Are you using Ruby on Rails?

Should you?

Come have a seat, and we'll figure it out

Learn how to create happy programmers, and 10 real world benefits to using Rails

Talk begins at 5 PM

Warning

Warning

I am not an **expert**

Warning

I am not an **expert**

I am a **bad programmer**

Where are we going?

Meet Tim

“What makes you enjoy being a painter Tim?”

“I enjoy being creative, and finding new things to paint”

“I enjoy creating beautiful pieces of art”

“I get satisfaction when people purchase my Art”

Happiness comes from:

The Inspiration

The Challenge

The Reward of Success

Meet Bob

“What makes you enjoy being a programmer Bob?”

“I enjoy thinking of creative ways to solve problems”

“I enjoy creating something with my own two hands, and watching it succeed”

“I enjoy getting positive feedback from my clients”

Happiness comes from:

The Inspiration

The Challenge

The Reward of Completion

Programmers don’t like programming

How do we increase programmer happiness?

How do we increase programmer happiness?

Tools that are easier to learn

How do we increase programmer happiness?

Tools that are easier to learn

Tools that make problems easier to solve

How do we increase programmer happiness?

Tools that are easier to learn

Tools that make problems easier to solve

Tools that increase the chance of success

♥

RAILS

Ruby

A Programming Language

1993 by Yukihiro “Matz” Matsumoto

Ruby

A Programming Language

1993 by Yukihiro “Matz” Matsumoto

Ruby on Rails

Web Application Framework

2004 by David Heinemeier Hansson

What problems does Ruby solve for me?

What problems does Ruby solve for me?

Understandable

What problems does Ruby solve for me?

Understandable

Principle of Least Surprise (POLS)

What problems does Ruby solve for me?

Understandable

Principle of Least Surprise (POLS)

Transparent

What problems does Ruby solve for me?

Easy to learn how it works

Principle of Least Surprise (POLS)

Transparent

What problems does Ruby solve for me?

Easy to learn how it works

Easy to guess how it works

Transparent

What problems does Ruby solve for me?

