

app/mailers/application_mailer.rb

```
1 # frozen_string_literal: true
```

```
2
3 class ApplicationMailer < ActionMailer::Base
4   default from: 'from@example.com'
5   layout 'mailer'
6 end
```

app/models/challenge.rb

```
1 # frozen_string_literal: true
```

```
2
3 class Challenge < ApplicationRecord
4   validates_presence_of :sql_schema, :sql_correct_query, :sql_seed, :title, :content
5   validate :compile_sql
6
7   has_many :submissions, class_name: 'Submission', dependent: :destroy
8   belongs_to :user, class_name: 'User'
9
10  def best_submissions
11    submissions.select('max(grade) as max_grade, user_id').group(:user_id)
12  end
13
14  private
15
16  def compile_sql
17    return unless sql_schema.present? && sql_correct_query.present? && sql_seed.present?
18    result = SharedAssessor.assessor.compile(
19      create_schema_sql_query: sql_schema,
20      instructor_sql_query: sql_correct_query,
21      seed_sql_query: sql_seed
22    )
23    self.metadata = result
24  rescue SqlAssess::DatabaseSchemaError => exception
25    errors.add(:sql_schema, exception.message)
26  rescue SqlAssess::DatabaseSeedError => exception
27    errors.add(:sql_seed, exception.message)
28  rescue SqlAssess::DatabaseQueryExecutionFailed => exception
29    errors.add(:sql_correct_query, exception.message)
30  rescue SqlAssess::CanonicalizationError
31    errors.add(:sql_correct_query, 'Cannot canonicalize query')
32  end
33 end
```

app/models/submission.rb

```
1 # frozen_string_literal: true
```

```
2
3 class Submission < ApplicationRecord
4   validates_presence_of :sql_query
5
6   belongs_to :challenge, class_name: 'Challenge'
7   belongs_to :user, class_name: 'User'
8
9   validate :compile_sql
10
11  scope :best_for_user, -> { group(:user_id) }
12
13  private
14
15  def compile_sql
16    return if sql_query.nil?
17
18    result = SharedAssessor.assessor.assess(
```

```

19     create_schema_sql_query: challenge.sql_schema,
20     instructor_sql_query: challenge.sql_correct_query,
21     seed_sql_query: challenge.sql_seed,
22     student_sql_query: sql_query
23 )
24
25 self.metadata = result.attributes
26 self.success = result.success
27 self.grade = result.grade
28 self.attribute_grades = result.attributes_grade
29 self.message = result.message
30 rescue SqlAssess::DatabaseQueryExecutionFailed => exception
31   errors.add(:sql_query, exception.message)
32 rescue SqlAssess::CanonicalizationError
33   errors.add(:sql_query, 'Cannot canonicalize query')
34 end
35 end

```

app/models/application_record.rb

```

1 # frozen_string_literal: true
2
3 class ApplicationRecord < ActiveRecord::Base
4   self.abstract_class = true
5 end

```

app/models/user.rb

```

1 # frozen_string_literal: true
2
3 class User < ApplicationRecord
4   # Include default devise modules. Others available are:
5   # :confirmable, :lockable, :timeoutable and :omniauthable
6   devise :database_authenticatable, :registerable, :rememberable, :trackable, :validatable
7
8   validates_inclusion_of :role, in: %w[admin student]
9
10  has_many :submissions, class_name: 'Submission', dependent: :destroy
11  has_many :challenges, class_name: 'Challenge', dependent: :destroy
12
13  def admin?
14    role == 'admin'
15  end
16 end

```

app/policies/challenge_policy.rb

```

1 # frozen_string_literal: true
2
3 class ChallengePolicy < ApplicationPolicy
4   def index?
5     true
6   end
7
8   def show?
9     super && user.admin?
10  end
11
12  def create?
13    user.admin?
14  end
15
16  def update?
17    user.admin?
18  end

```

```

19
20   def destroy?
21     user.admin?
22   end
23 end
24
25   app/policies/application_policy.rb
26
27   # frozen_string_literal: true
28
29   class ApplicationPolicy
30     attr_reader :user, :record
31
32     def initialize(user, record)
33       @user = user
34       @record = record
35     end
36
37     def index?
38       false
39     end
40
41     def show?
42       scope.where(id: record.id).exists?
43     end
44
45     def create?
46       false
47     end
48
49     def new?
50       create?
51     end
52
53     def update?
54       false
55     end
56
57     def edit?
58       update?
59     end
60
61     def destroy?
62       false
63     end
64
65     def scope
66       Pundit.policy_scope!(user, record.class)
67     end
68
69     class Scope
70       attr_reader :user, :scope
71
72       def initialize(user, scope)
73         @user = user
74         @scope = scope
75       end
76
77       def resolve
78         scope
79       end
80     end
81   end
82
83   app/policies/submission_policy.rb

```

```

1 # frozen_string_literal: true
2
3 class SubmissionPolicy < ApplicationPolicy
4   def index?
5     user.admin?
6   end
7
8   def create?
9     true
10  end
11
12  def report?
13    user.admin?
14  end
15
16  def show?
17    super && (user.admin? || record.user == user)
18  end
19 end

```

app/javascript/packs/highlight.js

```

1 import highlight from 'highlight.js';
2
3 highlight.initHighlightingOnLoad();

```

app/javascript/packs/codeEditor.js

```

1 import CodeMirror from 'codemirror';
2 import 'codemirror/mode/sql/sql.js';
3 import $ from 'jquery';
4
5 $(document).ready(function () {
6   $('.code-sql').each(function () {
7     var myCodeMirror = CodeMirror.fromTextArea(this, {
8       mode: 'text/x-mysql',
9       lineNumbers: true,
10      viewportMargin: Infinity
11    });
12  });
13 });

```

app/javascript/packs/application.js

```

1 /* eslint no-console:0 */
2 // This file is automatically compiled by Webpack, along with any other files
3 // present in this directory. You're encouraged to place your actual application logic in
4 // a relevant structure within app/javascript and only use these pack files to reference
5 // that code so it'll be compiled.
6 //
7 // To reference this file, add <%= javascript_pack_tag 'application' %> to the appropriate
8 // layout file, like app/views/layouts/application.html.erb
9 import '../styles/main.scss';
10 import 'bootstrap';
11 import './highlight';
12 import './codeEditor';

```

app/javascript/styles/code-editor.scss

```

1 .CodeMirror {
2   height: auto;
3   border: 1px solid #eee;
4 }

```

app/javascript/styles/main.scss

```

1 @import "~bootstrap/scss/bootstrap.scss";
2 @import "highlight.js/styles/default.css";
3 @import "codemirror/lib/codemirror.css";
4
5 #bodyContainer {
6     margin-top: 10px;
7 }
8
9 @import "submissions/where";
10 @import "code-editor";
11
12     app/javascript/styles/submissions/where.scss
13
14 // Repeat function obtained from
15 // https://stackoverflow.com/questions/38712106/repeat-dots-in-less-sass-for-content-property
16 @function repeat($character, $n) {
17     $c: "";
18     @for $i from 1 through $n {
19         $c: $c + $character;
20     }
21     @return $c;
22 }
23
24 @for $i from 0 through 10 {
25     .where-clause-depth-#{li}::before {
26         content: repeat('..', $i + 1);
27         margin-right: 4px;
28         color: grey;
29     }
30 }
31
32     app/jobs/application_job.rb
33
34 # frozen_string_literal: true
35
36 class ApplicationJob < ActiveJob::Base
37 end
38
39     app/controllers/application_controller.rb
40
41 # frozen_string_literal: true
42
43 class ApplicationController < ActionController::Base
44     include Pundit
45     protect_from_forgery with: :exception
46
47     before_action :authenticate_user!
48
49     rescue_from ActiveRecord::RecordNotFound, with: :handle_record_not_found
50     rescue_from Pundit::NotAuthorizedError, with: :handle_not_authorized
51
52     def handle_record_not_found
53         render plain: 'Not found', status: :not_found
54     end
55
56     def handle_not_authorized
57         render plain: 'Not Authorized', status: :unauthorized
58     end
59 end
60
61     app/controllers/root_controller.rb
62
63 # frozen_string_literal: true
64
65 class RootController < ApplicationController
66     def index; end
67 end

```

```

app/controllers/challenges_controller.rb
1 # frozen_string_literal: true
2
3 class ChallengesController < ApplicationController
4   before_action :load_challenge, except: %i[new create index]
5
6   def index
7     authorize Challenge
8     @challenges = Challenge.all
9   end
10
11   def show
12     authorize @challenge
13   end
14
15   def edit
16     authorize @challenge
17   end
18
19   def update
20     authorize @challenge
21     if @challenge.update(challenge_params)
22       flash[:success] = 'Successfully Updated'
23       redirect_to challenge_path(
24         id: @challenge
25       )
26     else
27       render :edit
28     end
29   end
30
31   def new
32     authorize Challenge
33     @challenge = Challenge.new
34   end
35
36   def create
37     authorize Challenge
38     @challenge = Challenge.new(challenge_params.merge(user: current_user))
39
40     if @challenge.save
41       flash[:success] = 'Successfully created'
42       redirect_to challenge_path(
43         id: @challenge
44       )
45     else
46       render :new
47     end
48   end
49
50   def destroy
51     authorize @challenge
52     @challenge.destroy!
53     flash[:success] = 'Sucesfully destroyed'
54     redirect_to challenges_path
55   end
56
57   private
58
59   def load_challenge
60     @challenge = Challenge.find_by!(id: params.require(:id))
61   end
62

```

```

63 def challenge_params
64   params.require(:challenge).permit(
65     :title,
66     :content,
67     :sql_schema,
68     :sql_seed,
69     :sql_correct_query
70   )
71 end
72 end

app/controllers/submissions_controller.rb

1 # frozen_string_literal: true
2
3 require 'csv'
4
5 class SubmissionsController < ApplicationController
6   before_action :load_challenge
7
8   def index
9     respond_to do |format|
10      format.html do
11        @submissions = @challenge.submissions
12        authorize @submissions
13      end
14
15      format.csv do
16        submissions = @challenge.best_submissions.includes(:user)
17
18        authorize submissions
19
20        final_csv = CSV.generate do |csv|
21          csv << %w[email grade]
22
23          submissions.each do |submission|
24            csv << [submission.user.email, submission.max_grade]
25          end
26        end
27
28        send_data(
29          final_csv,
30          filename: "grades_for_#{@challenge.title}.csv",
31          type: :csv
32        )
33      end
34    end
35  end
36
37  def show
38    @submission = Submission.find_by!(
39      challenge_id: @challenge.id,
40      id: params.require(:id)
41    )
42    authorize @submission
43  end
44
45  def report
46    @submission = Submission.find_by!(
47      challenge_id: @challenge.id,
48      id: params.require(:id)
49    )
50    authorize @submission
51  end

