

Ruby on Rails

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Section I - Intro

- Hopes & Fears
- Intro
- Install Rails
- Watch the Ball
- Instant Gratification
- About Rails

Hopes & Fears



What is Rails?



ActionPack

ActiveRecord

ActiveSupport

ActionMailer

ActiveResource

Convention over Configuration

Don't Repeat Yourself

Domain Specific Languages

"magic"
possibly too much

Why is Rails Important?



2 Tier vs 3 Tier

Rails Server

DB

Web Server

App Server

DB



A History Lesson

37 signals 4.

A Better Way To Work.

Over 3 million people use our web-based apps to get things done the simple way.

- · Nothing to download
- · Safe, secure, backed-up
- Access from anywhere
- · Works on Mac. PC, Linux
- · No "IT Guy" required
- Always up-to-date
- → More reasons why web-based is better.

"One of the Net's rising stars." -TIME

"Reader's Choice." - BusinessWeek

More praise from the press

Manage Projects and Collaborate with Your Team & Clients.

Share files, meet deadlines, assign tasks and centralize feedback.



Basecamp

Manage Your Projects

Organize and Share Information Across Your Business.

The quickest way to create and share information with your whole team.



Organize Your Business

Track Your Contacts, Leads, and Deals. Always Be Prepared.

Keep track of past conversations, calls, and emails. Never forget to follow-up.