Easy to learn how it works

Easy to guess how it works

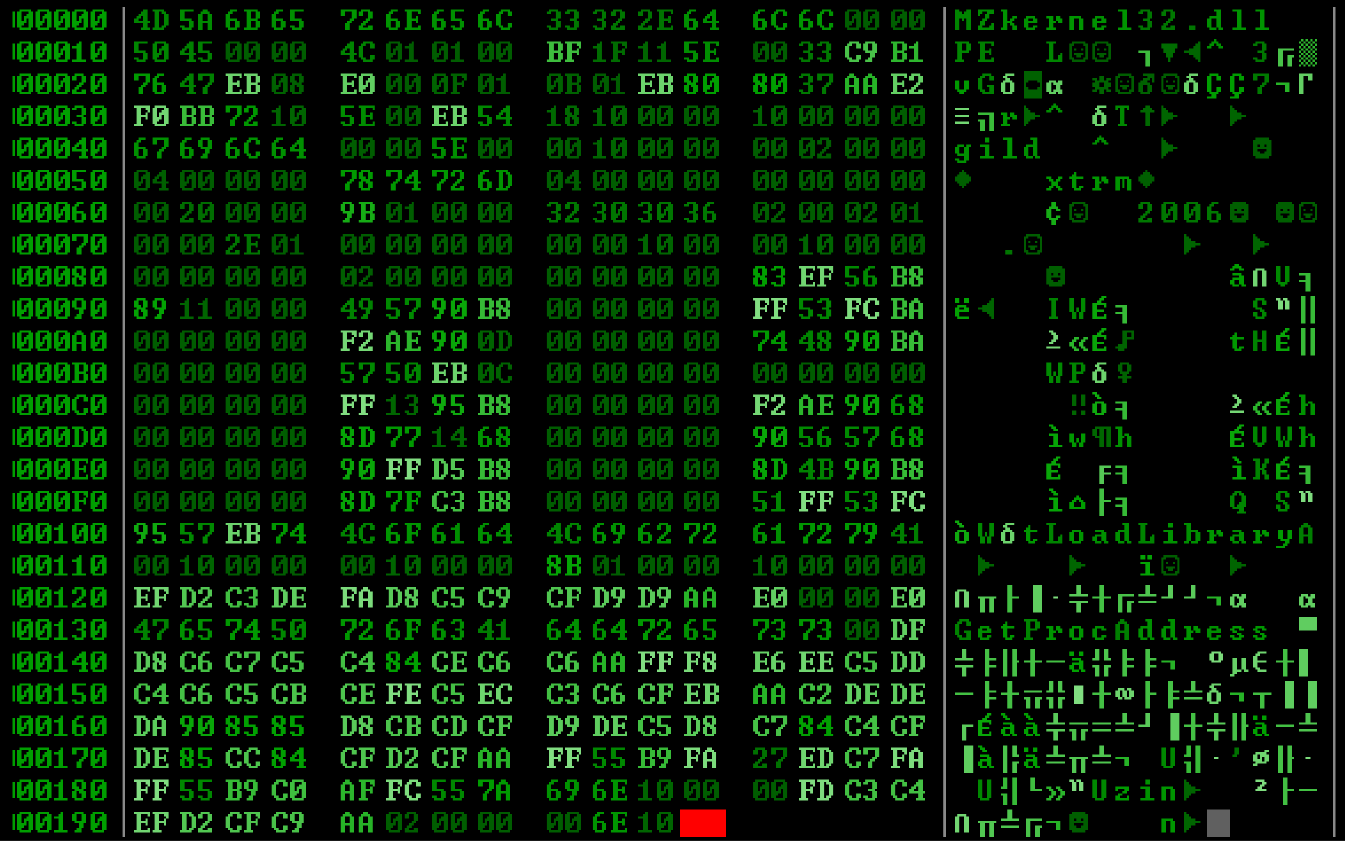
Easy to read how it works

Coderspeak

```
3.times { print “Ho!” }

exit unless shopping_cart.size > 0

[‘toast’, ‘cheese’].each { |food| print food.capitalize }
```



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What problems does Rails solve for me?