```

```

52
53 def new
54   @submission = Submission.new(
55     challenge_id: @challenge.id
56   )
57
58   authorize @submission
59 end
60
61 def create
62   @submission = Submission.new(
63     sql_query: params.require(:submission).require(:sql_query),
64     challenge_id: @challenge.id,
65     user_id: current_user.id
66   )
67
68   authorize @submission
69
70   if @submission.save
71     flash[:success] = 'Successfully submitted!'
72     redirect_to challenge_submission_path(
73       challenge_id: @challenge.id,
74       id: @submission.id
75     )
76   else
77     render :new
78   end
79 end
80
81 private
82
83 def load_challenge
84   @challenge = Challenge.find(params.require(:challenge_id))
85 end
86 end

```

app/views/devise/unlocks/new.html.erb

```

1 <h2>Resend unlock instructions</h2>
2
3 <%= form_for(resource, as: resource_name, url: unlock_path(resource_name), html: { method: :post }) do |f| %>
4   <%= devise_error_messages! %>
5
6   <div class="field">
7     <%= f.label :email %><br />
8     <%= f.email_field :email, autofocus: true %>
9   </div>
10
11   <div class="actions">
12     <%= f.submit "Resend unlock instructions" %>
13   </div>
14 <% end %>
15
16 <%= render "devise/shared/links" %>

```

app/views/devise/passwords/edit.html.erb

```

1 <h2>Change your password</h2>
2
3 <%= form_for(resource, as: resource_name, url: password_path(resource_name), html: { method: :put }) do |f| %>
4   <%= devise_error_messages! %>
5   <%= f.hidden_field :reset_password_token %>
6
7   <div class="field">
8     <%= f.label :password, "New password" %><br />

```



```

9     <% if @minimum_password_length %>
10         <em>(<%= @minimum_password_length %> characters minimum)</em><br />
11     <% end %>
12     <%= f.password_field :password, autofocus: true, autocomplete: "off" %>
13 </div>
14
15 <div class="field">
16     <%= f.label :password_confirmation, "Confirm new password" %><br />
17     <%= f.password_field :password_confirmation, autocomplete: "off" %>
18 </div>
19
20 <div class="actions">
21     <%= f.submit "Change my password" %>
22 </div>
23 <% end %>
24
25 <%= render "devise/shared/links" %>
26
27     app/views/devise/passwords/new.html.erb
28
1 <h2>Forgot your password?</h2>
2
3 <%= form_for(resource, as: resource_name, url: password_path(resource_name), html: { method: :post }) do |f|
4     <%>
5     <%= devise_error_messages! %>
6
7     <div class="field">
8         <%= f.label :email %><br />
9         <%= f.email_field :email, autofocus: true %>
10     </div>
11
12     <div class="actions">
13         <%= f.submit "Send me reset password instructions" %>
14     </div>
15 <% end %>
16
17 <%= render "devise/shared/links" %>
18
19     app/views/devise/mailer/confirmation_instructions.html.erb
20
1 <p>Welcome <%= @email %>!!</p>
2
3 <p>You can confirm your account email through the link below:</p>
4
5 <p><%= link_to 'Confirm my account', confirmation_url(@resource, confirmation_token: @token) %></p>
6
7     app/views/devise/mailer/reset_password_instructions.html.erb
8
1 <p>Hello <%= @resource.email %>!!</p>
2
3 <p>Someone has requested a link to change your password. You can do this through the link below.</p>
4
5 <p><%= link_to 'Change my password', edit_password_url(@resource, reset_password_token: @token) %></p>
6
7 <p>If you didn't request this, please ignore this email.</p>
8 <p>Your password won't change until you access the link above and create a new one.</p>
9
10     app/views/devise/mailer/password_change.html.erb
11
1 <p>Hello <%= @resource.email %>!!</p>
2
3 <p>We're contacting you to notify you that your password has been changed.</p>
4
5     app/views/devise/mailer/email_changed.html.erb
6
1 <p>Hello <%= @email %>!!</p>
2

```

```

3 <% if @resource.try(:unconfirmed_email?) %>
4   <p>We're contacting you to notify you that your email is being changed to <%= @resource.unconfirmed_email
   ↳ %>.</p>
5 <% else %>
6   <p>We're contacting you to notify you that your email has been changed to <%= @resource.email %>.</p>
7 <% end %>

    app/views/devise/mailer/unlock_instructions.html.erb

1 <p>Hello <%= @resource.email %>!</p>
2
3 <p>Your account has been locked due to an excessive number of unsuccessful sign in attempts.</p>
4
5 <p>Click the link below to unlock your account:</p>
6
7 <p><%= link_to 'Unlock my account', unlock_url(@resource, unlock_token: @token) %></p>

    app/views/devise/shared/_links.html.erb

1 <%- if controller_name != 'sessions' %>
2   <%= link_to "Log in", new_session_path(resource_name) %><br />
3 <% end -%>
4
5 <%- if devise_mapping.registerable? && controller_name != 'registrations' %>
6   <%= link_to "Sign up", new_registration_path(resource_name) %><br />
7 <% end -%>
8
9 <%- if devise_mapping.recoverable? && controller_name != 'passwords' && controller_name != 'registrations' %>
10  <%= link_to "Forgot your password?", new_password_path(resource_name) %><br />
11 <% end -%>
12
13 <%- if devise_mapping.confirmable? && controller_name != 'confirmations' %>
14  <%= link_to "Didn't receive confirmation instructions?", new_confirmation_path(resource_name) %><br />
15 <% end -%>
16
17 <%- if devise_mapping.lockable? && resource_class.unlock_strategy_enabled?(:email) && controller_name !=
   ↳ 'unlocks' %>
18  <%= link_to "Didn't receive unlock instructions?", new_unlock_path(resource_name) %><br />
19 <% end -%>
20
21 <%- if devise_mapping.omniauthable? %>
22   <%- resource_class.omniauth_providers.each do |provider| %>
23     <%= link_to "Sign in with #{OmniAuth::Utils.camelize(provider)}", omniauth_authorize_path(resource_name,
   ↳ provider) %><br />
24   <% end -%>
25 <% end -%>

    app/views/devise/sessions/new.html.erb

1 <div class="row justify-content-lg-center">
2   <div class="col-lg-6">
3     <h2>Log in</h2>
4
5     <%= form_for(resource, as: resource_name, url: session_path(resource_name)) do |f| %>
6       <div class="form-group">
7         <%= f.label :email %><br />
8         <%= f.email_field :email, autofocus: true, class: "form-control" %>
9       </div>
10
11      <div class="form-group">
12        <%= f.label :password %><br />
13        <%= f.password_field :password, autocomplete: "off", class: "form-control" %>
14      </div>
15
16      <% if devise_mapping.rememberable? -%>

```

```

17     <div class="form-group">
18         <%= f.check_box :remember_me %>
19         <%= f.label :remember_me %>
20     </div>
21 <% end -%>
22
23     <%= f.submit "Log in", class: "btn btn-primary form-control" %>
24 <% end %>
25
26     <%= render "devise/shared/links" %>
27 </div>
28 </div>

```

app/views/devise/confirmations/new.html.erb

```

1 <h2>Resend confirmation instructions</h2>
2
3 <%= form_for(resource, as: resource_name, url: confirmation_path(resource_name), html: { method: :post }) do
4   ↳ |f| %>
5     <%= devise_error_messages! %>
6
7     <div class="field">
8       <%= f.label :email %><br />
9       <%= f.email_field :email, autofocus: true, value: (resource.pending_reconfirmation? ?
10         ↳ resource.unconfirmed_email : resource.email) %>
11     </div>
12
13     <div class="actions">
14       <%= f.submit "Resend confirmation instructions" %>
15     </div>
16 <% end %>
17
18 <%= render "devise/shared/links" %>
19
20 app/views/devise/registrations/edit.html.erb
21
22 <h2>Edit your profile</h2>
23
24 <div class="row justify-content-lg-center">
25   <div class="col-lg-6">
26     <%= form_for(resource, as: resource_name, url: registration_path(resource_name), html: { method: :put })
27     ↳ do |f| %>
28       <%= devise_error_messages! %>
29
30       <div class="form-group">
31         <%= f.label :email %>
32         <%= f.email_field :email, autofocus: true, class: "form-control" %>
33       </div>
34
35       <% if devise_mapping.confirmable? && resource.pending_reconfirmation? %>
36         <div>Currently waiting confirmation for: <%= resource.unconfirmed_email %></div>
37       <% end %>
38
39       <div class="form-group">
40         <%= f.label :password %> <i>(leave blank if you don't want to change it)</i>
41         <%= f.password_field :password, class: "form-control" %>
42         <% if @minimum_password_length %>
43           <em><%= @minimum_password_length %> characters minimum</em>
44         <% end %>
45       </div>
46
47       <div class="form-group">
48         <%= f.label :password_confirmation %>
49         <%= f.password_field :password_confirmation, class: "form-control" %>
50       </div>

```

```

29
30 <div class="form-group">
31   <%= f.label :current_password %> <i>(we need your current password to confirm your changes)</i>
32   <%= f.password_field :current_password, class: "form-control" %>
33 </div>
34
35 <div class="actions">
36   <%= f.submit "Update", class: "btn btn-primary form-control" %>
37 </div>
38 <% end %>
39 <br/>
40 <h3 class="cancel">Cancel my account</h3>
41 <p>Unhappy? <%= button_to "Cancel my account", registration_path(resource_name), method: :delete, class:
  ↳ "btn btn-danger form-control" %></p>
42 </div>
43 </div>

