

# In this lecture, we will discuss...

- ❖ Adding **basic styling** to our view
- ❖ Making the app **more dynamic** with a request parameter
- ❖ **Routing** with a root path



# Layout

- ❖ **views/layout/application.html.erb** serves as view's container (unless overriden)

The screenshot shows a code editor with a sidebar containing a project tree. The tree includes controllers, helpers, mailers, models, views (with courses, greeter, layouts), bin, config, and environments. The application.html.erb file is selected in the tree and is displayed in the main editor area.

```
<!DOCTYPE html>
<html>
<head>
  <title>MyFirstApp</title>
  <%= stylesheet_link_tag 'application', media: 'all', 'data-turbolinks-track' => true %>
  <%= javascript_include_tag 'application', 'data-turbolinks-track' => true %>
  <%= csrf_meta_tags %>
</head>
<body>
<%= yield %>
</body>
</html>
```

A red arrow points from a callout bubble to the line <%= yield %>. The callout bubble contains the text "Display the view".



# What Does It Look Like Now?

A screenshot of a web browser window. The address bar shows 'localhost:3000/courses/index'. The search bar contains 'Search' with a magnifying glass icon. To the right of the search bar are several icons: a star, a folder, a download arrow, a house, a message bubble, and a menu. Below the browser window, the title 'Searching for - jhu' is displayed in bold black font. A table below the title lists three course entries.

## Searching for - jhu

Image	Name	Description
	Introduction to Genomic Technologies	The basic biology of modern genomics and the experimental tools used for measurement. This is the first course in the Genomic Big Data Science Specialization.
	Regression Models	Learn how to use regression models, the most important statistical analysis tool in the data scientist's toolkit. This is the seventh course in the Johns Hopkins Data Science Specialization.
	Statistics for Genomic Data	An introduction to the statistics behind the most popular genomic data science projects. This is the sixth course in



# Adding Some CSS

## FOLDERS

```
my_first_app
  app
    assets
      images
      javascripts
    stylesheets
      application.css
      courses.scss
      greeter.scss
  controllers
  helpers
  mailers
```

```
courses.scss
1 // Place all the styles related to the courses controller here.
2 // They will automatically be included in application.css.
3 // You can use Sass (SCSS) here: http://sass-lang.com/
4
5 table {
6   border-collapse: collapse;
7 }
8
9 td {
10   padding: 12px;
11 }
12
13 .even {
14   background-color: #D6E1C3;
15 }
```

If you are new to CSS, go to Course 4 - HTML, CSS and Javascript for Web Developers



# Modify View to Include CSS Classes

## FOLDERS

```
my_first_app
  app
    assets
    controllers
    helpers
    mailers
    models
    views
      courses
        index.html.erb
      greeter
      layouts
    bin
```

```
index.html.erb
```

```
1 <h1>Searching for - <%= @search_term %></h1>
2
3 <table border="1">
4   <tr>
5     <th>Image</th>
6     <th>Name</th>
7     <th>Description</th>
8   </tr>
9   <% @courses.each do |course| %>
10     <tr class=<%= cycle('even', 'odd') %>>
11       <td><%= image_tag(course["smallIcon"])%></td>
12       <td><%= course["name"] %></td>
13       <td><%= course["shortDescription"] %></td>
14     </tr>
15   <% end %>
16 </table>
```

cycle (Rails) helper



# What Does It Look Like Now?

A screenshot of a web browser window. The address bar shows 'localhost:3000/courses/index'. The search bar contains 'Search' with a magnifying glass icon. To the right of the search bar are several icons: a star, a folder, a download arrow, a house, a message bubble, and a menu. Below the browser window, the slide content is displayed.

## Searching for - jhu

Image	Name	Description
	Introduction to Genomic Technologies	The basic biology of modern genomics and the experimental tools used for measurement. This is the first course in the Genomic Big Data Science Specialization.
	Regression Models	Learn how to use regression models, the most important statistical analysis tool in the data scientist's toolkit. This is the seventh course in the Johns Hopkins Data Science Specialization.
	Statistics for Genomic Data	An introduction to the statistics behind the most popular genomic data science projects. This is the sixth course



# params helper

- ✧ It would be nice to **specify the search term**
- ✧ Use **params** “Hash” to **retrieve the value** (name of parameter becomes a symbol/key in the Hash)
- ✧ Returns **nil** if request parameter **not passed in** (standard Hash behavior)



