Ruby on Rails

CSE 190M, Spring 2009

Week 5

Installing Rails

- First, install Ruby with RubyGems
- Then, install the Rails gem

```
gem install rails -version=2.3.2 --include-dependencies
```

- Test that Rails is now installed in the terminal by just typing "rails". If it is installed, you should get a description on how to use it

```
rails
```

What is Ruby on Rails?

- Rails is…
  - Written in Ruby
  - A web development framework
  - For development of web applications written in Ruby
- Benefits of Rails
  - Built-in functionality
  - Encourages good software development practices
  - Open source and lots of community support

What is Ruby on Rails?

Disadvantages of Rails

- Steep learning curve
  - Common Terminal Commands
    - cd – change directory
    - ls – list file and folders in current folder
- Lots of "magic"
  - Not always clear how things are being done
  - Not always obvious how to change or debug Ruby Magic
- Deployment……

Creating a New Rails App

- We simply call the Rails gem and give it the path to our new application
- Create your Rails application!

  rails –d mysql ***path/to/application***
- Example
  - rails –d mysql my_app
- This will spit out a bunch of files that compose your new Ruby web application

Starting Your Application

- If you are working on your own computer, you must start your rails app
  - Open your application folder (C:\my_app)
  - Start Webrick, the built-in webserver

    ```
    ruby script/server
    ```
- If you are working on Webster, you may need to take a few steps to start your app… details to come later…

Viewing Your Application

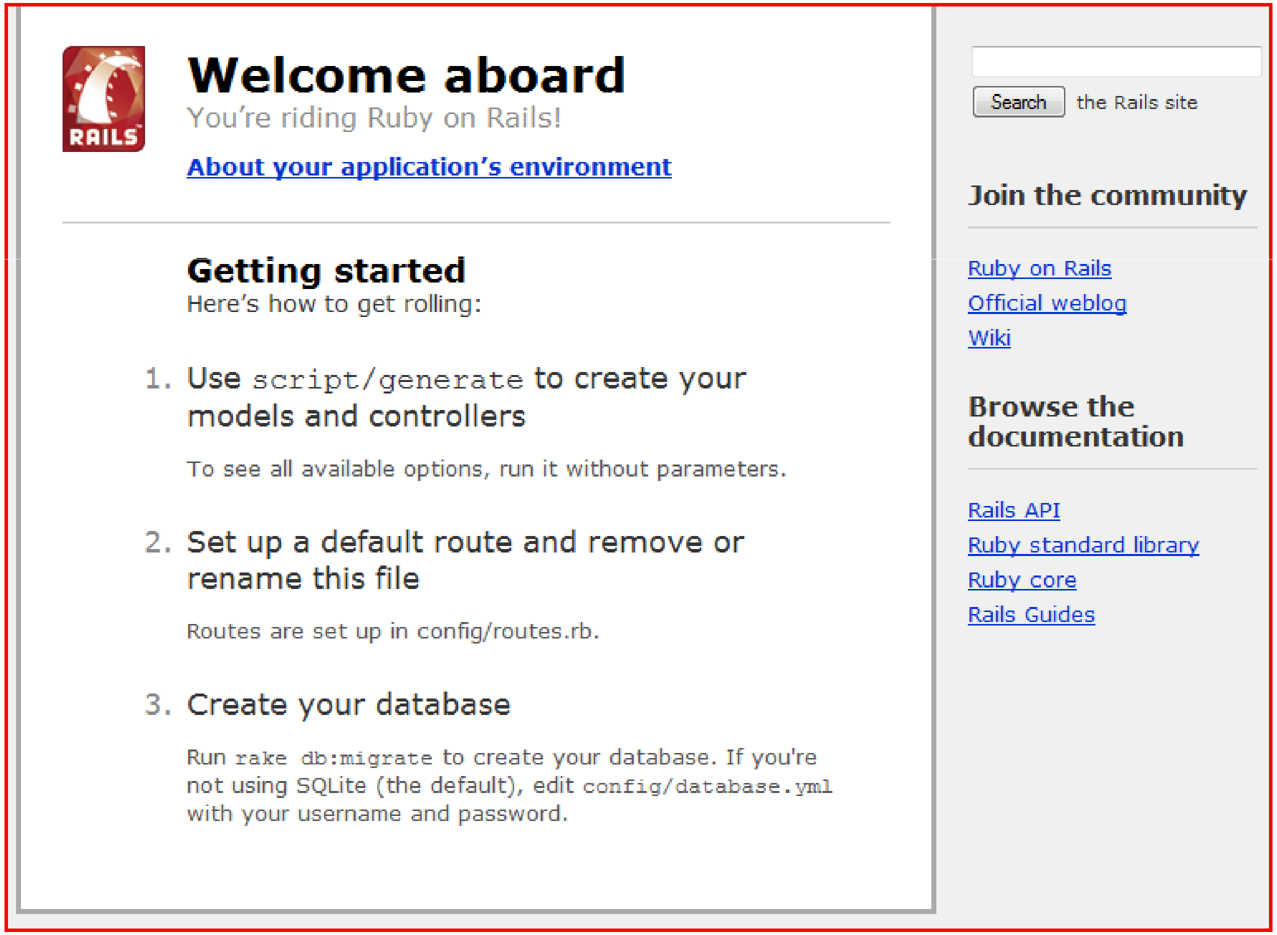
- Working locally
  - Open up Firefox and view the app on localhost with port 3000