```

app/views/devise/registrations/new.html.erb

```

1 <div class="row justify-content-lg-center">
2   <div class="col-lg-6">
3     <h2 class="text-center">Sign up</h2>
4
5     <%= form_for(resource, as: resource_name, url: registration_path(resource_name)) do |f| %>
6       <%= devise_error_messages! %>
7
8       <div class="form-group">
9         <%= f.label :email %><br />
10        <%= f.email_field :email, autofocus: true, class: "form-control" %>
11      </div>
12
13      <div class="form-group">
14        <%= f.label :password %>
15        <% if @minimum_password_length %>
16          <em>(<%= @minimum_password_length %> characters minimum)</em>
17        <% end %><br />
18        <%= f.password_field :password, autocomplete: "off", class: "form-control" %>
19      </div>
20
21      <div class="form-group">
22        <%= f.label :password_confirmation %><br />
23        <%= f.password_field :password_confirmation, autocomplete: "off", class: "form-control" %>
24      </div>
25
26      <div class="actions">
27        <%= f.submit "Sign up", class: "btn btn-primary form-control" %>
28      </div>
29    <% end %>
30
31    or
32
33    <%= render "devise/shared/links" %>
34  </div>
35 </div>

```

app/views/challenges/index.html.erb

```

1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item active" aria-current="page">Challenges</li>
4   </ol>
5 </nav>
6
7 <table class="table">
8   <thead>

```

```

9     <tr>
10         <th>Title</th>
11     </th></th>
12 </tr>
13 </thead>
14 <tbody>
15     <% @challenges.each do |challenge| %>
16         <tr>
17             <td><%= challenge.title %></td>
18             <td>
19                 <% if policy(challenge).show? %>
20                     <%= link_to "Show challenge", challenge_path(id: challenge.id) %>
21                 <% else %>
22                     <%= link_to(
23                         "New submission",
24                         new_challenge_submission_path(challenge_id: challenge.id)
25                     ) %>
26                 <% end %>
27             </td>
28         </tr>
29     <% end %>
30 </tbody>
31 </table>
32
33 <% if policy(Challenge).create? %>
34     <%= link_to "Create new challenge", new_challenge_path, class: "btn btn-primary" %>
35 <% end %>
36
37 app/views/challenges/_form_fields.html.erb
38
39 <div class="form-group">
40     <%= f.text_field :title, class: "form-control" %>
41 </div>
42
43 <div class="form-group">
44     <%= f.text_area :content, class: "form-control" %>
45 </div>
46
47 <div class="form-group">
48     <%= f.text_area :sql_schema, class: "form-control code-sql" %>
49 </div>
50
51 <div class="form-group">
52     <%= f.text_area :sql_seed, class: "form-control code-sql" %>
53 </div>
54
55 <div class="form-group">
56     <%= f.text_area :sql_correct_query, class: "form-control code-sql" %>
57 </div>
58
59 app/views/challenges/edit.html.erb
60
61 <nav aria-label="breadcrumb">
62     <ol class="breadcrumb">
63         <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
64         <li class="breadcrumb-item" aria-current="page"><%= link_to @challenge.title, challenge_path(@challenge)
65     %></li>
66         <li class="breadcrumb-item active" aria-current="page">Edit</li>
67     </ol>
68 </nav>
69
70 <%= bootstrap_form_for @challenge do |f| %>
71     <%= render partial: "form_fields", locals: { f: f } %>
72     <%= f.submit "Update", class: "btn btn-primary" %>
73 <% end %>

```

app/views/challenges/show.html.erb

```
1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
4     <li class="breadcrumb-item active" aria-current="page"><%= @challenge.title %></li>
5   </ol>
6 </nav>
7
8 <h3>Content</h3>
9 <%= @challenge.content %>
10
11 <h3>Schema</h3>
12 <pre><code class="sql"><%= @challenge.sql_schema %></code></pre>
13
14 <h3>Seed</h3>
15 <pre><code class="sql"><%= @challenge.sql_seed %></code></pre>
16
17 <h3>Correct Query</h3>
18 <pre><code class="sql"><%= @challenge.sql_correct_query %></code></pre>
19
20 <hr>
21
22 <% @challenge.metadata.each do |table| %>
23 <h3><%= table["name"] %></h3>
24   <table class="table table-bordered">
25     <thead>
26       <tr>
27         <th>#</th>
28         <% table["columns"].each do |column| %>
29
30           <th><%= column.fetch("name") %> <%= column.fetch("type") %></th>
31         <% end %>
32       </tr>
33     </thead>
34     <tbody>
35       <% table["data"].each_with_index do |row, i| %>
36         <tr>
37           <th scope="row"><%= i %></th>
38           <% table["columns"].each do |column| %>
39             <td><%= row.fetch(column.fetch("name")) %></td>
40           <% end %>
41         </tr>
42       <% end %>
43     </tbody>
44   </table>
45 <% end %>
46
47 <div class="btn-toolbar">
48   <%= link_to "Edit", edit_challenge_path(id: @challenge), class: "btn btn-primary mr-2" %>
49   <%= button_to "Destroy", challenge_path(id: @challenge), class: "btn btn-danger inline", method: :delete %>
50   <%= link_to(
51     "View Submissions",
52     challenge_submissions_path(challenge_id: @challenge.id),
53     class: "btn"
54   ) %>
55 <hr>
56 </div>
```

app/views/challenges/new.html.erb

```
1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
```

```

4     <li class="breadcrumb-item active" aria-current="page">New Challenge</li>
5   </ol>
6 </nav>
7
8 <%= bootstrap_form_for @challenge do |f| %>
9   <%= render partial: "form_fields", locals: { f: f } %>
10  <%= f.submit "Create", class: "btn btn-primary" %>
11 <% end %>

```

app/views/layouts/application.html.erb

```

1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>SQL grading</title>
5     <meta charset="utf-8">
6     <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
7
8     <%= csrf_meta_tags %>
9     <%= stylesheet_pack_tag 'application' %>
10  </head>
11
12  <body>
13    <%= render partial: "partials/navigation/header" %>
14
15    <% if flash[:alert].present? %>
16      <div class="alert alert-warning" role="alert">
17        <div class="container">
18          <%= flash[:alert] %>
19        </div>
20      </div>
21    <% end %>
22
23    <% if flash[:notice].present? %>
24      <div class="alert alert-secondary" role="alert">
25        <div class="container">
26          <%= flash[:notice] %>
27        </div>
28      </div>
29    <% end %>
30
31    <% if flash[:success].present? %>
32      <div class="alert alert-success" role="alert">
33        <div class="container">
34          <%= flash[:success] %>
35        </div>
36      </div>
37    <% end %>
38
39    <div class="container" id="bodyContainer">
40      <%= yield %>
41    </div>
42  </body>
43
44  <%= javascript_pack_tag 'application' %>
45 </html>

```

app/views/layouts/mailer.html.erb

```

1 <!DOCTYPE html>
2 <html>
3   <head>
4     <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5     <style>
6       /* Email styles need to be inline */

```

```

7     </style>
8 </head>
9
10 <body>
11     <%= yield %>
12 </body>
13 </html>

```

app/views/layouts/mailer.text.erb

```

1 <%= yield %>

```

app/views/submissions/index.html.erb

```

1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
4     <li class="breadcrumb-item" aria-current="page">
5       <%= link_to @challenge.title, challenge_path(@challenge) %>
6     </li>
7     <li class="breadcrumb-item active" aria-current="page">Submissions</li>
8   </ol>
9 </nav>

```

```

10
11 <table class="table">
12   <thead>
13     <tr>
14       <th>Email</th>
15       <th>Grade</th>
16       <th>View submission</th>
17     </tr>
18   </thead>
19   <tbody>
20     <% @submissions.each do |submission| %>
21       <tr>
22         <td><%= submission.user.email %></td>
23         <td><%= submission.grade %></td>
24         <td>
25           <%= link_to(
26             "View submission",
27             [:report, @challenge, submission]
28           ) %>
29         </td>
30       </tr>
31     <% end %>
32   </tbody>
33 </table>

```

```

34
35 <%= link_to(
36   "Download CSV",
37   challenge_submissions_path(@challenge, format: :csv),
38   class: "btn btn-primary"
39 )%>

```

app/views/submissions/_columns.html.erb

```

1 <% columns.each do |column| %>
2   <pre><code class="sql"><%= column %></code></pre>
3 <% end %>

```

app/views/submissions/_tables.html.erb

```

1 <% tables.each do |table| %>
2   <pre><code class="sql"><%= table["sql"] %></code></pre>
3 <% end %>

```

app/views/submissions/_group.html.erb


```

1 <% group.each do |group_column| %>
2   <pre><code class="sql"><%= group_column %></code></pre>
3 <% end %>
4
5 <% if group.empty? %>
6   No group clause
7 <% end %>
8
9   app/views/submissions/_order_by.html.erb
10
1 <% order_by.each do |rule| %>
2   <pre><code class="sql"><%= rule["column"] %></code></pre>
3 <% end %>
4
5 <% if order_by.empty? %>
6   No order by rule
7 <% end %>
8
9   app/views/submissions/_distinct_filter.html.erb
10
1 <pre><code class="sql"><%= distinct_filter %></code></pre>
2
3   app/views/submissions/report.html.erb
4
1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
4     <li class="breadcrumb-item" aria-current="page">
5       <%= link_to @challenge.title, challenge_submissions_path(challenge: @challenge) %>
6     </li>
7     <li class="breadcrumb-item active" aria-current="page">Submission result</li>
8   </ol>
9 </nav>
10
11 <h1>Summary</h1>
12 <table class="table">
13   <tbody>
14     <tr>
15       <th>Success</th>
16       <td><%= @submission.success %></td>
17     </tr>
18     <tr>
19       <th>Grade</th>
20       <td><%= @submission.grade %> / 100.00</td>
21     </tr>
22     <tr>
23       <th>Query</th>
24       <td><pre><code class="mysql" style="white-space: pre-wrap;"><%= @submission.sql_query
→ %></code></pre></td>
25     </tr>
26   </tbody>
27 </table>
28
29 <h1>Comparison of elements</h1>
30 <table class="table">
31   <thead>
32     <tr>
33       <th>Attribute</th>
34       <th>Submission</th>
35       <th>Correct</th>
36       <th>Match</th>
37     </tr>
38   </thead>
39   <tbody>
40     <tr>

