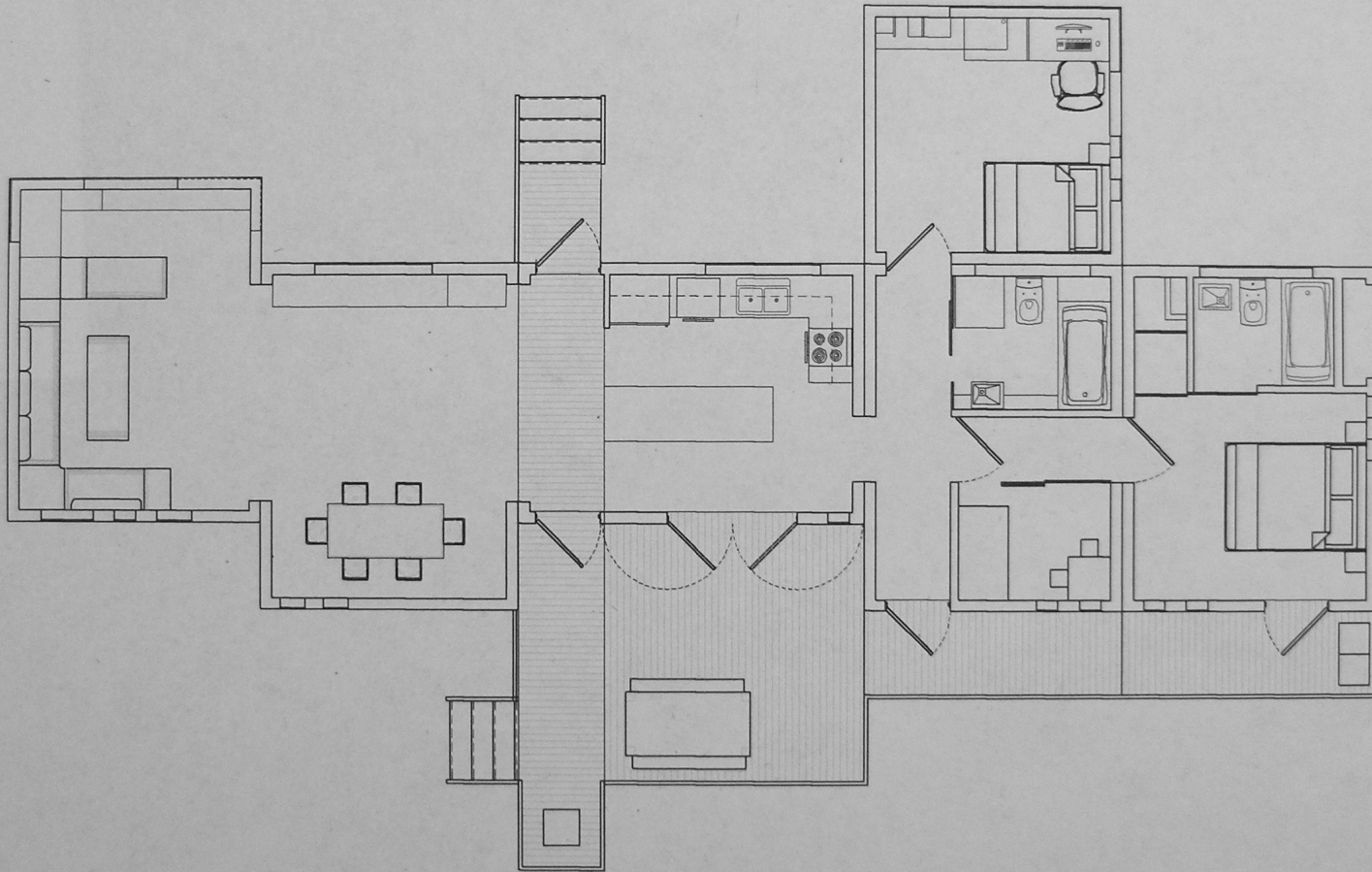


ONE HUNDRED DOLLARS

FRANKLIN

**A microsecond saved,
is a microsecond earned.**





templates and ivars

templates and ivars

- Rails uses instance variables in templates

templates and ivars

- Rails uses instance variables in templates
 - Painstakingly copies them over from the controller to the view
 - `@assigns.each { |key, value|
instance_variable_set("@#{key}", value) }`

templates and ivars

- Rails uses instance variables in templates
 - Painstakingly copies them over from the controller to the view
 - `@assigns.each { |key, value|
instance_variable_set("@#{key}", value) }`
- Merb loves you

templates and ivars

- Rails uses instance variables in templates
 - Painstakingly copies them over from the controller to the view
 - `@assigns.each { |key, value|
instance_variable_set("@#{key}", value) }`
- Merb loves you
 - Inlines templates into controller as methods.
 - ivar access through templates is natural, not contrived
 - some serious performance gains

No code
is faster than no code.