Highrise

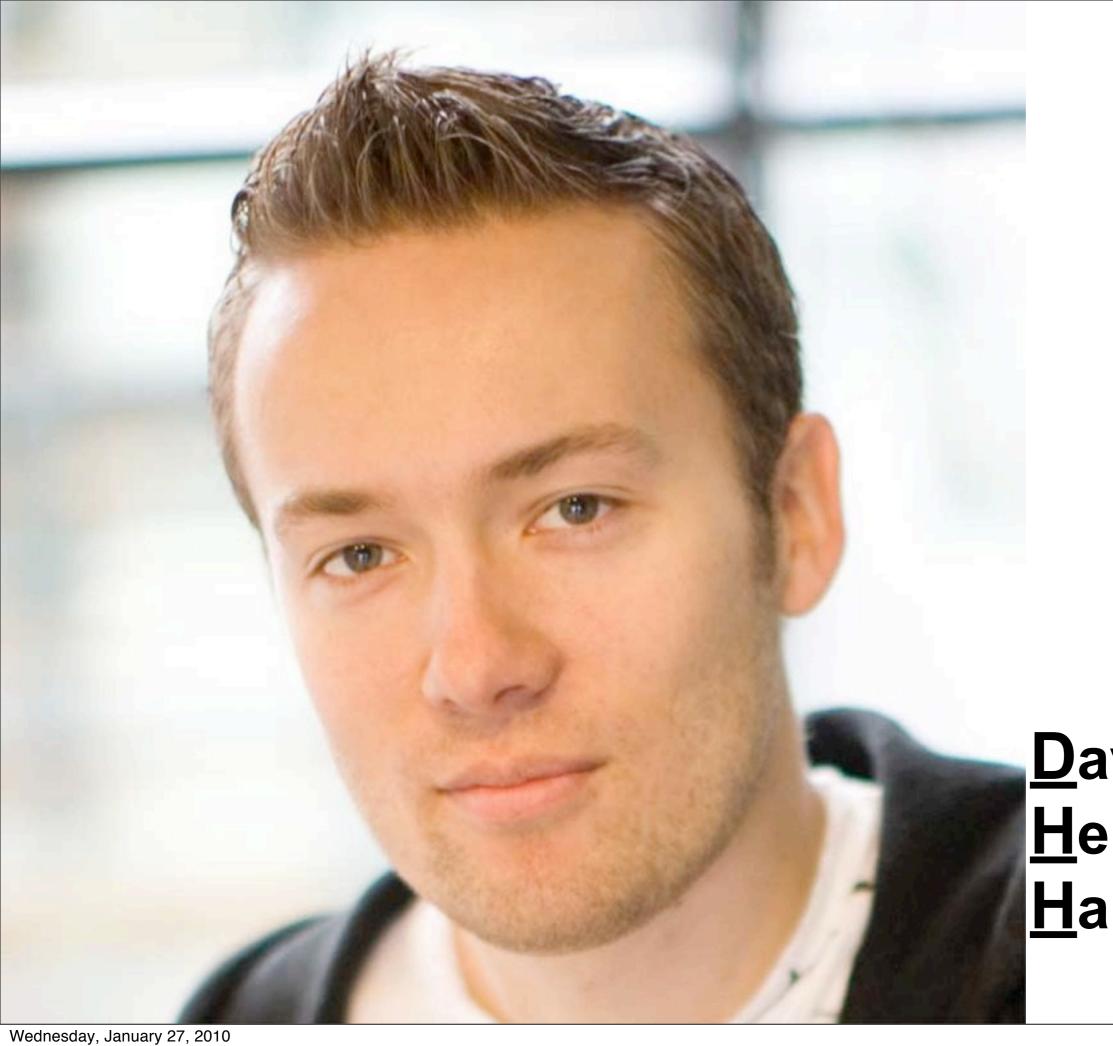
Track Your Contacts

Real-Time Chat, File & Code Sharing for Remote Teams.

Campfire is like instant messaging, but designed specifically for groups.



Chat with Your Group



<u>D</u>avid <u>H</u>einemeier <u>H</u>ansson

HOME PROPOSALS ABOUT EXHIBIT HALL CONNECT MORE RAILS YOUR ACCOUNT



RAILSCONF 2010 CALL FOR PARTICIPATION IS NOW OPEN

TWITTER

(OFFICIAL TAG: #RAILSCONF)

@jeffcohen sure, RailsConf is probably
 cool and all But what about Chicago

BaseCamp

Shopify

CrunchBase

Spiceworks

Github

Twitter

Hulu

Urban Dictionary

Penny Arcade

XING

Scribd

Yellowpages.com

Rails == Agile

This Class

- 10 weeks
- Lecture / Lab ~ 33% / 66%
- Working in rotating pairs
- Grading in class / on board

To Pass

- Attendance
 - 80% of classes
 - 20 min late == absence
- 100% of assignments
- project that meets requirements

Project Requirements

- at least 3 tables / models
- tests (model & controller)
- some client-side javascript
- validation
- login / signup (or equivalent complexity)
- must be "approved"

Resources

- Homework completion sheet
- Mailing List
- The Book
 - Agile Web Developement w/ Ruby on Rails
- http://apidock.com/
- jeremy.lightsmith@gmail.com
- 312-953-1193