```

```

41 <td>Columns</td>
42 <td>
43     <%= render partial: "columns", locals: {
44         columns: @submission.metadata["student"]["columns"],
45     } %>
46 </td>
47 <td>
48     <%= render partial: "columns", locals: {
49         columns: @submission.metadata["instructor"]["columns"],
50     } %>
51 </td>
52 <td><%= @submission.attribute_grades["columns"].to_d * 100.0 %>%</td>
53 </tr>
54 <tr>
55     <td>Tables</td>
56     <td>
57         <%= render partial: "tables", locals: {
58             tables: @submission.metadata["student"]["tables"],
59         } %>
60     </td>
61     <td>
62         <%= render partial: "tables", locals: {
63             tables: @submission.metadata["instructor"]["tables"],
64         } %>
65     </td>
66     <td><%= @submission.attribute_grades["tables"].to_d * 100.0 %>%</td>
67 </tr>
68 <tr>
69     <td>Where</td>
70     <td>
71         <%= render partial: "where", locals: {
72             query: @submission.metadata["student"]["where"],
73             depth: 0
74         } %>
75     </td>
76     <td>
77         <%= render partial: "where", locals: {
78             query: @submission.metadata["instructor"]["where"],
79             depth: 0
80         } %>
81     </td>
82     <td><%= @submission.attribute_grades["where"].to_d * 100.0 %>%</td>
83 </tr>
84 <tr>
85     <td>Order by</td>
86     <td>
87         <%= render partial: "order_by", locals: {
88             order_by: @submission.metadata["student"]["order_by"],
89         } %>
90     </td>
91     <td>
92         <%= render partial: "order_by", locals: {
93             order_by: @submission.metadata["instructor"]["order_by"],
94         } %>
95     </td>
96     <td><%= @submission.attribute_grades["order_by"].to_d * 100.0 %>%</td>
97 </tr>
98 <tr>
99     <td>Distinct filter</td>
100     <td>
101         <%= render partial: "distinct_filter", locals: {
102             distinct_filter: @submission.metadata["student"]["distinct_filter"],
103         } %>

```

```

04 </td>
05 <td>
06   <%= render partial: "distinct_filter", locals: {
07     distinct_filter: @submission.metadata["instructor"]["distinct_filter"],
08   } %>
09 </td>
10 <td><%= @submission.attribute_grades["distinct_filter"].to_d * 100.0 %>%</td>
11 </tr>
12 <tr>
13   <td>Limit</td>
14   <td>
15     <%= render partial: "limit", locals: {
16       limit: @submission.metadata["student"]["limit"],
17     } %>
18   </td>
19   <td>
20     <%= render partial: "limit", locals: {
21       limit: @submission.metadata["instructor"]["limit"],
22     } %>
23   </td>
24   <td><%= @submission.attribute_grades["limit"].to_d * 100.0 %>%</td>
25 </tr>
26 <tr>
27   <td>Group</td>
28   <td>
29     <%= render partial: "group", locals: {
30       group: @submission.metadata["student"]["group"],
31     } %>
32   </td>
33   <td>
34     <%= render partial: "group", locals: {
35       group: @submission.metadata["instructor"]["group"],
36     } %>
37   </td>
38   <td><%= @submission.attribute_grades["group"].to_d * 100.0 %>%</td>
39 </tr>
40 </tbody>
41 </table>

```

app/views/submissions/show.html.erb

```

1 <nav aria-label="breadcrumb">
2   <ol class="breadcrumb">
3     <li class="breadcrumb-item"><%= link_to "Challenges", challenges_path%></li>
4     <li class="breadcrumb-item" aria-current="page">
5       <%= link_to @challenge.title, new_challenge_submission_path(challenge: @challenge) %>
6     </li>
7     <li class="breadcrumb-item active" aria-current="page">Submission accepted</li>
8   </ol>
9 </nav>
10
11 <p>
12   <%= @submission.message %>
13 </p>

```

app/views/submissions/_limit.html.erb

```

1 <pre><code>Limit: <%= limit["limit"] %></code></pre>
2 <pre><code>Offset: <%= limit["offset"] %></code></pre>

```

app/views/submissions/_where.html.erb

```

1 <% class_name = "where-clause-depth-#{depth}" %>
2 <% if query == {} %>
3   No where conditions

```

```

4 <% elsif query["type"] == "AND" %>
5   <% query["clauses"].each_with_index do |clause, i| %>
6     <% if i != 0 %>
7       <div class="<%= class_name %> py-2"><span class="font-weight-bold">AND</span></div>
8     </div>
9     <% end %>
10    <%= render partial: "where", locals: {
11      query: clause,
12      depth: depth + 1
13    }%>
14  <% end %>
15 <% elsif query["type"] == "OR"%>
16   <% query["clauses"].each_with_index do |clause, i| %>
17     <% if i != 0 %>
18       <div class="<%= class_name %> py-2"><span class="font-weight-bold">OR</span></div>
19     <% end %>
20    <%= render partial: "where", locals: {
21      query: clause,
22      depth: depth + 1
23    }%>
24  <% end %>
25 <% else %>
26   <div class="<%= class_name %>">
27     <pre class="d-inline"><code class="d-inline"><%= query["sql"] %></code></pre>
28   </div>
29 <% end %>

```

app/views/submissions/new.html.erb

```

1 <h1><%= @challenge.title %></h1>
2
3 <hr>
4 <h3>Content:</h3>
5 <p><%= @challenge.content %></p>
6 <hr>
7 <h3>Schema:</h3>
8 <pre><code class="sql"><%= @challenge.sql_schema %></code></pre>
9 <hr>
10 <% @challenge.metadata.each do |table| %>
11 <h3><%= table["name"] %></h3>
12 <table class="table table-bordered">
13   <thead>
14     <tr>
15       <th>#</th>
16       <% table["columns"].each do |column| %>
17
18         <th><%= column.fetch("name") %> <%= column.fetch("type") %></th>
19       <% end %>
20     </tr>
21   </thead>
22 </table>
23 <% end %>
24
25 <%= bootstrap_form_for [@challenge, @submission] do |f| %>
26   <%= f.text_field :sql_query, class: "code-sql" %>
27   <%= f.submit "Submit", class: "btn btn-primary">
28 <% end %>

```

app/views/root/index.html.erb

```

1 <div class="text-center">
2   <h1 class="display-2">Welcome to SQL Assess</h1>
3
4 </div>

```

app/views/partials/navigation/_header.html.erb

```

1 <nav class="navbar navbar-expand-lg navbar-light bg-light">
2   <div class="container">
3     <a class="navbar-brand" href="#">SQL Project</a>
4     <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent"
→   aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
5       <span class="navbar-toggler-icon"></span>
6     </button>
7
8     <div class="collapse navbar-collapse" id="navbarSupportedContent">
9       <ul class="navbar-nav mr-auto">
10         <%= render(
11           partial: "partials/navigation/header_nav_link",
12           locals: { name: "Home", path: root_path }
13         ) %>
14         <%= render(
15           partial: "partials/navigation/header_nav_link",
16           locals: { name: "Challenges", path: challenges_path }
17         ) %>
18       </ul>
19       <div class="ul navbar-nav">
20         <% if user_signed_in? %>
21           <li class="nav-item dropdown">
22             <a class="nav-link dropdown-toggle" href="#" id="userDropdown" role="button"
→   data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
23               <%= current_user.email %>
24             </a>
25             <div class="dropdown-menu" aria-labelledby="userDropdown">
26               <p class="dropdown-header">Role: <%= current_user.role.capitalize %></p>
27               <div class="dropdown-divider"></div>
28               <%= link_to(
29                 "Sign out",
30                 users_sign_out_path,
31                 class: "dropdown-item",
32               ) %>
33               <%= link_to(
34                 "Edit profile",
35                 edit_user_registration_path,
36                 class: "dropdown-item",
37               ) %>
38             </div>
39           </li>
40           <% else %>
41             <li class="nav-item">
42               <%= link_to(
43                 "Sign in",
44                 new_user_session_path,
45                 class: "nav-link",
46               ) %>
47             </li>
48           <% end %>
49         </div>
50       </div>
51     </div>
52 </nav>

```

app/views/partials/navigation/_header_nav_link.html.erb

```

1 <% active_class = current_page?(path) ? "active" : "" %>
2 <li class="nav-item <%= active_class %>">
3   <%= link_to name, path, class: "nav-link" %>
4 </li>

```

app/assets/config/manifest.js

```

1 //= link_tree ../images

```

```

2 //= link_directory ../javascripts .js
3 //= link_directory ../stylesheets .css

    app/helpers/application_helper.rb

1 # frozen_string_literal: true
2
3 module ApplicationHelper
4 end

    app/channels/application_cable/connection.rb

1 # frozen_string_literal: true
2
3 module ApplicationCable
4   class Connection < ActionCable::Connection::Base
5   end
6 end

    app/channels/application_cable/channel.rb

1 # frozen_string_literal: true
2
3 module ApplicationCable
4   class Channel < ActionCable::Channel::Base
5   end
6 end

    bin/update

1 #!/usr/bin/env ruby
2 require 'pathname'
3 require 'fileutils'
4 include FileUtils
5
6 # path to your application root.
7 APP_ROOT = Pathname.new File.expand_path('../../', __FILE__)
8
9 def system!(*args)
10   system(*args) || abort("\n== Command #{args} failed ==")
11 end
12
13 chdir APP_ROOT do
14   # This script is a way to update your development environment automatically.
15   # Add necessary update steps to this file.
16
17   puts '== Installing dependencies =='
18   system! 'gem install bundler --conservative'
19   system! 'bundle check' || system! 'bundle install'
20
21   puts "\n== Updating database =="
22   system! 'bin/rails db:migrate'
23
24   puts "\n== Removing old logs and tempfiles =="
25   system! 'bin/rails log:clear tmp:clear'
26
27   puts "\n== Restarting application server =="
28   system! 'bin/rails restart'
29 end

    bin/rake

1 #!/usr/bin/env ruby
2 begin
3   load File.expand_path('../spring', __FILE__)
4 rescue LoadError => e
5   raise unless e.message.include?('spring')