Merb Performance Promise



- No stable release of Merb is slower than the last.

Merb Performance Promise



- No stable release of Merb is slower than the last.
- Ezra says heads will roll if it's not upheld.



Stack Features



Abstract Controller

- Because not everything is a web controller, you know?
- Used extensively
 - Exception Controller
 - Mail Controller
 - More in later slides...

No Double Renders

- Controller#render is just method that returns a string
 - clean Ruby that's idiomatically sane
- the value a controller action return is the response
 - far easier to understand
 - far easier to work with

display and provides

- Rails uses `respond_to`
 - ew...
- We just use case statements
 - Thanks to the the clean implementation of controller actions in Merb
- But we could also use the `display` method
 - sends an serialized object in the appropriate formats provided
 - or alternatively a rendered template if available

Background Processes

- Merb has a worker queue built-in
 - `run_later do`
 - # anything time intensive
 - # not required for the response
 - `end`
- Push it outside request-to-response cycle

Built on Rack

- Possible to write a web app from anything with a call method

```
- require 'rack'
  app = lambda {[
    200,
    {"Content-Type" => "text/plain"},
    ["Hello World"]
  ]}
  Rack::Handler::Mongrel .run(app, {:host =>
  "127.0.0.1", :port => 4000})
```

- Merb works with any server with a Rack interface
 - mongrel, thin, ebb, passenger

Rack Middleware

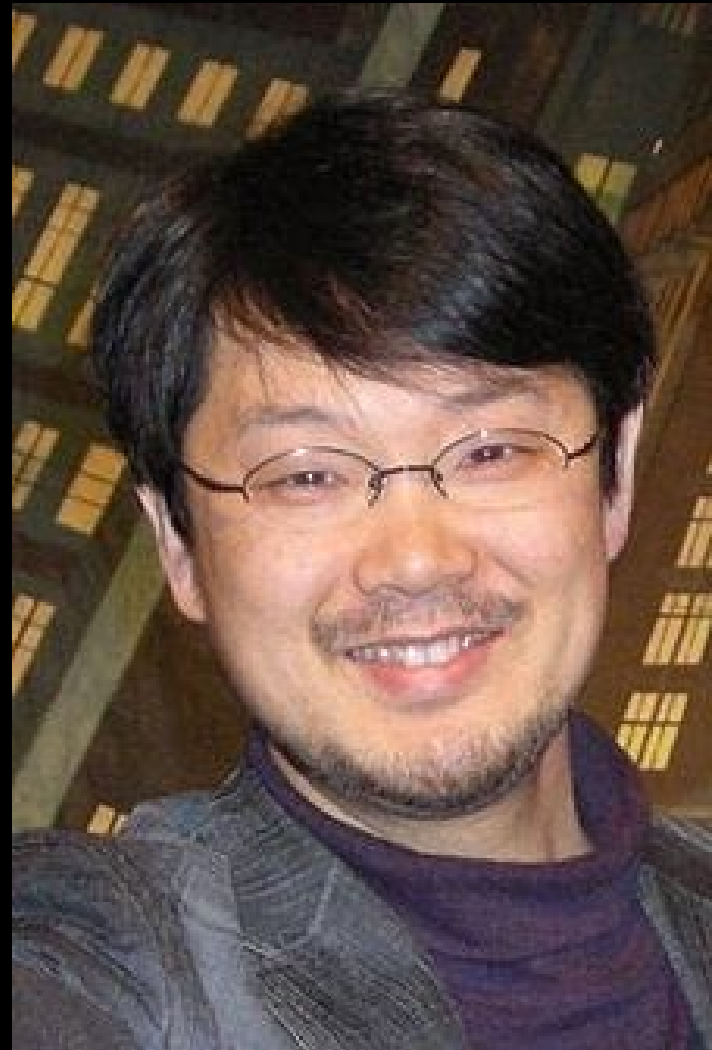
- Rack allows you to string together apps using `Rack::Cascade`
- Merb has `config/rack.rb`
 - based on request variables, target certain requests and handle them without invoking the full Merb stack
 - serve RSS feeds
 - call an API
 - run a full out micro Rack app
 - use it just to modify the requests

