In this lecture, we will discuss...

♦ Sessions and cookies



HTTP Is A Stateless Protocol

- ♦ HTTP is a stateless protocol
 - Each new request even from the same browser knows nothing about a previous request that was made
 - This means that even if a user makes a request he will be treated as unknown on all the subsequent requests
- ♦ Cookies and Sessions to the rescue (keep state)

http://guides.rubyonrails.org/security.html#whatare-sessions-questionmark



Sessions in Rails

- Session is created and made available through a session hash
- The server sends the browser a cookie with the session information, which the browser stores and sends back to the server on all subsequent requests (until the session ends)



Restful Sessions Controller

♦ Session can be thought of as a resource – let's go ahead and create a RESTful sessions controller

```
~/sandbox/i_reviewed$ rails g controller sessions new create destroy -q
~/sandbox/i_reviewed$
```



config/routes.rb

```
FOLDERS
                            routes.rb
▼   i_reviewed
                          Rails.application.routes.draw do
  ▶ □ app
                      2
                             root to: "books#index"
    [□ bin
                      3
                      4
                            resources :books do
  ▼ Config
                      5
                               resources :notes, only: [:create, :destroy]
      environme
                      6
                            end
      initializers initializers
                            resources :sessions, only: [:new, :create, :destroy]
                      8
      ☐ locales
                      9
                          end
      application
                     10
         boot.rb
                     11
         database.y
                    12
                     13
      (a) environme
                     14
      routes.rb
                     15
```



Sessions Controller Actions

- ♦ We can think of new action as login page and destroy as a logout page
- ♦ Thus, we'll need new (and create) actions to create a session and destroy action to destroy a session
- ♦ Let's map login/logout routes to make this more clear



config/routes.rb

```
routes.rb
Rails.application.routes.draw do
  root to: "books#index"
  resources :books do
    resources :notes, only: [:create, :destroy]
  end
  resources :sessions, only: [:new, :create, :destroy]
  get "/login" => "sessions#new", as: "login"
  delete "/logout" => "sessions#destroy", as: "logout"
end
```

This lets us refer to these routes in our code as login_path/logout_path or login_url/logout_url...



All Routes So Far

```
~/sandbox/i_reviewed$ rake routes
                                                   Controller#Action
    Prefix Verb
                 URI Pattern
      root GET
                                                   books#index
book_notes POST /books/:book_id/notes(.:format)
                                                   notes#create
 book_note DELETE /books/:book_id/notes/:id(.:format) notes#destroy
     books GET /books(.:format)
                                                   books#index
                                                   books#create
           POST /books(.:format)
  new_book GET
                 /books/new(.:format)
                                                   books#new
 edit_book GET
                 /books/:id/edit(.:format)
                                                   books#edit
      book GET /books/:id(.:format)
                                                   books#show
           PATCH /books/:id(.:format)
                                                   books#update
           PUT
                 /books/:id(.:format)
                                                   books#update
           DELETE /books/:id(.:format)
                                                   books#destroy
  sessions POST /sessions(.:format)
                                                   sessions#create
new_session GET /sessions/new(.:format)
                                                   sessions#new
   session DELETE /sessions/:id(.:format)
                                                   sessions#destroy
     login GET /login(.:format)
                                                   sessions#new
    logout DELETE /logout(.:format)
                                                   sessions#destroy
```



Summary

- Sessions and cookies make the interaction between browser and server stateful
- ♦ You can think of Sessions as yet another resource
- Custom routes http://guides.rubyonrails.org/routing.html

What's Next?

♦ Sessions Controller and View

