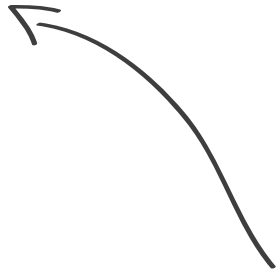
Rails Tutorial

Let's install some Rails!

rubyforge.org/frs/download.
php/76862/railsinstaller-2.2.1.exe



Windows:

Download RailsInstaller and run it. Click through the installer using the default options.

Installation of Git and SSH-keys is required if you want to put your app online with Heroku.

http://railsoneclick.com/

OS X:

Download the RailsInstaller for your version of OS X:

10.7 and 10.8 http://railsinstaller.s3.amazonaws.com/RailsInstaller-1.0.4-osx-10.7.app.tgz

10.6 http://railsinstaller.s3.amazonaws.com/RailsInstaller-1.0.4-osx-10.6.app.tgz

Double click the downloaded file and it will unpack it into the current directory. It will open a readme file with 'Rails Installer OS X' at the top. Please ignore the instructions in this file.

Linux:

For Ubuntu:

```
bash < <(curl -s https://raw.github.com/railsgirls/instal-
lation-scripts/master/rails-install-ubuntu.sh)
```

For Fedora:

```
bash < <(curl -s https://raw.github.com/railsgirls/instal-
lation-scripts/master/rails-install-fedora.sh)
```

Or!

... if you already have Ruby installed:

```
ruby -v
```

To install Rails, use the `gem install` command provided by RubyGems:

```
gem install rails
```

To verify that you have everything installed correctly:

```
rails --version
```

If it says something like “Rails 4.0.0”, you are ready to continue.

Creating a map

Starting a new Rails project:

```
mkdir projects
cd projects
rails new mapp
cd mapp
rails s
```

Open http://localhost:3000 in browser.
CTRL-C to exit the server in Terminal/Command Prompt.

scaffolding

Scaffolding is a technique supported by some model-view-controller frameworks, in which the programmer may write a specification that describes how the application database may be used. The compiler uses this specification to generate code that the application can use to create, read, update and delete database entries, effectively treating the template as a “scaffold” on which to build a more powerful application.

scaffolding

quick feedback

motivated by faster success

learn how Rails works

jumpstart your development

scaffolding

has always been controversial

Rails' wow factor

illustrating the best practices around RESTful controllers

scaffolding:

Rails' scaffolds generate a starting point that allows us to list, add, remove, edit, and view things.

```
rails generate scaffold attendee name:string twitter_
handle:string bio:text address:text picture:string

rake db:migrate

rails s
```

app/	Contains the controllers, models, views, helpers, mailers and assets for your application. You'll focus on this folder for the remainder of this guide.
bin/	Contains the rails script that starts your app and can contain other scripts you use to deploy or run your application.
config/	Configure your application's runtime rules, routes, database, and more.
config.ru	Rack configuration for Rack based servers used to start the application.
db/	Contains your current database schema, as well as the database migrations.
Gemfile **Gemfile.lock**	These files allow you to specify what gem dependencies are needed for your Rails application. These files are used by the Bundler gem.
lib/	Extended modules for your application.
log/	Application log files.

public/	The only folder seen to the world as-is. Contains the static files and compiled assets.
Rakefile	This file locates and loads tasks that can be run from the command line. The task definitions are defined throughout the components of Rails.
README	This is a brief instruction manual for your application. You should edit this file to tell others what your application does, how to set it up, and so on.
test/	Unit tests, fixtures, and other test apparatus.
tmp/	Temporary files (like cache, pid and session files)
vendor/	A place for all third-party code. In a typical Rails application, this includes Ruby Gems and the Rails source code (if you optionally install it into your project).

html and Rails

Creating HTML Dynamically with erb. Know PHP? Then the content of an erb file will seem very familiar to you. It is a mixture of HTML and Ruby code (erb stands for embedded Ruby). But we cannot simply put such an erb web page into the public directory, as pages stored in this directory are delivered 1:1 without first passing through an erb parser.