Extlib

- ActiveSupport is a kitchen sink
 - with no immediate remedy
 - changes Ruby's very idioms
- Extlib isn't.
 - Just what you need
 - Class#class_inheritable_*, cattr_*
 - Object#meta_class, try_dup, in?
 - String#snake_case, camel_case
 - blank?

Matz's Opinion

- Rails makes drastic changes to the Ruby language itself
- I'm not a web-guy, but Merb gives users more freedom in a Ruby-ish way of programming
- “Merb has a bright future for the people not satisfied by the fixed ways in Rails”



DataMapper

DataMapper
destroys ActiveRecord

Auto-migrations

- What you always needed but never knew
- Get developers up and running quickly
- Classic migration still around, but meant for production deployments

Identity Maps

- This is false in ActiveRecord:
 - ```
@parent = Tree.find(:first, :conditions => ['name = ?', 'bob'])
@parent.children.each do |child|
 puts @parent.object_id == child.parent.object_id
end
```
- In DM, row-objects are equal to themselves

# Lazy Loading DataSets

- Particular fields are treated as if they were associations, and only loaded when you need them
- You can define these in your model
- By default applies to text and text-based fields

# Strategic Eager Loading

- Makes working with collections easy.
- Only issues the queries you need, when you need them.
- :includes not needed
- “Performant by Default”
- Die N+1. Die.

DataMapper  
makes working with  
collections easy



Anything for Easy Collections

# alias\_method\_chain

- Rails loves it.
  - Implementation of the decorator pattern



# alias\_method\_chain

- Rails loves it.
  - Implementation of the decorator pattern
  - Results in alias\_method\_chain hell.
    - Makes code ridiculously opaque
    - With alias\_method\_chain as an accomplice, the standardly handled request stack-trace shows at least 10 more lines to Mongrel than it does with Merb.



# alias\_method\_chain

- Rails loves it.
  - Implementation of the decorator pattern
  - Results in alias\_method\_chain hell.
    - Makes code ridiculously opaque
    - With alias\_method\_chain as an accomplice, the standardly handled request stack-trace shows at least 10 more lines to Mongrel than it does with Merb.
- Merb hates it.
  - Prefers genuine refactoring, which is good for the API



# Merb API

- Methods are documented as public, private, plugin
  - public method interfaces will not change from version to version without timed deprecation
  - private methods are not to be used by the application developer, providing the core team maximum flexibility for restructuring and increasing performance
  - plugin methods aren't exactly as safe as public methods but are tagged so that plugin developers know it's acceptable to use them

# Plugins are Gems



# Merb Parts

- Conceptually like Controllers for Partials
- Widgets can be complex, so sometimes you need the logic layer
- Thank you, once again, Abstract Controller

# Merb Slices

- Like Rails Engines, just smarter and official part of the stack
- Extract some code from your app and use it on others
- Organized in the same MVC way
- Some Possible Uses
  - forums slice
  - groups slice
  - admin slice

# Merb Auth

- RESTful authentication
- Cascading strategy pattern
  - Login form, HTTP Auth, OpenID, custom strategies
- Customize your logins
  - or use the standard merb-auth password slice

There's more...

So much more...