Problem #1

There are too many ways to create web applications

Problem #1

There are too many ways to create web applications

Solution

The Golden Path

Problem #1

There are too many ways to create web applications

Solution

The Golden Path

MVC Framework

Model View Controller

Problem #1

There are too many ways to create web applications

Solution

The Golden Path

MVC Framework

Convention Over Configuration

ActiveRecord

The glue between the database and the code

ActiveRecord

The glue between the database and the code

posts table

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posts table

1. Create the the model file

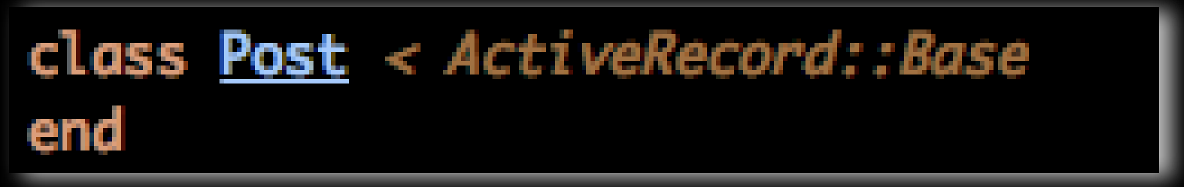
ActiveRecord

The glue between the database and the code

posts table

1. Create the the model file

post.rb



```ruby
class Post < ActiveRecord::Base
end
```

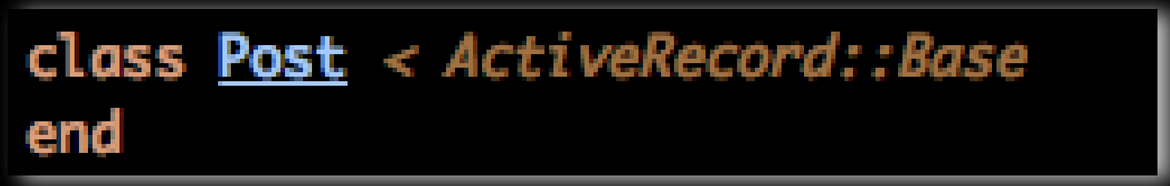
ActiveRecord

The glue between the database and the code

posts table

1. Create the the model file

post.rb



```ruby
class Post < ActiveRecord::Base
end
```

There is no step 2

ActiveRecord

This means anywhere in my app, I can run

```
Post.find(:all)

Post.find(:all, :order => “created_on”)

Post.find(:all, :conditions => { :id => 2..9 })

Post.count(:all)

Post.find_by_id(3)
```

ActiveRecord

This means anywhere in my app, I can run

```
for post in Post.find(:all)
    print “post title = “ + post.title
    print “post body = “ + post.body
end
```

ActiveRecord

This means anywhere in my app, I can run

```
for post in Post.find(:all)
    print “post title = ” + post.title
    print “post body = ” + post.body
end
```

```
Post.find_by_title_and_body(“this”, “that”)
```