```

```

6 end
7 require_relative '../config/boot'
8 require 'rake'
9 Rake.application.run

  bin/setup

1  #!/usr/bin/env ruby
2  require 'pathname'
3  require 'fileutils'
4  include FileUtils
5
6  # path to your application root.
7  APP_ROOT = Pathname.new File.expand_path('../../', __FILE__)
8
9  def system!(*args)
10     system(*args) || abort("\n== Command #{args} failed ==")
11 end
12
13 chdir APP_ROOT do
14     # This script is a starting point to setup your application.
15     # Add necessary setup steps to this file.
16
17     puts '== Installing dependencies =='
18     system! 'gem install bundler --conservative'
19     system('bundle check') || system('bundle install')
20
21     # Install JavaScript dependencies if using Yarn
22     # system('bin/yarn')
23
24
25     # puts "\n== Copying sample files =="
26     # unless File.exist?('config/database.yml')
27     #   cp 'config/database.yml.sample', 'config/database.yml'
28     # end
29
30     puts "\n== Preparing database =="
31     system! 'bin/rails db:setup'
32
33     puts "\n== Removing old logs and tempfiles =="
34     system! 'bin/rails log:clear tmp:clear'
35
36     puts "\n== Restarting application server =="
37     system! 'bin/rails restart'
38 end
39
40 bin/bundle
41
42 #!/usr/bin/env ruby
43 ENV['BUNDLE_GEMFILE'] ||= File.expand_path('../../Gemfile', __FILE__)
44 load Gem.bin_path('bundler', 'bundle')
45
46 bin/yarn
47
48 #!/usr/bin/env ruby
49 VENDOR_PATH = File.expand_path '..', __dir__
50 Dir.chdir(VENDOR_PATH) do
51     begin
52         exec "yarnpkg #{ARGV.join(" ")}"
53     rescue Errno::ENOENT
54         $stderr.puts "Yarn executable was not detected in the system."
55         $stderr.puts "Download Yarn at https://yarnpkg.com/en/docs/install"
56         exit 1
57     end
58 end
59 end

```

```

bin/webpack
1  #!/usr/bin/env ruby
2
3  ENV["RAILS_ENV"] ||= ENV["RACK_ENV"] || "development"
4  ENV["NODE_ENV"] ||= ENV["RAILS_ENV"]
5
6  require "pathname"
7  ENV["BUNDLE_GEMFILE"] ||= File.expand_path("../..//Gemfile",
8    Pathname.new(__FILE__).realpath)
9
10 require "rubygems"
11 require "bundler/setup"
12
13 require "webpacker"
14 require "webpacker/webpack_runner"
15 Webpacker::WebpackRunner.run(ARGV)

bin/webpack-dev-server
1  #!/usr/bin/env ruby
2
3  ENV["RAILS_ENV"] ||= ENV["RACK_ENV"] || "development"
4  ENV["NODE_ENV"] ||= ENV["RAILS_ENV"]
5
6  require "pathname"
7  ENV["BUNDLE_GEMFILE"] ||= File.expand_path("../..//Gemfile",
8    Pathname.new(__FILE__).realpath)
9
10 require "rubygems"
11 require "bundler/setup"
12
13 require "webpacker"
14 require "webpacker/dev_server_runner"
15 Webpacker::DevServerRunner.run(ARGV)

bin/rspec
1  #!/usr/bin/env ruby
2  begin
3    load File.expand_path('../spring', __FILE__)
4  rescue LoadError => e
5    raise unless e.message.include?('spring')
6  end
7  require 'bundler/setup'
8  load Gem.bin_path('rspec-core', 'rspec')

bin/spring
1  #!/usr/bin/env ruby
2
3  # This file loads spring without using Bundler, in order to be fast.
4  # It gets overwritten when you run the `spring binstub` command.
5
6  unless defined?(Spring)
7    require 'rubygems'
8    require 'bundler'
9
10   lockfile = Bundler::LockfileParser.new(Bundler.default_lockfile.read)
11   spring = lockfile.specs.detect { |spec| spec.name == "spring" }
12   if spring
13     Gem.use_paths Gem.dir, Bundler.bundle_path.to_s, *Gem.path
14     gem 'spring', spring.version
15     require 'spring/binstub'
16   end
17 end

```



```

bin/rails
1  #!/usr/bin/env ruby
2  begin
3    load File.expand_path('../spring', __FILE__)
4  rescue LoadError => e
5    raise unless e.message.include?('spring')
6  end
7  APP_PATH = File.expand_path('../config/application', __dir__)
8  require_relative '../config/boot'
9  require 'rails/commands'

  config/secrets.yml

1  # Be sure to restart your server when you modify this file.
2
3  # Your secret key is used for verifying the integrity of signed cookies.
4  # If you change this key, all old signed cookies will become invalid!
5
6  # Make sure the secret is at least 30 characters and all random,
7  # no regular words or you'll be exposed to dictionary attacks.
8  # You can use `rails secret` to generate a secure secret key.
9
10 # Make sure the secrets in this file are kept private
11 # if you're sharing your code publicly.
12
13 # Shared secrets are available across all environments.
14
15 # shared:
16 #   api_key: a1B2c3D4e5F6
17
18 # Environmental secrets are only available for that specific environment.
19
development:
  secret_key_base:
    ↪ 4b9faf5ec5e407c70bb30612d85f0cf87183598042b0aa9878f3c237ee52d59da240bce837c4a647009a54a9a9b72ba1df5eea93248a
22
test:
  secret_key_base:
    ↪ f3e15528b06acdbd18d57e05f61430017d4d5dfc7a663332075ac975586c1832ca7daf6a45f2eb96ae887dc45b8c3a73568eba9b9b60
25
26 # Do not keep production secrets in the unencrypted secrets file.
27 # Instead, either read values from the environment.
28 # Or, use `bin/rails secrets:setup` to configure encrypted secrets
29 # and move the `production:` environment over there.
30
production:
  secret_key_base: <%= ENV["SECRET_KEY_BASE"] %>

  config/routes.rb

1  # frozen_string_literal: true
2
3  Rails.application.routes.draw do
4    get '/', to: 'root#index', as: :root
5
6    devise_for :users
7
8    # Create link for sign_out
9    devise_scope :user do
10     get '/users/sign_out' => 'devise/sessions#destroy'
11   end
12
13   resources :challenges do
14     resources :submissions do

```

```

15     member do
16       get 'report'
17     end
18   end
19 end
20 end

config/locales/en.yml

1 en:
2   header:
3     title: SQL Grading

config/locales/devise.en.yml

# Additional translations at https://github.com/plataformatec/devise/wiki/I18n

2
3 en:
4   devise:
5     confirmations:
6       confirmed: "Your email address has been successfully confirmed."
7       send_instructions: "You will receive an email with instructions for how to confirm your email address in
      ↳ a few minutes."
8       send_paranoid_instructions: "If your email address exists in our database, you will receive an email
      ↳ with instructions for how to confirm your email address in a few minutes."
9   failure:
10     already_authenticated: "You are already signed in."
11     inactive: "Your account is not activated yet."
12     invalid: "Invalid %{authentication_keys} or password."
13     locked: "Your account is locked."
14     last_attempt: "You have one more attempt before your account is locked."
15     not_found_in_database: "Invalid %{authentication_keys} or password."
16     timeout: "Your session expired. Please sign in again to continue."
17     unauthenticated: "You need to sign in or sign up before continuing."
18     unconfirmed: "You have to confirm your email address before continuing."
19   mailer:
20     confirmation_instructions:
21       subject: "Confirmation instructions"
22     reset_password_instructions:
23       subject: "Reset password instructions"
24     unlock_instructions:
25       subject: "Unlock instructions"
26     email_changed:
27       subject: "Email Changed"
28     password_change:
29       subject: "Password Changed"
30   omniauth_callbacks:
31     failure: "Could not authenticate you from %{kind} because \"#{reason}\"."
32     success: "Successfully authenticated from %{kind} account."
33   passwords:
34     no_token: "You can't access this page without coming from a password reset email. If you do come from a
      ↳ password reset email, please make sure you used the full URL provided."
35     send_instructions: "You will receive an email with instructions on how to reset your password in a few
      ↳ minutes."
36     send_paranoid_instructions: "If your email address exists in our database, you will receive a password
      ↳ recovery link at your email address in a few minutes."
37     updated: "Your password has been changed successfully. You are now signed in."
38     updated_not_active: "Your password has been changed successfully."
39   registrations:
40     destroyed: "Bye! Your account has been successfully cancelled. We hope to see you again soon."
41     signed_up: "Welcome! You have signed up successfully."
42     signed_up_but_inactive: "You have signed up successfully. However, we could not sign you in because your
      ↳ account is not yet activated."
43     signed_up_but_locked: "You have signed up successfully. However, we could not sign you in because your
      ↳ account is locked."

```

```

44 signed_up_but_unconfirmed: "A message with a confirmation link has been sent to your email address.
   ↳ Please follow the link to activate your account."
45 update_needs_confirmation: "You updated your account successfully, but we need to verify your new email
   ↳ address. Please check your email and follow the confirm link to confirm your new email address."
46 updated: "Your account has been updated successfully."
47 sessions:
48   signed_in: "Signed in successfully."
49   signed_out: "Signed out successfully."
50   already_signed_out: "Signed out successfully."
51 unlocks:
52   send_instructions: "You will receive an email with instructions for how to unlock your account in a few
   ↳ minutes."
53   send_paranoid_instructions: "If your account exists, you will receive an email with instructions for how
   ↳ to unlock it in a few minutes."
54   unlocked: "Your account has been unlocked successfully. Please sign in to continue."
55 errors:
56   messages:
57     already_confirmed: "was already confirmed, please try signing in"
58     confirmation_period_expired: "needs to be confirmed within %{period}, please request a new one"
59     expired: "has expired, please request a new one"
60     not_found: "not found"
61     not_locked: "was not locked"
62     not_saved:
63       one: "1 error prohibited this %{resource} from being saved:"
64       other: "%{count} errors prohibited this %{resource} from being saved:"

config/cable.yml

1 development:
2   adapter: async
3
4 test:
5   adapter: async
6
7 production:
8   adapter: redis
9   url: redis://localhost:6379/1
10  channel_prefix: fyp_production

config/environments/production.rb

1 # frozen_string_literal: true
2
3 Rails.application.configure do
4   # Settings specified here will take precedence over those in config/application.rb.
5
6   # Code is not reloaded between requests.
7   config.cache_classes = true
8
9   # Eager load code on boot. This eager loads most of Rails and
10  # your application in memory, allowing both threaded web servers
11  # and those relying on copy on write to perform better.
12  # Rake tasks automatically ignore this option for performance.
13  config.eager_load = true
14
15  # Full error reports are disabled and caching is turned on.
16  config.consider_all_requests_local = false
17  config.action_controller.perform_caching = true
18
19  # Attempt to read encrypted secrets from `config/secrets.yml.enc`.
20  # Requires an encryption key in `ENV["RAILS_MASTER_KEY"]` or
21  # `config/secrets.yml.key`.
22  config.read_encrypted_secrets = true
23
24  # Disable serving static files from the `/public` folder by default since

