# Want To Code Along?



- Rails app created
- 2. RSpec installed and set up
- 3. Simple BDD installed and set up

#### Check out these videos...





### Nested Forms



Nested Forms allow you to create a parent and child objects in the same form. This makes the user experience better by reducing the number of forms and takes advantage of Active Record Associations.

http://guides.rubyonrails.org/form\_helpers.html#building-complex-forms http://guides.rubyonrails.org/association\_basics.html

## Starship Spec:

#### /spec/features/starship\_spec.rb

```
require 'rails helper'
feature "Starship with Crew Members" do
  #communicate purpose upfront with Simple BDD
  scenario "visitor can create starship with crew members" do
   Given "visitor can view new starship form"
   When "visitor enters information for starship and crew members"
   Then "visitor can see starship listing"
  end
  #define methods from scenario
 def visitor can view new starship form
   visit new starship path
    expect (page) . to have content ("New Starship")
 end
 def visitor enters information for starship and crew members
   enter starship info
   enter crew members info
    click button "Create Starship"
 end
```

### Starship Spec (cont.): /spec/features/starship\_spec.rb



```
def visitor can see starship listing
    expect (page) .to have_content ("USS Enterprise (NCC-1701-A)")
    expect (page) . to have content ("James T. Kirk")
 end
  #define additional methods
  def enter starship info
    fill_in("starship[name]", with: "USS Enterprise (NCC-1701-A)")
 end
 def enter crew members info
    fill_in("starship[crew_members_attributes[0][name]", with: "James T. Kirk")
    select('Command', :from => "starship[crew members attributes[0][division]")
    fill in ("starship[crew members attributes[1][name]", with: "Spock")
    select('Science', :from => "starship[crew members attributes[1][division]")
   fill_in("starship[crew members attributes[2][name]", with: "Leonard McCoy")
    select ('Engineering', :from => "starship[crew members attributes[0][division]")
 end
end
```

```
FOLDERS
                 starship spec rb

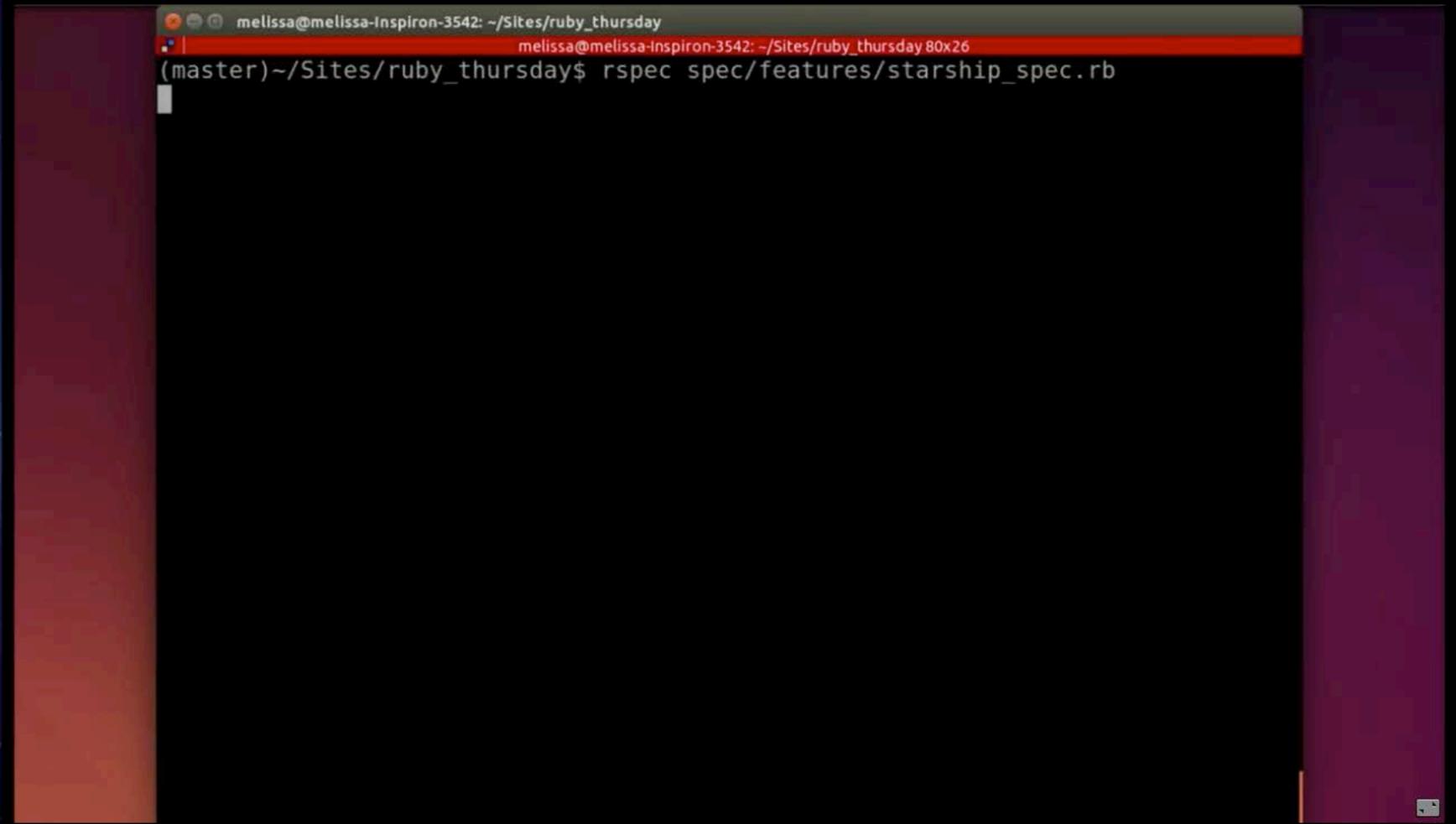
▼ ruby thursday

                         click button "Create Starship"
                19
 ▶ app
                     I end
                20
 config
                21
 22