This is the first time for us to get in touch with the MVC (Model, View, Controller) model.

```
<!DOCTYPE html>
<html>
<head>
  <title>Testproject</title>
  <%= stylesheet_link_tag    “application”, :media => “all” %>
  <%= javascript_include_tag “application” %>
  <%= csrf_meta_tags %>
</head>
<body>

<p>My Header</p>
<hr>

<%= yield %>

</body>
</html>
```

design:

We'll use Twitter's Bootstrap project to give us nicer default styles really easily. Open app/views/layouts/application.html.erb and add on top of

```
<%= stylesheet_link_tag "application" %>
```

the line

```
<link rel="stylesheet" href="http://railsgirls.com/assets/
bootstrap.css">
```

and swap

```
<%= yield %>
```

for

```
<div class="container"><%= yield %></div>
```

Let's also add topbar and footer to the layout and style those and the attendees table. To the application.html.erb under <body> add:

```
<div class="navbar navbar-fixed-top">
    <div class="navbar-inner">
        <div class="container"><a class="brand" href="/">The
mapp</a><ul class="nav">
              <li class="active"><a href="/
attendees">attendees</a></li>
            </ul>
        </div>
    </div>
</div>
```

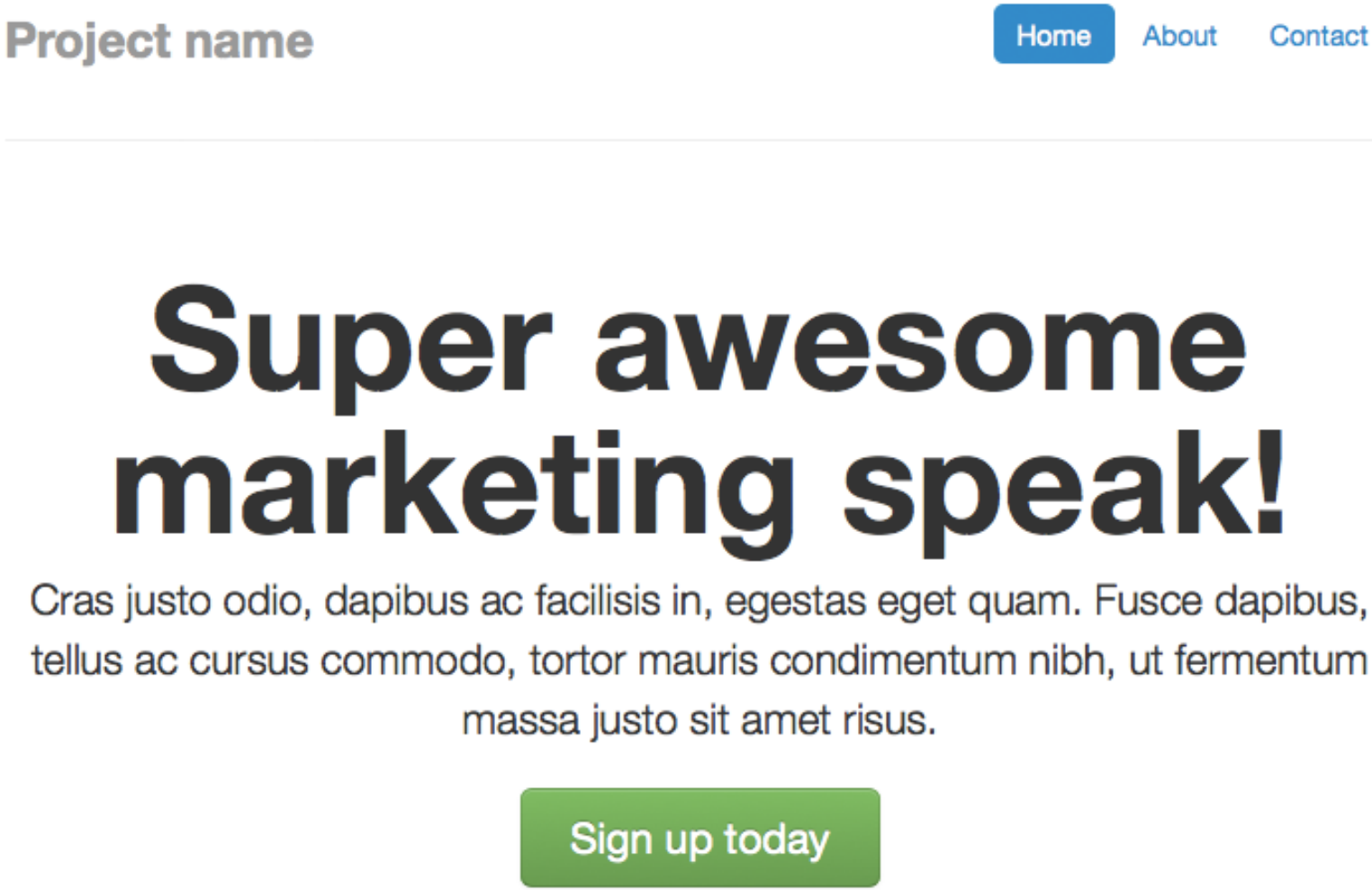
before </body> add:

```
<footer>
    <div class="container">5 talen in 5 dagen</div>
</footer>
```