SAVAS

Addison-Wesley Professional Ruby Series



THE MERB WAY

THE MERB WAY



FOY SAVAS



# Proven Production Apps

# Rails Examples

twitter

YELLOWPAGES.COM™

**CHOW** FOOD  
DRINK  
FUN

CrunchBase



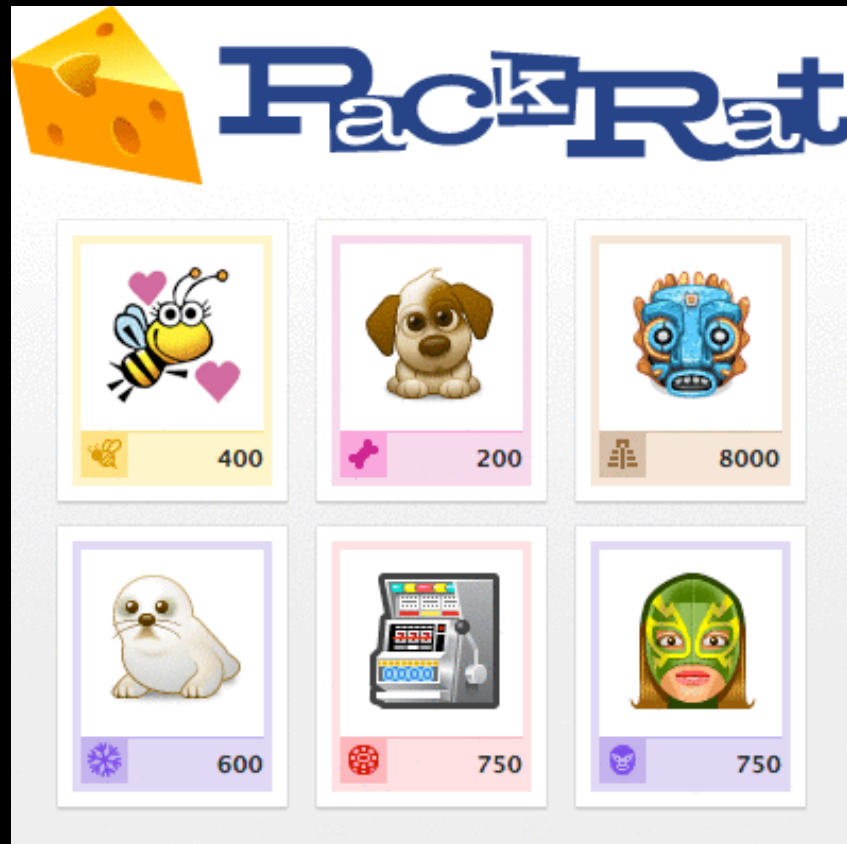
hulu™

ODEO

iLike

 **revolutionhealth™**  
*Your home for health and balance*

# Merb Examples



# Facebook Application



Javascript Framework



Javascript Framework  
( Merb Backend )

# Apple already using Merb



previously .mac



Search Engine



Search Engine  
( Merb Frontend )

