

CS 683 Emerging Technologies
Fall Semester, 2005
Doc 21 Rails Intro
Nov 10, 2005

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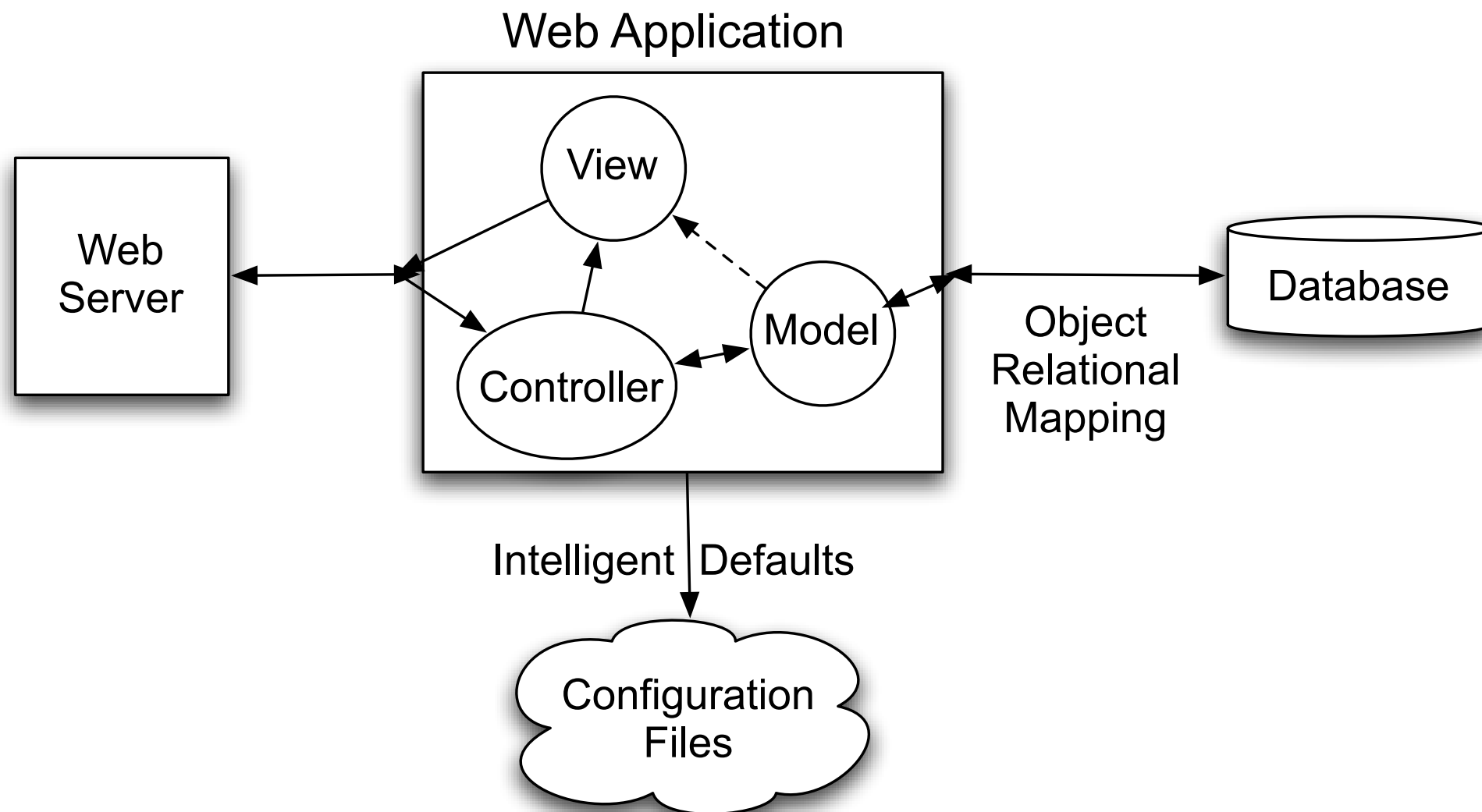
References