# params helper

- ❖ No changes to the Model or the View, **only** to the Controller

FOLDERS

- my\_first\_app
  - app
    - assets
    - controllers
      - concerns
      - application\_controller.rb
    - courses\_controller.rb

courses\_controller.rb \*

```
1 class CoursesController < ApplicationController
2   def index
3     @search_term = params[:looking_for] || 'jhu'
4     @courses = Coursera.for(@search_term)
5   end
6 end
7
8
```

Default to 'jhu' if request parameter not passed in



# What Does It Look Like Now?

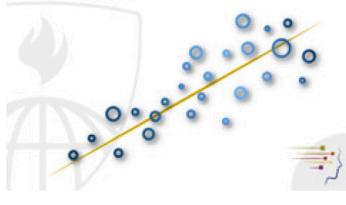


## Searching for - python

Image	Name	Description
	Algorithmic Thinking (Part 1)	Experienced Computer Scientists analyze and solve computational problems at a level of abstraction that is beyond that of any particular programming language. This two-part class is designed to train students in the mathematical concepts and process of "Algorithmic Thinking", allowing them to build simpler, more efficient solutions to computational problems.
	Deciphering Molecular Evolution (Bioinformatics IV)	In this course, we will see how evolutionary trees resolve quandaries from finding the origin of a deadly virus to locating the birthplace of modern humans. We will then use methods from computational proteomics to test whether we can reconstruct Tyrannosaurus rex proteins and prove that birds evolved from dinosaurs.
	The Fundamentals of Computing Specialization Capstone	The "Fundamentals of Computing" series concludes with a two-week course that reviews the series material and whose primary assessment is a cumulative "capstone" exam.



# And Without A Request Parameter?

Searching for - jhu		
Image	Name	Description
	Introduction to Genomic Technologies	The basic biology of modern genomics and the experimental tools used for measurement. This is the first course in the Genomic Big Data Science Specialization.
	Regression Models	Learn how to use regression models, the most important statistical analysis tool in the data scientist's toolkit. This is the seventh course in the Johns Hopkins Data Science Specialization.
	Statistics for Genomic Data Science	An introduction to the statistics behind the most popular genomic data science projects. This is the sixth course in the Genomic Big Data Science Specialization from Johns Hopkins University.



# One Final Twist: Root Path

- ❖ What if we wanted the root path go to the `index` action? Just modify `routes.rb`

The image shows a code editor window and a file browser window side-by-side.

**File Browser (Left):**

- my\_first\_app
  - app
  - bin
  - config
    - environments
    - initializers
    - locales
  - application.rb
  - boot.rb
  - database.yml
  - environment.rb
- routes.rb

**Code Editor (Right):**

```
routes.rb
1 Rails.application.routes.draw do
2   get 'courses/index'
3
4   # get 'greeter/hello'
5
6   # SAME AS ABOVE
7   get 'greeter/hello' => "greeter#hello"
8   get 'greeter/goodbye'
9
10  root 'courses#index' ←
11  # You can have the root of your site routed with "root"
12  # root 'welcome#index'
13 end
14
15
```

A red arrow points to the line `root 'courses#index'` in the code editor.



# One Final Twist – Root Path

A screenshot of a web browser window. The address bar shows "localhost:3000/?looking\_for=diet". The search bar contains "Search". To the right of the search bar are various icons for bookmarking, sharing, and navigating. The main content area displays a table of course results.

## Searching for - diet

Image	Name	Description
	The Meat We Eat	<p>The Meat We Eat is a course designed to create a more informed consumer about the quality, safety, healthfulness and sustainability of muscle foods and address current issues in animal agriculture in developed and developing countries.</p>
	Sustainability of Food Systems: A Global Life Cycle Perspective	<p>This course explores the diversity of the foods we eat, the ways in which we grow, process, distribute, and prepare them, and the impacts they have upon our environment, health, and society. We will also examine the challenges and opportunities of creating a more sustainable global food system in the future.</p>
	Nutrition, Health, and Lifestyle: Issues and Insights	<p>This seven week course will explore nutrition concepts that take center stage in mainstream media outlets and become conversation topics among consumers interested in food choice as it relates to optimal health and physical performance.</p>



# Summary

- ✧ Minor CSS changes can **dramatically** enhance the app
- ✧ **params** helper **parses** request parameters
- ✧ Easy to change the root path by **tweaking routes.rb**

## What's Next?

- ✧ Deploying to Heroku