                      def visitor can see starship listing
 log
                         expect(page).to have content("USS Enterprise (NCC-1)
 public
                23
 ₩ spec
                         expect(page).to have content("James T. Kirk")
                24
 controllers
 factories
                25
 features
 helpers
                26
                      #define additional methods
 models
                27
                      def enter starship info
 ▶ views
  rails helper.rb
                         fill in("starship[name]", with: "USS Enterprise (NCO
                28
  spec helper.rb
                29
                      end
 vendor
                30
  gitignore
  .rspec
                31
                      def enter crew members info
  Gemfile
                         fill in("starship[crew members attributes][0][name]'
                32
  Gemfile.lock
  README.rdoc
                         select('Command', :from => "starship[crew members at
                33
  Rakefile
  config.ru
                         fill in("starship[crew members attributes][1][name]
                34
                         select('Science', :from => "starship[crew members at
                35
                         fill in("starship[crew members attributes][2][name]'
                36
                         select('Engineering', :from => "starship[crew member
                37
                38
                      end
```

# Run the Spec:



```
$ rspec spec/features/starship_spec.rb
```



```
🔊 🖱 🕦 melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday
                           melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday 80x26
(master)~/Sites/ruby thursday$ rspec spec/features/starship spec.rb
Failures:
  1) Starship with Crew Members visitor can create starship with crew members
     # ./spec/features/starship spec.rb:12:in `visitor can view new starship for
     # /home/melissa/.rvm/gems/ruby-2.2.1/gems/simple bdd-0.1.0/lib/simple bdd.r
b:21:in 'block (2 levels) in <module:SimpleBdd>'
     # ./spec/features/starship spec.rb:6:in `block (2 levels) in <top (required
Finished in 0.90606 seconds (files took 2.5 seconds to load)
Failed examples:
                                            # Starship with Crew Members visitor ca
n create starship with crew members
(master)~/Sites/ruby thursday$
```