Open app/assets/stylesheets/application.css and add to the bottom:

```
#logo {
    font-size: 20px;
    font-family: "Helvetica Neue",Helvetica,Arial,sans-ser-
if;
    float: left;
    padding: 10px;
}
body { padding-top: 100px; }
footer { margin-top: 100px; }
table, td, th { vertical-align: middle !important; border:
none !important; }
th { border-bottom: 1px solid #DDD !important; }
td.picture { width: 140px; }
td.picture img { width: 140px; }
```

usually considered bad practice


Project name
Home
About
Contact
Super awesome marketing speak!
Cras justo odio, dapibus ac facilisis in, egestas eget quam. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.
Sign up today
Subheading
Donec id elit non mi porta gravida at eget metus. Maecenas faucibus mollis interdum.
Subheading
Donec id elit non mi porta gravida at eget metus. Maecenas faucibus mollis interdum.

Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called the hero unit and three supporting pieces of content. Use it as a starting point to create something more unique.

Learn more »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

View details »

Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

View details »

Geo for Bootstrap

A theme for Twitter Bootstrap, from Divshot.

To get started, download the "bootstrap.css" or "bootstrap.min.css" file and include it in your HTML webpage <head> tag: <link href="bootstrap.css" rel="style

Typography

h1. Heading 1
h2. Heading 2
h3. Heading 3
h4. Heading 4
h5. Heading 5
h6. Heading 6

Example body text

Nullam quis risus eget urna mollis ornare vel eu leo. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nullam id dolor id nibh ultricies vehicula ut id elit.

Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Donec sed odio dui.

Example addresses

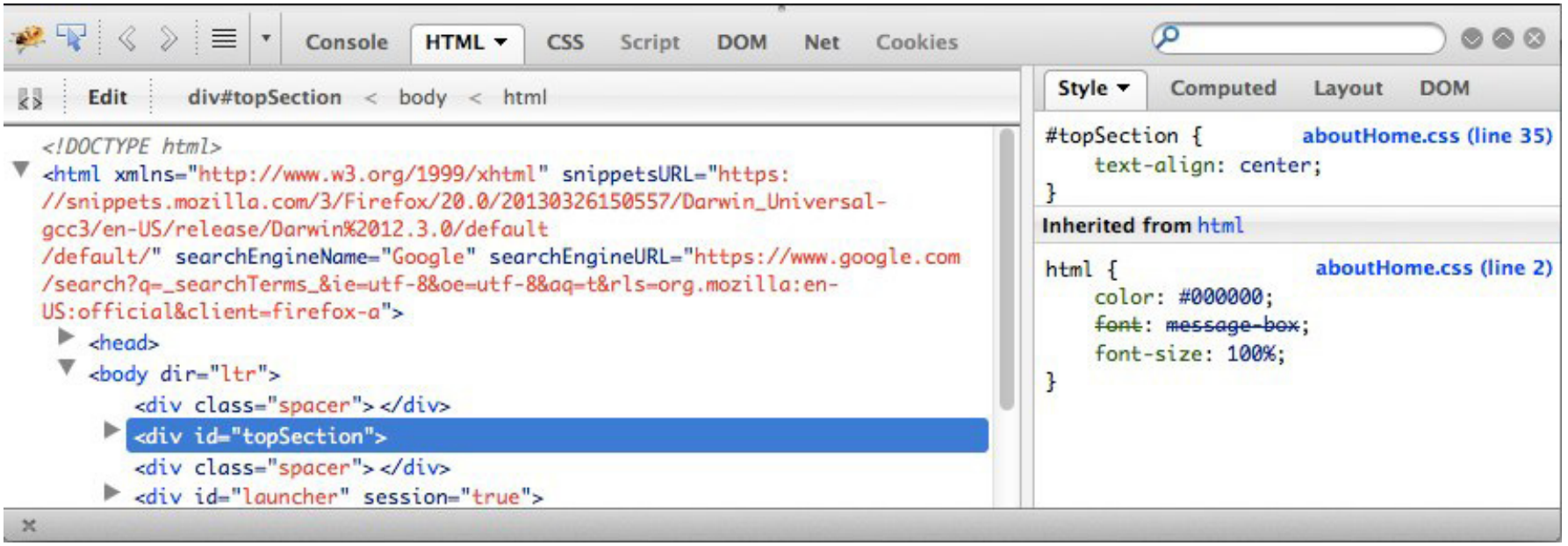
Twitter, Inc.
795 Folsom Ave, Suite 600
San Francisco, CA 94107
P: (123) 456-7890