Install Rails

Pass the Stewie



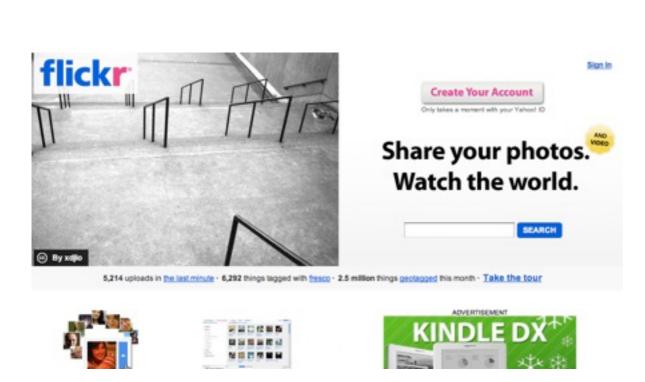
Advanced Search Language Tools

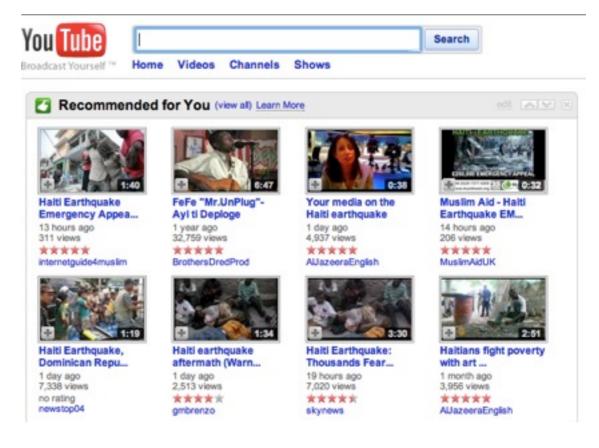
Google Search I'm Feeling Lucky

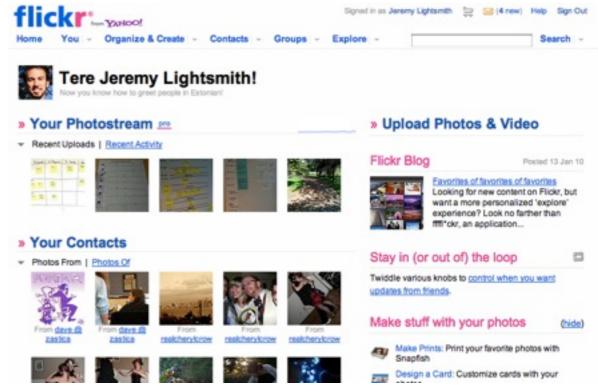
Information, resources, and ways you can help survivors of the Haiti earthquake.

Advertising Programs - Business Solutions - About Google

62010 - Privacy







Instant Gratification

About Rails



Naming Conventions

script/console



Active Support Extensions

- date / time
 - 5.seconds.ago
 - Date.today.to_s(:db)
- string helpers pluralize, classify, underscore, etc
- blank?



Section 2 - Models

- database.yml
- Migrations
- Active Record Models
- Active Record Relationships
- Active Record Validations

database.yml

Migrations



Active Record Models

Active Record Relationships

belongs_to

has_many

has_one

has_many:through

Active Record Validations

```
validates_presence_of
validates_uniqueness_of
validates_length_of
```

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Section 3 -Agile Practices

- Testing in Rails (5)
- Red, Green, Refactor (15)
- Ping Pong Pairing (60)
- Going Further (5)
- Test Models (60)
- Fixtures (10)

Testing in Rails

test/ fixtures/ functional/ integrational/ performance/ unit/ test_helper.rb

Red, Green, Refactor

Make it fail,
Make it pass
Make it clean

Refactoring?

changing

STRUCTURE !BEHAVIOR

Ping Pong Pairing

Going Further

Stuff to know about that we won't use here

Behavior Driven Design





Acceptance
Test
Driven
Design





Test Models

Fixtures

Section 4 - Controllers

- Routes
- REST
- View Forms
- Test Controllers
- Nested Resources

Routes



View Forms

Test Controllers

Nested Resources

Section 5 - Plugins

- Logging In
- Pagination
- Upload a File
- Upload a Photo

Logging In

Pagination

Upload a File

Upload a Photo

Section 6 - Views

- About views
 - Templates
 - Helpers
 - Layouts
- CSS
- Other view options
- Hoptoad for Errors

About Views: Templates, Helpers, Layouts



Other View Options

Hoptoad

Section 7 - AJAX

- AJAX
- RJS Templates
- jQuery
- Firebug



RJS Templates

jQuery

Firebug

Section 8 - Deployment

- Heroku
- E-mail
- Capistrano
- Other Deployment Options
- Deployment Strategies

Heroku

E-Mail

Capistrano

Other Deployment Options

Deployment Strategies

Section 9 - Advanced

- Caching
- Searching

Caching

Searching

Section 10 -Project Demos

Project Demos

Project Demos