# Generate Starship model:



```
$ rails g scaffold Starship name:string
```

\$ rake db:migrate

```
melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday
                          melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday 80x26
     create
                  app/views/starships/new.html.erb
                  app/views/starships/ form.html.erb
     create
     invoke
                rspec
                  spec/controllers/starships controller spec.rb
     create
     create
                  spec/views/starships/edit.html.erb spec.rb
                  spec/views/starships/index.html.erb spec.rb
     create
     create
                  spec/views/starships/new.html.erb spec.rb
                  spec/views/starships/show.html.erb spec.rb
     create
     create
                  spec/routing/starships routing spec.rb
     invoke
                  rspec
     create
                    spec/requests/starships spec.rb
     invoke
                helper
     create
                  app/helpers/starships helper.rb
     invoke
                  rspec
                    spec/helpers/starships helper spec.rb
     create
     invoke
                jbuilder
                  app/views/starships/index.json.jbuilder
     create
     create
                  app/views/starships/show.json.jbuilder
     invoke
              assets
     invoke
                coffee
     create
                  app/assets/javascripts/starships.coffee
     invoke
                SCSS
                  app/assets/stylesheets/starships.scss
     create
     invoke
              SCSS
     create
                app/assets/stylesheets/scaffolds.scss
(master)~/Sites/ruby thursday$
```

```
FOLDERS
                          starship_spec.rb

▼ ruby_thursday

                                          CreateStarships < ActiveRecord::Migration
 ▶ app
 ▶ bin
                                  def change
 ▶ config
                                      create table :starships do |t|
 ₩ db
  w migrate
                                          t.string :name
     20150505175824 devise c
     20150511180353_devise_c
     20150519195606 create
                                          t.timestamps null: false
    schema.rb
                           6
    seeds.rb
 log
                           8
 ▶ public
 ₩ spec
  ▶ controllers
                         10
  ▶ factories
  ▶ features
  ▶ helpers
  ▶ models
   requests
   ▶ routing
   ▶ views
    rails helper.rb
    spec_helper.rb

    tmp

 vendor
   .gitignore
   .rspec
   Gemfile
   Gemfile lock
```

Tab Size: 2

README.rdoc

Rakefile

config.ru

## Generate Crew Member model:



```
$ rails g model CrewMember name:string division:string starship_id:integer
```

\$ rake db:migrate

#### Models:



```
/app/models/starship.rb
 class Starship < ActiveRecord::Base
    has many :crew_members
    accepts_nested_attributes_for :crew_members,
      reject_if: lambda { | attributes | attributes ["name"].blank?}
 end
/app/models/crew member.rb
```

class CrewMember < ActiveRecord::Base
 belongs\_to :starship
end</pre>



```
Crew Members:
<l
<%= f.fields_for :crew_members do |cm| %>
   <
     <%= cm.label :name %>
     <%= cm.text_field :name %>
     <%= cm.label :division %>
     <%= cm.select(:division, ["Command", "Engineering", "Science"]) %>
   <% end %>
```

```
FOLDERS
                                                 x crew_member.rb x form.html.erb
                      starship spec rb
                                     starship.rb

▼ ruby_thursday.

 ₩ app
  assets
                                    <l
                       6
  controllers
                                    <% @starship.errors.full messages.each do |</pre>
  helpers
  mailers
                                       message| %>
  concerns
                                       <%= message %>
     .keep
                       9
     admin.rb
                                    <% end %>
     crew member.rb
                                    10
     hacker.rb
     starship.rb
                                 </div>
  ₹ views
   ▶ admin
                             <% end %>
   ▶ home
                     13
   ▶ layouts
   ₩ starships
                             <div class="field">
                     14
      form.html.erb
                                <%= f.label :name %><br>
      edit.html.erb
      index.html.erb
                     16
                                <%= f.text field :name %>
      index.json.jbuilder
      new.html.erb
                     17
                             </div>
      show.html.erb
                     18
      show.json.jbuilder
 bin
                     19
                             <div class="actions">
 ▶ config

    db

                                 <%= f.submit %>
                     20

□ lib

                             </div>
 log
 public
                          <% end %>
 ₩ spec
  controllers
                     23
  ▶ factories
```