Problem #2

Our website was coded for one type of database, and now we need to change

Problem #2

Our website was coded for one type of database, and now we need to change

Solution

ActiveRecord

Not dependent on your database

Problem #3

Our website isn’t maintainable or extendable

Problem #3

Our website isn’t maintainable or extendable

Solution

Keep things modular MVC

Problem #3

Our website isn’t maintainable or extendable

Solution

Keep things modular	MVC
Don’t Repeat Yourself	DRY

Problem #3

Our website isn’t maintainable or extendable

Solution

Keep things modular	MVC
Don’t Repeat Yourself	DRY
Full Suite of Testing Tools	

Problem #4

Versioning the Database

Problem #4

Versioning the Database

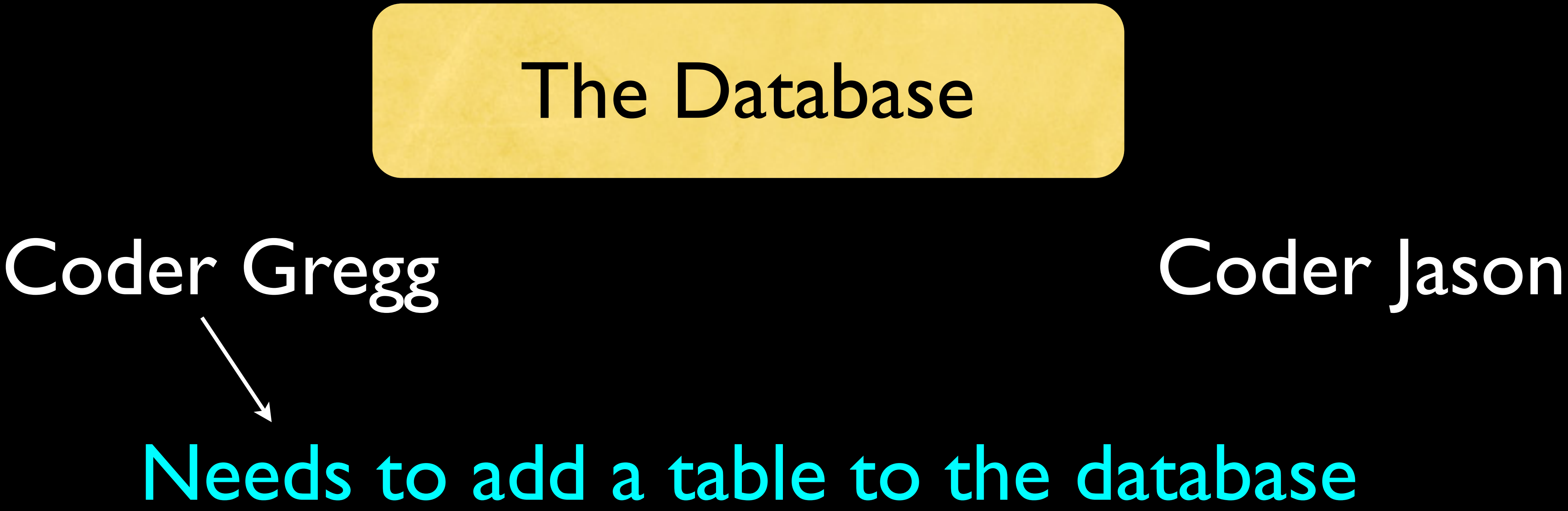
The Database

Coder Gregg

Coder Jason

Problem #4

Versioning the Database



The Database

Coder Gregg

Coder Jason

Needs to add a table to the database

Problem #4

Versioning the Database

The Database

Coder Gregg

Coder Jason

Needs to add a table to the database

1. Write up the table SQL and send it to everyone

Problem #4

Versioning the Database

The Database

Coder Gregg

Coder Jason

Needs to add a table to the database

1. Write up the table SQL and send it to everyone

or

2. Take a database snapshot and send it to everyone

Problem #4

Versioning the Database

Solution

Migrations

Problem #4

Versioning the Database

Solution

Migrations

1. Gregg creates 001_add_table.rb
2. Gregg checks this file into the source repository
3. His coworkers check out the code, and run: "rake db:migrate"

A Sample Migration

001_add_table.rb

```
class AddTable < ActiveRecord::Migration
  def self.up
    create_table :cars do |t|
      t.column :model, :string
      t.column :year, :int
      t.column :make, :string
      t.column :comments, :text
    end
  end

  def self.down
    drop_table :cars
  end
end
```

Problem #5

Every time I change the database
I have to add 20 lines of code

Problem #5

Every time I change the database
I have to add 20 lines of code

Solution

With Rails, I don't have to add any lines of code

Problem #6

We want to integrate AJAX, but without a javascript expert.

Problem #6

We want to integrate AJAX, but without a javascript expert.

Solution

Javascript Helpers & RJS

Your pathway to Prototype and Scriptaculous

Problem #7

If our lead developer quits, we’re totally screwed

Problem #7

If our lead developer quits, we’re totally screwed

Solution

There is only one way to create a Ruby on Rails application

Problem #8

Creating web services require twice as much work

Problem #8

Creating web services require twice as much work

Solution

Only code once

```
@post = Post.find(1)
respond_to { |format|
   format.html { render :action => ‘view_post’ }
   format.xml { render :xml => @post.to_xml }
   format.js { render :action => ‘appear_post’ }
}
```

Problem #9

We’ve run up into limitations of the framework itself

Problem #9

We've run up into limitations of the framework itself

Solution

Flexible (Reprogrammable) Tools

The biggest concern

Problem #10

WILL IT BLEND?™
PRESENTED BY BLENDTEC

Will it scale?

Basecamp

twitter

43 Things

Will it scale?

A
LIST
apart
FOR PEOPLE WHO
MAKE WEBSITES

PENNY ARCADE

ODEO

Scaling is

100% Hardware & Server Config

Scaling is

100% Hardware & Server Config

FALSE

Scaling is

50% Hardware & Server Config
50% Good Coding & Cached Data

Scaling is

50% Hardware & Server Config
50% Good Coding & Cached Data

Rails comes with 3 caching mechanisms

To Sum Up

Even if you’re

not an expert

and might be a

bad programmer

you can still create advanced web applications

My Email:

Gregg@RailsEnvy.com

My Blog:

www.RailsEnvy.com

To Learn:

Agile Web Development with Rails

by Dave Thomas & David Heinemeier Hansson

Ruby For Rails

by David Black