Agile Web Development with Rails, Thomas & Hansson, Pragmatic Bookshelf, 2005

<http://www.rubyonrails.org/> Main Ruby on Rails site

<http://wiki.rubyonrails.com/rails> Lots of howtos

Rails Architecture



Model-View-Controller

Model

Core functionality & data

Controller

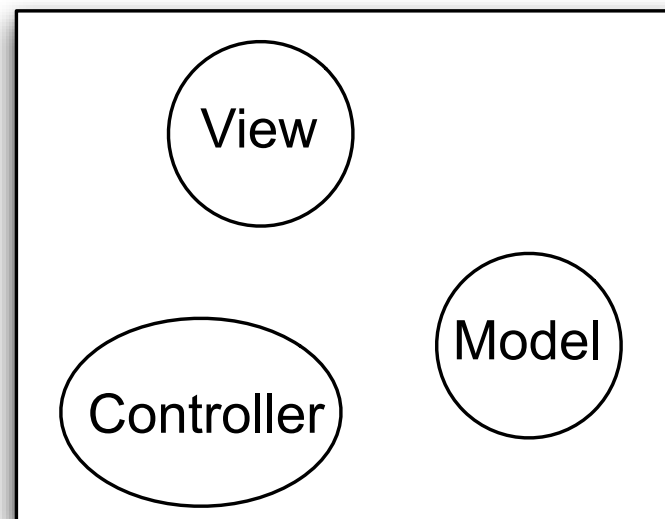
Handles user input

View

Displays information to user

Created by Trygve Reenskaug

GUI Application



Installing Rails

Make sure Ruby & Gems is installed

`ruby -v`

`gem --version`

If not installed use installer at

<http://rubyforge.org/projects/rubyinstaller/>

`gem install rails --include-dependencies`

For more information see:

<http://download.rubyonrails.com/>

<http://wiki.rubyonrails.com/rails/pages/GettingStartedWithRails>

Hello World Example

Create a new application

AI 40->rails demo

AI 41->cd demo

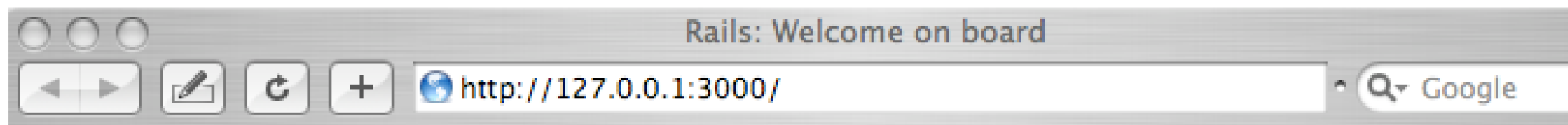
AI 42->ls

README	config/	log/	vendor/
Rakefile	db/	public/	
app/	doc/	script/	
components/	lib/	test/	

Run the Rails Webserver - WEBrick

AI 43->ruby script/server

Access the server at <http://127.0.0.1:3000/>



Congratulations, you've put Ruby on Rails!

Before you move on, verify that the following conditions have been met:

1. The log and public directories must be writable to the web server (`chmod -R 775 log` and `chmod -R 775 public`).

Generating Controllers and Tests

```
AI 15->ruby script/generate controller Say
exists app/controllers/
exists app/helpers/
create app/views/say
exists test/functional/
create app/controllers/say_controller.rb
create test/functional/say_controller_test.rb
create app/helpers/say_helper.rb
```

Complete Hello Example

demo/app/controllers/say_controller.rb
edit to be:

```
class SayController < ApplicationController
  def hello
  end
end
```

demo/app/views/say/hello.rhtml
new file

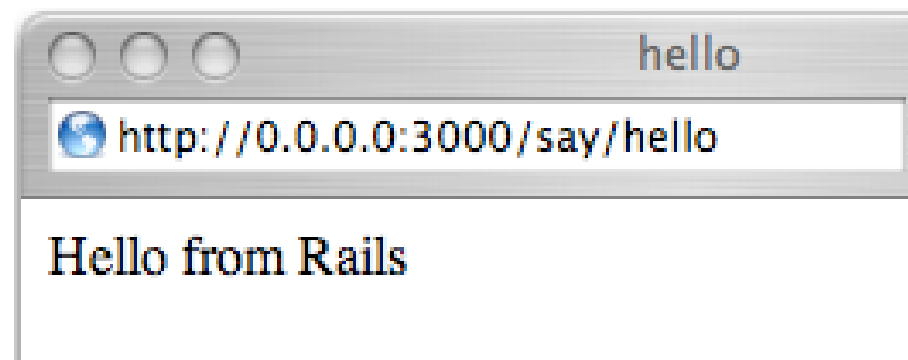
```
<html>
  <head>
    <title>hello</title>
  </head>
  <body>
    Hello from Rails
  </body>
</html>
```