```

```
25 # Apache or NGINX already handles this.
26 config.public_file_server.enabled = ENV['RAILS_SERVE_STATIC_FILES'].present?
27
28 # Compress JavaScripts and CSS.
29 config.assets.js_compressor = :uglifier
30 # config.assets.css_compressor = :sass
31
32 # Do not fallback to assets pipeline if a precompiled asset is missed.
33 config.assets.compile = false
34
35 # `config.assets.precompile` and `config.assets.version` have moved to config/initializers/assets.rb
36
37 # Enable serving of images, stylesheets, and JavaScripts from an asset server.
38 # config.action_controller.asset_host = 'http://assets.example.com'
39
40 # Specifies the header that your server uses for sending files.
41 # config.action_dispatch.x_sendfile_header = 'X-Sendfile' # for Apache
42 # config.action_dispatch.x_sendfile_header = 'X-Accel-Redirect' # for NGINX
43
44 # Mount Action Cable outside main process or domain
45 # config.action_cable.mount_path = nil
46 # config.action_cable.url = 'wss://example.com/cable'
47 # config.action_cable.allowed_request_origins = [ 'http://example.com', /http:\/\/example.*/ ]
48
49 # Force all access to the app over SSL, use Strict-Transport-Security, and use secure cookies.
50 # config.force_ssl = true
51
52 # Use the lowest log level to ensure availability of diagnostic information
53 # when problems arise.
54 config.log_level = :debug
55
56 # Prepend all log lines with the following tags.
57 config.log_tags = [:request_id]
58
59 # Use a different cache store in production.
60 # config.cache_store = :mem_cache_store
61
62 # Use a real queuing backend for Active Job (and separate queues per environment)
63 # config.active_job.queue_adapter = :resque
64 # config.active_job.queue_name_prefix = "fyp_#{Rails.env}"
65 config.action_mailer.perform_caching = false
66
67 # Ignore bad email addresses and do not raise email delivery errors.
68 # Set this to true and configure the email server for immediate delivery to raise delivery errors.
69 # config.action_mailer.raise_delivery_errors = false
70
71 # Enable locale fallbacks for I18n (makes lookups for any locale fall back to
72 # the I18n.default_locale when a translation cannot be found).
73 config.i18n.fallbacks = true
74
75 # Send deprecation notices to registered listeners.
76 config.active_support.deprecation = :notify
77
78 # Use default logging formatter so that PID and timestamp are not suppressed.
79 config.log_formatter = ::Logger::Formatter.new
80
81 # Use a different logger for distributed setups.
82 # require 'syslog/logger'
83 # config.logger = ActiveSupport::TaggedLogging.new(Syslog::Logger.new 'app-name')
84
85 if ENV['RAILS_LOG_TO_STDOUT'].present?
86   logger           = ActiveSupport::Logger.new(STDOUT)
87   logger.formatter = config.log_formatter
```

```

88     config.logger      = ActiveSupport::TaggedLogging.new(logger)
89 end
90
91 # Do not dump schema after migrations.
92 config.active_record.dump_schema_after_migration = false
93 end
94
95 config/environments/development.rb
96
1 # frozen_string_literal: true
2
3 Rails.application.configure do
4   # Settings specified here will take precedence over those in config/application.rb.
5
6   # In the development environment your application's code is reloaded on
7   # every request. This slows down response time but is perfect for development
8   # since you don't have to restart the web server when you make code changes.
9   config.cache_classes = false
10
11   # Do not eager load code on boot.
12   config.eager_load = false
13
14   # Show full error reports.
15   config.consider_all_requests_local = true
16
17   # Enable/disable caching. By default caching is disabled.
18   if Rails.root.join('tmp/caching-dev.txt').exist?
19     config.action_controller.perform_caching = true
20
21     config.cache_store = :memory_store
22     config.public_file_server.headers = {
23       'Cache-Control' => "public, max-age=#{2.days.seconds.to_i}",
24     }
25   else
26     config.action_controller.perform_caching = false
27
28     config.cache_store = :null_store
29   end
30
31   # Don't care if the mailer can't send.
32   config.action_mailer.raise_delivery_errors = false
33
34   config.action_mailer.perform_caching = false
35
36   config.action_mailer.default_url_options = { host: 'localhost', port: 3000 }
37   config.action_mailer.delivery_method = :letter_opener
38
39   # Print deprecation notices to the Rails logger.
40   config.active_support.deprecation = :log
41
42   # Raise an error on page load if there are pending migrations.
43   config.active_record.migration_error = :page_load
44
45   # Debug mode disables concatenation and preprocessing of assets.
46   # This option may cause significant delays in view rendering with a large
47   # number of complex assets.
48   config.assets.debug = true
49
50   # Suppress logger output for asset requests.
51   config.assets.quiet = true
52
53   # Raises error for missing translations
54   # config.action_view.raise_on_missing_translations = true
55

```

```

56 # Use an evented file watcher to asynchronously detect changes in source code,
57 # routes, locales, etc. This feature depends on the listen gem.
58 config.file_watcher = ActiveSupport::EventedFileUpdateChecker
59 end

    config/environments/test.rb

1 # frozen_string_literal: true
2
3 Rails.application.configure do
4   # Settings specified here will take precedence over those in config/application.rb.
5
6   # The test environment is used exclusively to run your application's
7   # test suite. You never need to work with it otherwise. Remember that
8   # your test database is "scratch space" for the test suite and is wiped
9   # and recreated between test runs. Don't rely on the data there!
10  config.cache_classes = true
11
12  # Do not eager load code on boot. This avoids loading your whole application
13  # just for the purpose of running a single test. If you are using a tool that
14  # preloads Rails for running tests, you may have to set it to true.
15  config.eager_load = false
16
17  # Configure public file server for tests with Cache-Control for performance.
18  config.public_file_server.enabled = true
19  config.public_file_server.headers = {
20    'Cache-Control' => "public, max-age=#{1.hour.seconds.to_i}",
21  }
22
23  # Show full error reports and disable caching.
24  config.consider_all_requests_local = true
25  config.action_controller.perform_caching = false
26
27  # Raise exceptions instead of rendering exception templates.
28  config.action_dispatch.show_exceptions = false
29
30  # Disable request forgery protection in test environment.
31  config.action_controller.allow_forgery_protection = false
32  config.action_mailer.perform_caching = false
33
34  # Tell Action Mailer not to deliver emails to the real world.
35  # The :test delivery method accumulates sent emails in the
36  # ActionMailer::Base.deliveries array.
37  config.action_mailer.delivery_method = :test
38
39  # Print deprecation notices to the stderr.
40  config.active_support.deprecation = :stderr
41
42  # Raises error for missing translations
43  # config.action_view.raise_on_missing_translations = true
44 end

    config/spring.rb

1 # frozen_string_literal: true
2
3 %w[
4   .ruby-version
5   .rbenv-vars
6   tmp/restart.txt
7   tmp/caching-dev.txt
8 ].each { |path| Spring.watch(path) }

    config/environment.rb

```

```

1 # frozen_string_literal: true
2
3 # Load the Rails application.
4 require_relative 'application'
5
6 # Initialize the Rails application.
7 Rails.application.initialize!
8
9   config/application.rb
10
11 # frozen_string_literal: true
12
13 require_relative 'boot'
14
15 require 'rails/all'
16
17 # Require the gems listed in Gemfile, including any gems
18 # you've limited to :test, :development, or :production.
19 Bundler.require(*Rails.groups)
20
21 module Fyp
22   class Application < Rails::Application
23     # Initialize configuration defaults for originally generated Rails version.
24     config.load_defaults 5.1
25
26     # Settings in config/environments/* take precedence over those specified here.
27     # Application configuration should go into files in config/initializers
28     # -- all .rb files in that directory are automatically loaded.
29   end
30 end
31
32   config/puma.rb
33
34 # frozen_string_literal: true
35
36 # Puma can serve each request in a thread from an internal thread pool.
37 # The `threads` method setting takes two numbers: a minimum and maximum.
38 # Any libraries that use thread pools should be configured to match
39 # the maximum value specified for Puma. Default is set to 5 threads for minimum
40 # and maximum; this matches the default thread size of Active Record.
41 #
42 threads_count = ENV.fetch('RAILS_MAX_THREADS') { 5 }
43 threads threads_count, threads_count
44
45 # Specifies the `port` that Puma will listen on to receive requests; default is 3000.
46 #
47 port      ENV.fetch('PORT') { 3000 }
48
49 # Specifies the `environment` that Puma will run in.
50 #
51 environment ENV.fetch('RAILS_ENV') { 'development' }
52
53 # Specifies the number of `workers` to boot in clustered mode.
54 # Workers are forked webserver processes. If using threads and workers together
55 # the concurrency of the application would be max `threads` * `workers`.
56 # Workers do not work on JRuby or Windows (both of which do not support
57 # processes).
58 #
59 # workers ENV.fetch("WEB_CONCURRENCY") { 2 }
60
61 # Use the `preload_app!` method when specifying a `workers` number.
62 # This directive tells Puma to first boot the application and load code
63 # before forking the application. This takes advantage of Copy On Write
64 # process behavior so workers use less memory. If you use this option
65 # you need to make sure to reconnect any threads in the `on_worker_boot`

```



```

33 # block.
34 #
35 # preload_app!
36
37 # If you are preloading your application and using Active Record, it's
38 # recommended that you close any connections to the database before workers
39 # are forked to prevent connection leakage.
40 #
41 # before_fork do
42 #   ActiveRecord::Base.connection_pool.disconnect! if defined?(ActiveRecord)
43 # end
44
45 # The code in the `on_worker_boot` will be called if you are using
46 # clustered mode by specifying a number of `workers`. After each worker
47 # process is booted, this block will be run. If you are using the `preload_app!`
48 # option, you will want to use this block to reconnect to any threads
49 # or connections that may have been created at application boot, as Ruby
50 # cannot share connections between processes.
51 #
52 # on_worker_boot do
53 #   ActiveRecord::Base.establish_connection if defined?(ActiveRecord)
54 # end
55 #
56
57 # Allow puma to be restarted by `rails restart` command.
58 plugin :tmp_restart