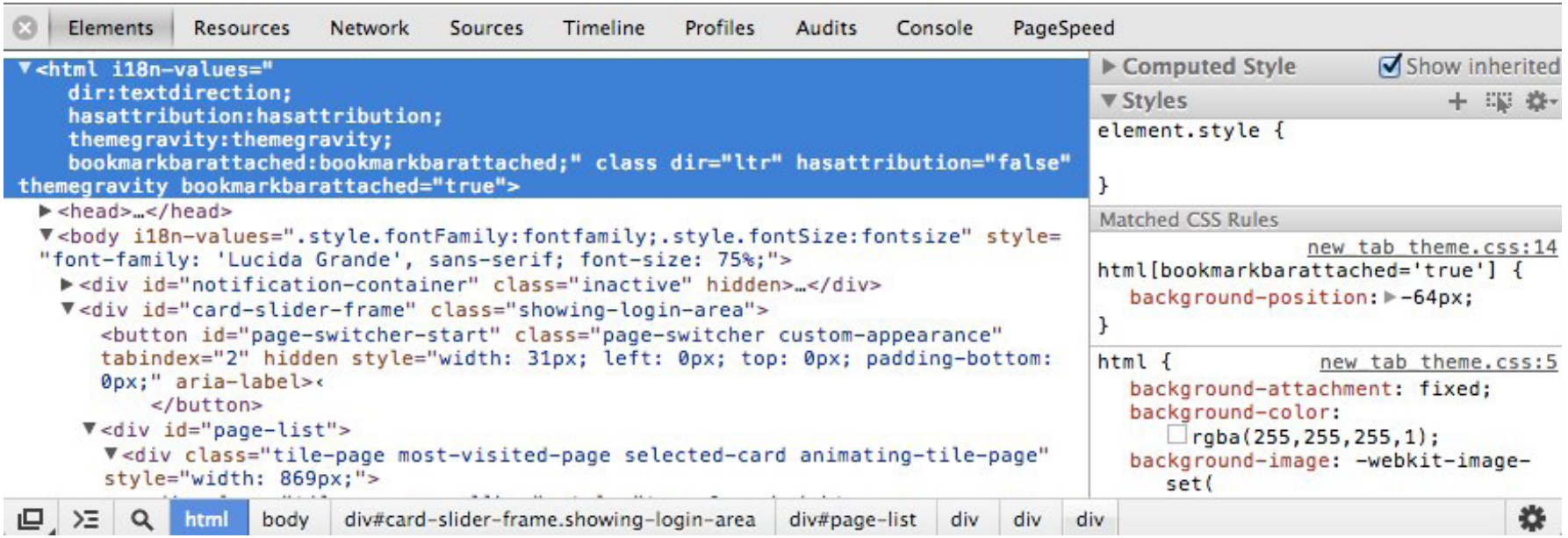
Full Name
first.last@gmail.com

> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer posuere erat a ante.
> — Someone famous in Source Title

> Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer posuere erat a ante.
> Someone famous in Source Title —

https://getfirebug.com/





https://developers.google.com/chrome-developer-tools/?hl=nl

gems

A Rails gem (or: plugin or library) is either an extension or a modification of the core framework. As such they are:

a way for developers to share bleeding-edge ideas
without hurting the stable code base

a segmented architecture so that units of code can be
fixed or updated on their own release schedule

an outlet for the core developers so that they don't have
to include every cool new feature under the sun

adding pictures:

We need to install additional library to add image processing.
Open Gemfile in the project and add:

```
gem 'carrierwave'
```

https://github.com/carrierwaveuploader/carrierwave

under the line:

```
gem 'sqlite3'
```

In the Terminal/Command Prompt run `bundle`**. Restart the Rails server process in the Terminal. Then run** `rails generate uploader Picture`

Open app/models/attendee.rb and add:

```
mount_uploader :picture, PictureUploader
```

under the line:

```
class Attendee < ActiveRecord::Base
```

Open app/views/attendees/_form.html.erb and change

```
<%= f.text_field :picture %>
```

to

```
<%= f.file_field :picture %>
```

and

```
<%= form_for(@attendee) do |f| %>
```

to

```
<%= form_for(@attendee, :html => {:multipart => true}) do
|f| %>
```

The view doesn’t look nice, it only shows a path to the file, so let’s fix it. Open app/views/attendees/show.html.erb and change

```
<%= @attendee.picture %>
```

to

```
<%= image_tag(@attendee.picture_url, :width => 600) if @at-
tendee.picture.present? %>
```

routing:

If you try to open http://localhost:3000 it still shows the default page.

On OS X and Linux, in the Terminal run:

```
rm public/index.html
```

In Windows, in the Command Prompt run:

```
del public\index.html
```

Then open config/routes.rb and add the following after the first line:

```
root :to => redirect("/attendees")
```

routing

The Rails router recognizes URLs and dispatches them to a controller's action. It can also generate paths and URLs, avoiding the need to hardcode strings in your views.

routes.rb

```
get '/patients/:id', to: 'patients#show'
```

add Geolocator and Google Maps:

Open Gemfile in the project and add

```
gem 'geocoder'
```

and

```
gem 'gmaps4rails'
```

under the line

```
gem 'carrierwave'
```

in the Terminal/Command Prompt run

```
bundle
```

and then

```
rails generate migration AddLatitudeAndLongitudeToAttendee
latitude:float longitude:float
```

```
rake db:migrate
```

Open app/models/attendee.rb and add

```
geocoded_by :address
after_validation :geocode
```

after

```
mount_uploader :picture, PictureUploader
```

In the Terminal/Command Prompt run

```
rails generate gmaps4rails:install
```

Go back to app/models/attendee.rb and add

```
acts_as_gmappable :process_geocoding => false
```

after

```
after_validation :geocode
```

Open app/controllers/attendees_controller.rb and add

```
@pins = @attendees.to_gmaps4rails
```

in the index method, after

```
@attendees = Attendee.all
```

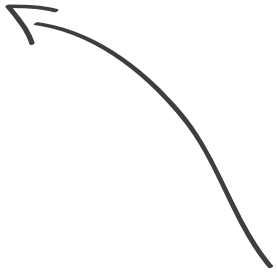
Open app/views/attendees/index.html.erb and add

```
<br/>
<%= gmaps4rails(@pins) %>
<%= yield :scripts %>
```

after the table.

Taking it online

https://id.heroku.com/signup/devcenter



Heroku:

Sign up for a Heroku account, if you don't already have one.

Install the Heroku Toolbelt for your development operating system.

https://toolbelt.heroku.com/

```
$ heroku login
```

Press enter at the prompt to upload your existing `ssh` key or create a new one, used for pushing code later on.

Add the following in the Gemfile:

```
group :development do
  gem 'sqlite3'
end
```

Run:

```
bundle install --without production
```

Version control:

```
git init
git add .
git commit -m "initial commit"
```

App creation:

```
heroku create
Creating evening-sky-7498... done, stack is cedar
http://evening-sky-7498.herokuapp.com/ | git@heroku.
com:evening-sky-7498.git
Git remote heroku added

git push heroku master

heroku run rake db:migrate


heroku open
```