Access page via

<http://localhost:3000/say/hello>

<http://127.0.0.1:3000/say/hello>

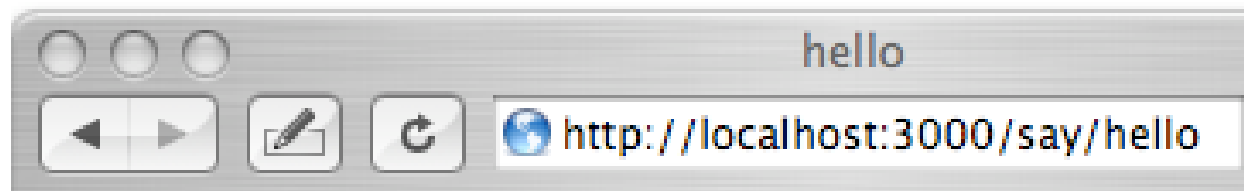
<http://0.0.0.0:3000/say/hello>



Dynamic Page

demo/app/controllers/say_controller.rb

```
class SayController < ApplicationController
  def hello
    @time = Time.now
  end
end
```



It is now Wed Nov 09 22:23:46 PST 2005

1 + 2 = 3

Hello 1

Hello 2

Hello 3

demo/app/views/say/hello.rhtml

```
<html>
  <head>
    <title>hello</title>
  </head>
  <body>
    <p>It is now <%= @time %></p>

    <p>1 + 2 = <%= 1 + 2 %></p>

    <% count = 0 %>
    <p> <% 3.times do %>
      Hello <%= count += 1 %><br/>
    <% end %>
  </body>
</html>
```

Links

demo/app/views/say/hello.rhtml

```
<html>
  <head>
    <title>hello</title>
  </head>
  <body>

    <p>Say <a href="/say/goodbye">GoodBye</a></p>
    <p><%= link_to "GoodBye", :action => "goodbye" %>
  </body>
</html>
```

demo/app/views/say/goodbye.rhtml

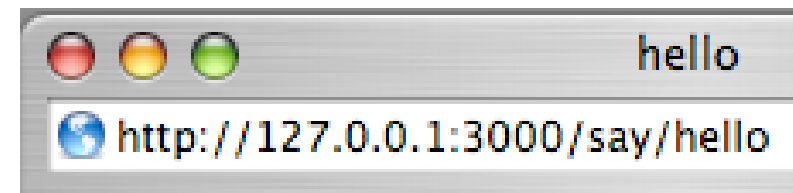
```
<html>
  <head>
    <title>Bye</title>
  </head>
  <body>
    <p>Goodbye</p>

    <p>Say <%=
      link_to( "Hello", :action => "hello") %>
  </body>
</html>
```

demo/app/controllers/say_controller.rb

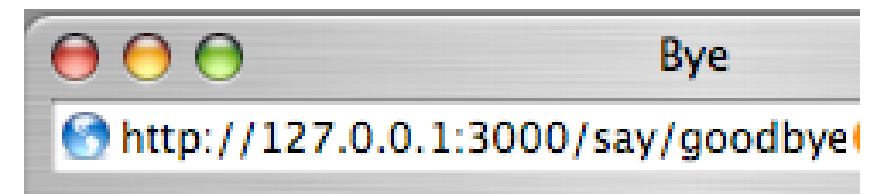
```
class SayController < ApplicationController
  def hello
    @time = Time.now
  end

  def goodbye
  end
end
```



Say [GoodBye](#)

[GoodBye](#)



Goodbye

Say [Hello](#)