```

config/database.yml

```

1 # SQLite version 3.x
2 #   gem install sqlite3
3 #
4 #   Ensure the SQLite 3 gem is defined in your Gemfile
5 #   gem 'sqlite3'
6 #
7 default: &default
8   adapter: mysql2
9   pool: <%= ENV.fetch("RAILS_MAX_THREADS") { 5 } %>
10  timeout: 5000
11
12 development:
13   <<: *default
14   host: 127.0.0.1
15   username: root
16   password: ""
17   database: "sql_assess_dev"
18
19 # Warning: The database defined as "test" will be erased and
20 # re-generated from your development database when you run "rake".
21 # Do not set this db to the same as development or production.
22 test:
23   <<: *default
24   host: 127.0.0.1
25   username: root
26   password: ""
27   database: "sql_assess_test"

```

config/webpack/development.js

```

1 const environment = require('./environment')
2
3 module.exports = environment.toWebpackConfig()

```

config/webpack/test.js


```

1  const environment = require('./environment')
2
3  module.exports = environment.toWebpackConfig()
4
5  config/webpack/production.js
6
7  const environment = require('./environment')
8
9  module.exports = environment.toWebpackConfig()
10
11  config/webpack/environment.js
12
13  const { environment } = require('@rails/webpacker')
14  const webpack = require('webpack')
15
16  environment.plugins.set('Provide', new webpack.ProvidePlugin(
17    {
18      $: 'jquery',
19      jQuery: 'jquery',
20      'window.jQuery': 'jquery',
21      Popper: ['popper.js', 'default'],
22    })
23  );
24
25  module.exports = environment
26
27  config/boot.rb
28
29  # frozen_string_literal: true
30
31  ENV['BUNDLE_GEMFILE'] ||= File.expand_path('../Gemfile', __dir__)
32
33  require 'bundler/setup' # Set up gems listed in the Gemfile.
34
35  config/webpacker.yml
36
37  # Note: You must restart bin/webpack-dev-server for changes to take effect
38
39  default: &default
40    source_path: app/javascript
41    source_entry_path: packs
42    public_output_path: packs
43    cache_path: tmp/cache/webpacker
44
45    # Additional paths webpack should lookup modules
46    # ['app/assets', 'engine/foo/app/assets']
47    resolved_paths: []
48
49    # Reload manifest.json on all requests so we reload latest compiled packs
50    cache_manifest: false
51
52    extensions:
53      - .coffee
54      - .erb
55      - .js
56      - .jsx
57      - .ts
58      - .vue
59      - .sass
60      - .scss
61      - .css
62      - .png
63      - .svg
64      - .gif
65      - .jpeg
66      - .jpg

```

```

31 development:
32   <<: *default
33   compile: true
34
35   # Reference: https://webpack.js.org/configuration/dev-server/
36   dev_server:
37     https: false
38     host: localhost
39     port: 3035
40     public: localhost:3035
41     hmr: false
42     # Inline should be set to true if using HMR
43     inline: true
44     overlay: true
45     disable_host_check: true
46     use_local_ip: false
47
48 test:
49   <<: *default
50   compile: true
51
52   # Compile test packs to a separate directory
53   public_output_path: packs-test
54
55 production:
56   <<: *default
57
58   # Production depends on precompilation of packs prior to booting for performance.
59   compile: false
60
61   # Cache manifest.json for performance
62   cache_manifest: true
63
64   config/initializers/application_controller_renderer.rb
65
66 1 # frozen_string_literal: true
67 2 # Be sure to restart your server when you modify this file.
68 3
69 4 # ActiveSupport::Reloader.to_prepare do
70 5 #   ApplicationController.renderer.defaults.merge!(
71 6 #     http_host: 'example.org',
72 7 #     https: false
73 8 #   )
74 9 # end
75
76   config/initializers/backtrace_silencers.rb
77
78 1 # frozen_string_literal: true
79 2 # Be sure to restart your server when you modify this file.
80 3
81 4 # You can add backtrace silencers for libraries that you're using but don't wish to see in your backtraces.
82 5 # Rails.backtrace_cleaner.add_silencer { |line| line =~ /my_noisy_library/ }
83 6
84 7 # You can also remove all the silencers if you're trying to debug a problem that might stem from framework
85 8 # Rails.backtrace_cleaner.remove_silencers!
86
87   config/initializers/mime_types.rb
88
89 1 # frozen_string_literal: true
90 2 # Be sure to restart your server when you modify this file.
91 3
92 4 # Add new mime types for use in respond_to blocks:
93 5 # Mime::Type.register "text/richtext", :rtf

```

config/initializers/filter_parameter_logging.rb

```
1 # frozen_string_literal: true
2
3 # Be sure to restart your server when you modify this file.
4
5 # Configure sensitive parameters which will be filtered from the log file.
6 Rails.application.config.filter_parameters += [:password]
```

config/initializers/wrap_parameters.rb

```
1 # frozen_string_literal: true
2
3 # Be sure to restart your server when you modify this file.
4
5 # This file contains settings for ActionController::ParamsWrapper which
6 # is enabled by default.
7
8 # Enable parameter wrapping for JSON. You can disable this by setting :format to an empty array.
9 ActiveSupport.on_load(:action_controller) do
10   wrap_parameters format: [:json]
11 end
12
13 # To enable root element in JSON for ActiveRecord objects.
14 # ActiveSupport.on_load(:active_record) do
15 #   self.include_root_in_json = true
16 # end
```

config/initializers/assets.rb

```
1 # frozen_string_literal: true
2
3 # Be sure to restart your server when you modify this file.
4
5 # Version of your assets, change this if you want to expire all your assets.
6 Rails.application.config.assets.version = '1.0'
7
8 # Add additional assets to the asset load path.
9 # Rails.application.config.assets.paths << Emoji.images_path
10 # Add Yarn node_modules folder to the asset load path.
11 Rails.application.config.assets.paths << Rails.root.join('node_modules')
12
13 # Precompile additional assets.
14 # application.js, application.css, and all non-JS/CSS in the app/assets
15 # folder are already added.
16 # Rails.application.config.assets.precompile += %w( admin.js admin.css )
```

config/initializers/cookies_serializer.rb

```
1 # frozen_string_literal: true
2
3 # Be sure to restart your server when you modify this file.
4
5 # Specify a serializer for the signed and encrypted cookie jars.
6 # Valid options are :json, :marshal, and :hybrid.
7 Rails.application.config.action_dispatch.cookies_serializer = :json
```

config/initializers/devise.rb

```
1 # frozen_string_literal: true
2
3 # Use this hook to configure devise mailer, warden hooks and so forth.
4 # Many of these configuration options can be set straight in your model.
5 Devise.setup do |config|
6   # The secret key used by Devise. Devise uses this key to generate
7   # random tokens. Changing this key will render invalid all existing
8   # confirmation, reset password and unlock tokens in the database.
```

```

9 # Devise will use the `secret_key_base` as its `secret_key`
10 # by default. You can change it below and use your own secret key.
11 # config.secret_key =
12   ↳ '4a2bd81b8193665c9b2596cefd6140b2698b96390a60232309b542fd736c82d0595adaa2207d8a6ac6ad50baa3f70d46f7f4d3b0e22'
13
14 # ==> Mailer Configuration
15 # Configure the e-mail address which will be shown in Devise::Mailer,
16 # note that it will be overwritten if you use your own mailer class
17 # with default "from" parameter.
18 config.mailer_sender = 'please-change-me-at-config-initializers-devise@example.com'
19
20 # Configure the class responsible to send e-mails.
21 # config.mailer = 'Devise::Mailer'
22
23 # Configure the parent class responsible to send e-mails.
24 # config.parent_mailer = 'ActionMailer::Base'
25
26 # ==> ORM configuration
27 # Load and configure the ORM. Supports :active_record (default) and
28 # :mongoid (bson_ext recommended) by default. Other ORMs may be
29 # available as additional gems.
30 require 'devise/orm/active_record'
31
32 # ==> Configuration for any authentication mechanism
33 # Configure which keys are used when authenticating a user. The default is
34 # just :email. You can configure it to use [:username, :subdomain], so for
35 # authenticating a user, both parameters are required. Remember that those
36 # parameters are used only when authenticating and not when retrieving from
37 # session. If you need permissions, you should implement that in a before filter.
38 # You can also supply a hash where the value is a boolean determining whether
39 # or not authentication should be aborted when the value is not present.
40 # config.authentication_keys = [:email]
41
42 # Configure parameters from the request object used for authentication. Each entry
43 # given should be a request method and it will automatically be passed to the
44 # find_for_authentication method and considered in your model lookup. For instance,
45 # if you set :request_keys to [:subdomain], :subdomain will be used on authentication.
46 # The same considerations mentioned for authentication_keys also apply to request_keys.
47 # config.request_keys = []
48
49 # Configure which authentication keys should be case-insensitive.
50 # These keys will be downcased upon creating or modifying a user and when used
51 # to authenticate or find a user. Default is :email.
52 config.case_insensitive_keys = [:email]
53
54 # Configure which authentication keys should have whitespace stripped.
55 # These keys will have whitespace before and after removed upon creating or
56 # modifying a user and when used to authenticate or find a user. Default is :email.
57 config.strip_whitespace_keys = [:email]
58
59 # Tell if authentication through request.params is enabled. True by default.
60 # It can be set to an array that will enable params authentication only for the
61 # given strategies, for example, `config.params_authenticatable = [:database]` will
62 # enable it only for database (email + password) authentication.
63 # config.params_authenticatable = true
64
65 # Tell if authentication through HTTP Auth is enabled. False by default.
66 # It can be set to an array that will enable http authentication only for the
67 # given strategies, for example, `config.http_authenticatable = [:database]` will
68 # enable it only for database authentication. The supported strategies are:
69 # :database = Support basic authentication with authentication key + password
70 # config.http_authenticatable = false