# Count them all as Ruby apps





# Marketability

# Rails

## Ruby's Killer App

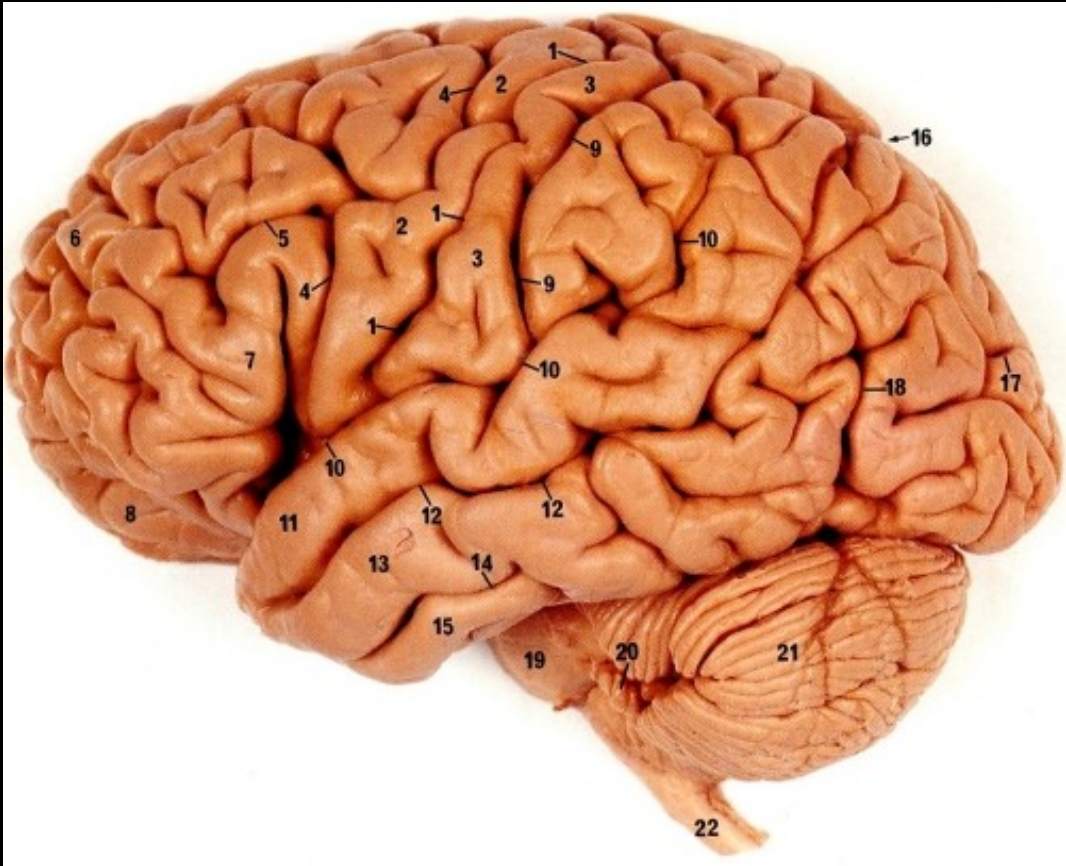
# Rails

## Ruby's Killer App

### Forever?

# Is marketing why?

There's a lot of Rails promotional material and much of it is connected to *Getting Real* and 37signals, and that may be why clients ask for it, but it's not why they want to use it.





The Internet has made us all  
peer-consumers.



**foysavas**

smile for the screenshot :-)

*less than 10 seconds ago from web*

[@gilesgoatboy](#) still going to be able to make it? *about 16 hours ago from web in reply to gilesgoatboy*

typos suck *about 24 hours ago from web*

#prorubyconf08 "baking it out": nytimes slang for snapshotting a full rails app and pushing it statically, used during the election *about 24 hours ago from web*

#prorubyconf08 #obieconf is there a IRC backchannel? *9:11 AM yesterday from web*

**Name** Foy Savas

**Location** South End, Boston, MA USA

**Web** <http://www.foysav...>

**Bio** Director at Assembly Web Consulting. I'm also an aspiring raw foodist and author of The Merb Way.

191  
following

256  
followers

196  
updates

## Updates

## Favorites

## Actions

## Following



Value is  
all the promotion  
you need.



# Development Team

# EngineYard vs 37signals



# EngineYard vs 37signals



- I am not going there.

# EngineYard vs 37signals



- I am not going there.
- DHH virtually made our space. Respect.

# EngineYard vs 37signals



- I am not going there.
- DHH virtually made our space. Respect.
- Ezra, Yehuda, and gang – they are making Ruby succeed.

*Merb Advantage Anyway?*

# Merb Advantage Anyway?

- Far more modular framework means that developers, including core team developers, tend to work on features as gems
  - This significantly lowers the social barrier to entry and results in a greater chance for both experimentation and innovation.

# Merb Advantage Anyway?

- Far more modular framework means that developers, including core team developers, tend to work on features as gems
  - This significantly lowers the social barrier to entry and results in a greater chance for both experimentation and innovation.
- Core framework not in the opinion business
  - Even though you may not find yourself using the standard Merb stack, the core development team will still be there for you by making sure that Merb plays as well as it can with your choice of tools.

}

Obviously both  
Rails and Merb  
are heavy-hitters

There can be only one.



The winner is...

*Any questions?*

**Wait, who won?**

**Who's dead?**

It doesn't matter.

That question was whack.

# True Story

I quit a job because we switched from Rails.

Granted it was from Rails to PHP, and  
because the consultancy was about cheap  
labor, quick contracts, and no value.

But I left.

I love working in Rails

I love working in Rails  
so don't ask me to kill it.



Merb has fundamental  
advantages for both  
developers and their clients

# Including

- Superior performance that can translate to saving on servers
- Granulated modularity that increases the potential reuse of code
- Stack agnosticism that gives you the freedom to use the right tools for the right job

# Open-Endedness

道可道非常道  
名可名非常名

A way that can be taken rarely stays the way.  
A name that can be given rarely stays the name.

The applications we build  
need a framework that can  
grow alongside them.

Merb is that framework.

Don't just believe me...

class << your\_mind

# Try it yourself

```
gem install merb
```