▶ features

```
x crew member.rb x form.html.erb
                   starship spec.rb
                                starship rb

▼ ruby thursday

                         <% end %>
  assets
                  13
 controllers
                  14
                         <div class="field">
  helpers
  mailers
                            <%= f.label :name %><br>
  concerns
                            <%= f.text field :name %>
                  16
    .keep
                         </div>
    admin.rb
    crew_member.rb
                          Crew Members:
                  18
    hacker.rb
    starship.rb
                  19
                          < >
  ₹ views
                               <%= f.fields for :crew members
                  20
                                                                                |CM| %>
  ▶ admin
  ▶ home
                  21
  ▶ layouts
   22
                        <%= cm.label :name %>
     form.html erb
                  23
                        <%= cm.text field :name %>
     edit.html.erb
     index.html.erb
                        <%= cm.label :division %>
                  24
     index.json.jbuilder
                  25
                       <%= cm.select(:division, ["Command", "</pre>
     new.html.erb
     show.html.erb
                                      Engineering", "Science"]) %>
     show.json.jbuilder
                  26
 config
                  27
                                         %>
                  28
                  29
                         <div class="actions">
                            <%= f.submit %>
                  30
 controllers
 ▶ factories
                  31
 ▶ features
```

bin

Iib

▶ log

public

₩ spec

**FOLDERS** 

₩ app

# Starship Controller: /app/controllers/starships\_controller.rb



```
def new
 @starship = Starship.new
  3.times { @starship.crew members.build}
end
# ...
def starship params
  params.require(:starship).permit(:name,
  crew members attributes: [:starship id, :name, :division])
end
```

```
FOLDERS
                                                          crew member.rb × form.html.erb
                        starship_spec.rb
                                         starship.rb
                                                                                             starships controller rb

▼ ruby_thursday

                                    @starships
                                                           Starship.all
 ₩ app
  assets
                         8
                                end

▼ controllers

    ▶ concerns
                         9
     admin_controller.rb
                       10
                                    GET /starships/1
     application_controller.rb
                                                                                                                                 St. St.
     home controller.rb
                                   GET /starships/1.json
                       11
                                       show
  helpers
  mailers
                       13
                                end
   concerns
                       14
     .keep
                       15
                                # GET /starships/new
     admin.rb
     crew member.rb
                       16
                                def new
     hacker.rb
     starship.rb
                                    @starship = Starship.new I
   ▼ views
                                     3.times { @starship.crew members.build}
                       18

    admin

    home
                       19
                                end

    layouts

    ▼ starships

                       20
       form.html.erb
                                # GET /starships/1/edit
                       21
      edit.html.erb
      index.html.erb
                                def edit
                       22
      index.json.jbuilder
      new.html.erb
                       23
                                end
      show.html.erb
                       24
      show.json.jbuilder
 ▶ bin
                       25
                                # POST /starships

    config

    db

                                # POST /starships.json
                       26

    lib

                       77
```

Line 18, Column 45

Ruby

Spaces: 2

```
FOLDERS
                                  × starship.rb
                                                  X crew member.rb X form.html.erb
                      starship spec.rb
                                                                                     starships controller rb

▼ ruby_thursday.

                     64
 ₹ app
  assets
                     65
  Jse callbacks to share common setup or constraints betwe
   concerns
     admin_controller.rb
                             set starship
    application_controller.rb
                                                                                                                       St. St.
     home controller.rb
                          istarship = Starship.find(params[:id])
     starships controller rb
  ▶ helpers
                     69
  mailers
                     70
  concerns
                          lever trust parameters from the scary internet, only all
     .keep
                             starship params
     admin.rb
     crew member.rb
                          params.require(:starship).permit(:name,
     hacker.rb
     starship.rb
                           members attributes: [:starship id, :name, :division])
  ₹ views
                     75
   ▶ admin
   ▶ home
                     76
   ▶ layouts
   77
      form.html.erb
      edit.html.erb
      index.html.erb
      index.json.jbuilder
      new.html.erb
      show.html.erb
      show.json.jbuilder
 ▶ bin

    config

    db

    lib
```