    http://localhost:3000/

- Working on Webster
  - Open up Firefox and navigate to your application
    - webster.cs.washington.edu/rctucker/my_app

Viewing Your Application

- A new application will show you this page



Welcome aboard

You're riding Ruby on Rails!

About your application's environment

Getting started

Here's how to get rolling:

1. Use `script/generate` to create your models and controllers

   To see all available options, run it without parameters.

2. Set up a default route and remove or rename this file

   Routes are set up in config/routes.rb.

3. Create your database

   Run `rake db:migrate` to create your database. If you're not using SQLite (the default), edit `config/database.yml` with your username and password.

Join the community

- Ruby on Rails
- Official weblog
- Wiki

Browse the documentation

- Rails API
- Ruby standard library
- Ruby core
- Rails Guides

Navigating the Rails File System

- When we open our project (C:\my_app), we see a number of folders

- For now, we will only be interested in a few of them
  - The "app" folder, specifically "app\views"
  - The "config" folder

The "app" Folder

- The "app" folder deals with the actual code of our application.
- It will hold all of our...
  - Objects ("models"),
  - .erb files ("views"), and...
  - code to work between the two ("controllers")

The "config" Folder

- The "config" folder will be where we configure particular settings of our Rails application

- We will tell our application how to setup the URLs of our app in the "routes.rb" file

- Eventually, we will tell our app how to connect to a particular database in the "database.yml" file

Making a Custom Homepage

- Instead of the standard "Welcome Aboard" page, we want to create our own front page
- To do this, we will
  - Remove/rename the default index.html page in our "public" folder
  - Create a "index.html.erb" file in our views to represent our home page
  - Create a route in our "config\routes.rb" file tell Rails to deal our custom home page as the default instead of index.html

Custom Homepage Step-by-Step

- Delete "public\index.html" file
- Create "home" folder in "views" with "index.html.erb" file for custom home page
- In "app\controllers", create a file named home_controller that defines a class called HomeController that inherits from ApplicationController
- Create an "index" method in the home_controller
- Update routes with the following lines

```
map.home '/', :controller => 'home'
map.connect '', :controller => 'home'
```

Update config/environment.rb

- We aren't using a database yet… so we need to keep Rails from trying to use a database

- Go to the config/environment.rb file and uncomment the following line

```
config.frameworks -= [ :active_record, :active_resource, :action_mailer ]
```

Uploading to Webster

- If you work locally and then upload your work to webster (or vice-versa), both applications needs to use the save version of rails
- Webster is currently running rails version 2.3.2
- You can install that specific version on your machine by saying

```
gem install rails -version=2.3.2 --include-dependencies
```

Homework #5

- Create an Rails application on Webster
- Create an appropriate custom homepage
- Turn in a text file with a link to your custom homepage