

# Beginning Ruby on Rails

Session Seven

# Catching Up

```
git clone git://github.com/anthonylewis/issues.git
```

```
cd issues
```

```
bundle install
```

```
bundle exec rake db:migrate
```

# More Rails Gems

- Add features with little code
- Customizing Devise
- Authorization
- File Uploads
- Pagination
- Search

# Customizing Devise

Making users work the way we want.

# Adding Usernames

- rails generate migration  
add\_username\_to\_users username:string
- bundle exec rake db:migrate
- Add attr\_accessible :username in model

# Changing Views

- rails generate devise:views
- app/views/devise/registrations/edit.html.erb

```
<p><%= f.label :username %><br />
<%= f.email_field :username %></p>
```

# Update Layout

- Edit app/views/layouts/application.html.erb

```
<% if user_signed_in? %>
  <%= link_to "Profile", edit_user_registration_path %> |
  <%= link_to "Sign out", destroy_user_session_path,
    :method => :delete %>
<% else %>
  <%= link_to "Sign in", new_user_session_path %> |
  <%= link_to "Sign up", new_user_registration_path %>
<% end %>
```

# Authorization

Different users can do different things.



# CanCan

- Edit Gemfile and add:
  - `gem 'cancan'`
- `bundle install`
- `rails generate cancan:ability`

# Adding Roles

- rails generate migration add\_role\_to\_users  
role:string
- bundle exec rake db:migrate

# Defining Roles

- Edit app/models/user.rb

```
attr_accessible :email, :password,  
                :password_confirmation, :remember_me,  
                :role
```

```
ROLES = ['admin', 'moderator', 'user']
```

# Update View

- app/views/devise/registration/edit.html.erb

```
<p><%= f.collection_select :role, User::ROLES,  
    :to_s, :humanize %></p>
```

# Abilities

- Edit app/models/ability.rb
- Abilities
  - :create, :read, :update, :destroy, :manage
- Conditions
  - Hash of attributes

```
def initialize(user)
  user ||= User.new # guest user (not logged in)

  if user.role == 'admin'
    can :manage, :all
  elsif user.role == 'moderator'
    can [:create, :read], Issue
    can :manage, Note
  elsif user.role == 'user'
    can [:create, :read], :all
    can :manage, Issue, :user_id => user.id
  else
    can :read, [Issue, Note]
  end
end
```

# Update Views

- Edit app/views/issues/index.html.erb

```
<% if can? :create, Issue %>  
  <p><%= link_to 'New Issue', new_issue_path %></p>  
<% end %>
```

# Update Views

- Edit app/views/issues/index.html.erb

```
<%= link_to 'Show', issue %>
<% if can? :manage, issue %>
  | <%= link_to 'Edit', edit_issue_path(issue) %>
  | <%= link_to 'Destroy', issue,
    | :confirm => 'Are you sure?', :method => :delete %>
<% end %>
```



# Update Controllers

- app/controllers/application\_controller.rb

```
rescue_from CanCan::AccessDenied do |exception|  
  flash[:alert] = "Access denied."  
  redirect_to root_url  
end
```

# Update Controllers

- `app/controllers/issues_controller.rb`

```
class IssuesController < ApplicationController  
  authorize_resource
```

# Pagination

What if we have lots of issues?

# Will\_Paginate

- Edit Gemfile and add:
  - `gem 'will_paginate'`
- `bundle install`

# Update Controller

- Edit app/controllers/issues\_controller.rb

```
def index
  @issues = Issue.paginate
    :page => params[:page], :per_page => 5

  respond_to do |format|
    format.html # index.html.erb
    format.xml { render :xml => @issues }
  end
end
```

# Update View

- Edit `app/views/issues/index.html.erb`

```
<%= will_paginate @issues %>
```

# Search

Why click through all the pages?

# MetaSearch

- Edit Gemfile and add:
  - `gem 'meta_search'`
- `bundle install`



# Update Controller

- Edit app/controllers/issues\_controller.rb

```
def index
  @search = Issue.search params[:search]
  @issues = @search.paginate
    :page => params[:page], :per_page => 5

  respond_to do |format|
    format.html # index.html.erb
    format.xml { render :xml => @issues }
  end
end
```

# Update View

- Edit app/views/issues/index.html.erb

```
<%= form_for @search do |f| %>
  <p>
    <%= f.text_field :description_contains %>
    <%= f.submit 'Search' %>
  </p>
<% end %>
```

# File Uploads

# Paperclip

- Edit Gemfile and add:
  - `gem "paperclip", "~> 2.3"`
- `bundle install`

# Paperclip

- rails generate paperclip user photo
- bundle exec rake db:migrate

# Update Model

- Edit app/models/user.rb

```
attr_accessible :email, :password,  
                :password_confirmation, :remember_me,  
                :username, :role, :photo
```

```
ROLES = ['admin', 'moderator', 'user']
```

```
has_attached_file :photo
```

# Update Views

- `app/views/devise/registration/edit.html.erb`
- Form must be 'multipart' to upload files:

```
:html => { :method => :put, :multipart => true }
```

# Update Views

- `app/views/devise/registration/edit.html.erb`
- Add a file field to select the file:

```
<p><%= f.file_field :photo %></p>
```



# Update Views

- `app/views/devise/registration/edit.html.erb`
- Add an image tag to display it:

```
<%= image_tag current_user.photo.url,  
           :size => "120x120" %>
```

# Homework

There's always more to do.

# Learn More

- Keep up-to-date with RailsCasts
  - <http://railscasts.com>
- Screencasts covering current topics
- Most are only 10-15 minutes long