Line 74, Column 60

Ruby

Spaces: 2

```
🔊 🗐 📵 melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday
                           melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday 80x26
(master)~/Sites/ruby thursday$ rspec spec/features/starship spec.rb
Failures:
  1) Starship with Crew Members visitor can create starship with crew members
     # ./spec/features/starship spec.rb:24:in `visitor can see starship listing'
     # /home/melissa/.rvm/gems/ruby-2.2.1/gems/simple bdd-0.1.0/lib/simple bdd.r
b:21:in 'block (2 levels) in <module:SimpleBdd>'
     # ./spec/features/starship spec.rb:8:in `block (2 levels) in <top (required
> 1
Finished in 1.11 seconds (files took 7.75 seconds to load)
Failed examples:
                                            # Starship with Crew Members visitor ca
n create starship with crew members
(master)~/Sites/ruby thursday$
```

## Show Starship HTML: /app/views/starship/show.html.erb



```
FOLDERS

▼ ruby thursday

  ₹ app
    assets

▼ controllers

      concerns
         admin_controller.rb
         application controller.rb
         home controller.rb
         starships controller.rb
    ▶ helpers
    mailers
     concerns
         .keep
         admin.rb
         crew member.rb
         hacker.rb
         starship.rb
     ♥ views
      ▶ admin
      home

    layouts

    ▼ starships

           form.html.erb
           edit.html.erb
           index.html.erb
           index.json.jbuilder
           new.html.erb
           show.html erb
           show.json.jbuilder
  ▶ bin

    config

    db

    lib
```

```
x crew member rb x form html.erb x starships controller rb x
        x starship rb
starship spec rb
   <%= notice %>
   <0>
     <strong>Name:</strong>
     <%= @starship.name %>
     <strong>Crew Members:</strong>
 6
     <% @starship.crew members.each</pre>
                                            |crew member| %>
        <%= crew member.name %>
 8
 9
     <%
             %>
10
   11
   <%= link to 'Edit', edit starship path(@starship) %> |
   <%= link to 'Back', starships path %>
14
```

3 lines, 88 characters selected

Tab Size: 2 HTML (Rails

```
FOLDERS

▼ ruby thursday

  ₹ app
    assets

▼ controllers

      concerns
         admin_controller.rb
         application controller.rb
         home controller.rb
         starships controller.rb
    ▶ helpers
    mailers
     concerns
         .keep
         admin.rb
         crew member.rb
         hacker.rb
         starship.rb
     ♥ views
      ▶ admin
      home

▶ layouts

    ▼ starships

           form.html.erb
           edit.html.erb
           index.html.erb
           index.json.jbuilder
           new.html.erb
           show.html erb
           show.json.jbuilder
  ▶ bin

    config

    db

    lib
```

```
x crew member.rb x form.html.erb x starships controller.rb x
        x starship rb
starship spec rb
   <%= notice %>
   <0>
     <strong>Name:</strong>
     <%= @starship.name %>
     <strong>Crew Members:</strong>
 6
     <% @starship.crew members.each</pre>
                                            |crew member| %>
        <%= crew member.name %>
 8
 9
     <%
             %>
10
   11
   <%= link to 'Edit', edit starship path(@starship) %> |
   <%= link to 'Back', starships path %>
14
```

3 lines, 88 characters selected

Tab Size: 2 HTML (Rails

```
melissa@melissa-Inspiron-3542: ~/Sites/ruby_thursday
                              melissa@melissa-Inspiron-3542: -/Sites/ruby_thursday 80x26
(master)~/Sites/ruby_thursday$ rspec spec/features/starship_spec.rb
Finished in 1.12 seconds (files took 2.61 seconds to load)
1 example, 0 failures
(master)~/Sites/ruby_thursday$
```