```

```

71 # If 401 status code should be returned for AJAX requests. True by default.
72 # config.http_authenticatable_on_xhr = true
73
74 # The realm used in Http Basic Authentication. 'Application' by default.
75 # config.http_authentication_realm = 'Application'
76
77 # It will change confirmation, password recovery and other workflows
78 # to behave the same regardless if the e-mail provided was right or wrong.
79 # Does not affect registerable.
80 # config.paranoid = true
81
82 # By default Devise will store the user in session. You can skip storage for
83 # particular strategies by setting this option.
84 # Notice that if you are skipping storage for all authentication paths, you
85 # may want to disable generating routes to Devise's sessions controller by
86 # passing skip: :sessions to `devise_for` in your config/routes.rb
87 config.skip_session_storage = [:http_auth]
88
89 # By default, Devise cleans up the CSRF token on authentication to
90 # avoid CSRF token fixation attacks. This means that, when using AJAX
91 # requests for sign in and sign up, you need to get a new CSRF token
92 # from the server. You can disable this option at your own risk.
93 # config.clean_up_csrf_token_on_authentication = true
94
95 # When false, Devise will not attempt to reload routes on eager load.
96 # This can reduce the time taken to boot the app but if your application
97 # requires the Devise mappings to be loaded during boot time the application
98 # won't boot properly.
99 # config.reload_routes = true
100
101 # ==> Configuration for :database_authenticatable
102 # For bcrypt, this is the cost for hashing the password and defaults to 11. If
103 # using other algorithms, it sets how many times you want the password to be hashed.
104 #
105 # Limiting the stretches to just one in testing will increase the performance of
106 # your test suite dramatically. However, it is STRONGLY RECOMMENDED to not use
107 # a value less than 10 in other environments. Note that, for bcrypt (the default
108 # algorithm), the cost increases exponentially with the number of stretches (e.g.
109 # a value of 20 is already extremely slow: approx. 60 seconds for 1 calculation).
110 Rails.env.test? ? config.stretches = 1 : config.stretches = 11
111
112 # Set up a pepper to generate the hashed password.
113 # config.pepper =
114 ↪ '7f45998a496d8602b3e7d575f3838cb89205da9b7d7dbf4b6379e5191edb20f3f36d6d5b2e1b3deb502e51ba02972fe3de8add9882
115
116 # Send a notification to the original email when the user's email is changed.
117 # config.send_email_changed_notification = false
118
119 # Send a notification email when the user's password is changed.
120 # config.send_password_change_notification = false
121
122 # ==> Configuration for :confirmable
123 # A period that the user is allowed to access the website even without
124 # confirming their account. For instance, if set to 2.days, the user will be
125 # able to access the website for two days without confirming their account,
126 # access will be blocked just in the third day. Default is 0.days, meaning
127 # the user cannot access the website without confirming their account.
128 # config.allow_unconfirmed_access_for = 2.days
129
130 # A period that the user is allowed to confirm their account before their
131 # token becomes invalid. For example, if set to 3.days, the user can confirm
132 # their account within 3 days after the mail was sent, but on the fourth day
133 # their account can't be confirmed with the token any more.

```

```

33 # Default is nil, meaning there is no restriction on how long a user can take
34 # before confirming their account.
35 # config.confirm_within = 3.days
36
37 # If true, requires any email changes to be confirmed (exactly the same way as
38 # initial account confirmation) to be applied. Requires additional unconfirmed_email
39 # db field (see migrations). Until confirmed, new email is stored in
40 # unconfirmed_email column, and copied to email column on successful confirmation.
41 config.reconfirmable = true
42
43 # Defines which key will be used when confirming an account
44 # config.confirmation_keys = [:email]
45
46 # ==> Configuration for :rememberable
47 # The time the user will be remembered without asking for credentials again.
48 # config.remember_for = 2.weeks
49
50 # Invalidates all the remember me tokens when the user signs out.
51 config.expire_all_remember_me_on_sign_out = true
52
53 # If true, extends the user's remember period when remembered via cookie.
54 # config.extend_remember_period = false
55
56 # Options to be passed to the created cookie. For instance, you can set
57 # secure: true in order to force SSL only cookies.
58 # config.rememberable_options = {}
59
60 # ==> Configuration for :validatable
61 # Range for password length.
62 config.password_length = 6..128
63
64 # Email regex used to validate email formats. It simply asserts that
65 # one (and only one) @ exists in the given string. This is mainly
66 # to give user feedback and not to assert the e-mail validity.
67 config.email_regexp = /\A[^@\s]+@[^@\s]+\z/
68
69 # ==> Configuration for :timeoutable
70 # The time you want to timeout the user session without activity. After this
71 # time the user will be asked for credentials again. Default is 30 minutes.
72 # config.timeout_in = 30.minutes
73
74 # ==> Configuration for :lockable
75 # Defines which strategy will be used to lock an account.
76 # :failed_attempts = Locks an account after a number of failed attempts to sign in.
77 # :none = No lock strategy. You should handle locking by yourself.
78 # config.lock_strategy = :failed_attempts
79
80 # Defines which key will be used when locking and unlocking an account
81 # config.unlock_keys = [:email]
82
83 # Defines which strategy will be used to unlock an account.
84 # :email = Sends an unlock link to the user email
85 # :time = Re-enables login after a certain amount of time (see :unlock_in below)
86 # :both = Enables both strategies
87 # :none = No unlock strategy. You should handle unlocking by yourself.
88 # config.unlock_strategy = :both
89
90 # Number of authentication tries before locking an account if lock_strategy
91 # is failed attempts.
92 # config.maximum_attempts = 20
93
94 # Time interval to unlock the account if :time is enabled as unlock_strategy.
95 # config.unlock_in = 1.hour

```

```

96 # Warn on the last attempt before the account is locked.
97 # config.last_attempt_warning = true
98
99
100 # ==> Configuration for :recoverable
101 #
102 # Defines which key will be used when recovering the password for an account
103 # config.reset_password_keys = [:email]
104
105 # Time interval you can reset your password with a reset password key.
106 # Don't put a too small interval or your users won't have the time to
107 # change their passwords.
108 config.reset_password_within = 6.hours
109
110 # When set to false, does not sign a user in automatically after their password is
111 # reset. Defaults to true, so a user is signed in automatically after a reset.
112 # config.sign_in_after_reset_password = true
113
114 # ==> Configuration for :encryptable
115 # Allow you to use another hashing or encryption algorithm besides bcrypt (default).
116 # You can use :sha1, :sha512 or algorithms from others authentication tools as
117 # :clearance_sha1, :authlogic_sha512 (then you should set stretches above to 20
118 # for default behavior) and :restful_authentication_sha1 (then you should set
119 # stretches to 10, and copy REST_AUTH_SITE_KEY to pepper).
120 #
121 # Require the `devise-encryptable` gem when using anything other than bcrypt
122 # config.encryptor = :sha512
123
124 # ==> Scopes configuration
125 # Turn scoped views on. Before rendering "sessions/new", it will first check for
126 # "users/sessions/new". It's turned off by default because it's slower if you
127 # are using only default views.
128 # config.scoped_views = false
129
130 # Configure the default scope given to Warden. By default it's the first
131 # devise role declared in your routes (usually :user).
132 # config.default_scope = :user
133
134 # Set this configuration to false if you want /users/sign_out to sign out
135 # only the current scope. By default, Devise signs out all scopes.
136 # config.sign_out_all_scopes = true
137
138 # ==> Navigation configuration
139 # Lists the formats that should be treated as navigational. Formats like
140 # :html, should redirect to the sign in page when the user does not have
141 # access, but formats like :xml or :json, should return 401.
142 #
143 # If you have any extra navigational formats, like :iphone or :mobile, you
144 # should add them to the navigational formats lists.
145 #
146 # The "/*/*" below is required to match Internet Explorer requests.
147 # config.navigational_formats = ['*/*', :html]
148
149 # The default HTTP method used to sign out a resource. Default is :delete.
150 config.sign_out_via = :delete
151
152 # ==> OmniAuth
153 # Add a new OmniAuth provider. Check the wiki for more information on setting
154 # up on your models and hooks.
155 # config.omniauth :github, 'APP_ID', 'APP_SECRET', scope: 'user,public_repo'
156
157 # ==> Warden configuration
158 # If you want to use other strategies, that are not supported by Devise, or

```



```

59 # change the failure app, you can configure them inside the config.warden block.
60 #
61 # config.warden do |manager|
62 #   manager.intercept_401 = false
63 #   manager.default_strategies(scope: :user).unshift :some_external_strategy
64 # end
65
66 # ==> Mountable engine configurations
67 # When using Devise inside an engine, let's call it `MyEngine`, and this engine
68 # is mountable, there are some extra configurations to be taken into account.
69 # The following options are available, assuming the engine is mounted as:
70 #
71 #   mount MyEngine, at: '/my_engine'
72 #
73 # The router that invoked `devise_for`, in the example above, would be:
74 # config.router_name = :my_engine
75 #
76 # When using OmniAuth, Devise cannot automatically set OmniAuth path,
77 # so you need to do it manually. For the users scope, it would be:
78 # config.omniauth_path_prefix = '/my_engine/users/auth'
79 end

```

```

config/initializers/assessor.rb

```

```

1 # frozen_string_literal: true
2
3 class SharedAssessor
4   class_attribute :database_host
5   class_attribute :database_port
6   class_attribute :database_username
7   class_attribute :database_password
8
9   def self.assessor
10     SqlAssess::Assessor.new(
11       database_host: database_host,
12       database_port: database_port,
13       database_username: database_username,
14       database_password: database_password
15     )
16   end
17 end
18
19 SharedAssessor.database_host = '127.0.0.1'
20 SharedAssessor.database_port = '3306'
21 SharedAssessor.database_username = 'root'
22 SharedAssessor.database_password = ''

```

```

config/initializers/inflections.rb

```

```

1 # frozen_string_literal: true
2 # Be sure to restart your server when you modify this file.
3
4 # Add new inflection rules using the following format. Inflections
5 # are locale specific, and you may define rules for as many different
6 # locales as you wish. All of these examples are active by default:
7 # ActiveSupport::Inflector.inflections(:en) do |inflect|
8 #   inflect.plural /^(ox)$/i, '\1en'
9 #   inflect.singular /^(ox)en/i, '\1'
10 #   inflect.irregular 'person', 'people'
11 #   inflect.uncountable %w( fish sheep )
12 # end
13
14 # These inflection rules are supported but not enabled by default:
15 # ActiveSupport::Inflector.inflections(:en) do |inflect|
16 #   inflect.acronym 'RESTful'
17 # end

```



```

spec/spec_helper.rb
1 require 'simplecov'
2 SimpleCov.start 'rails' do
3   add_filter %r{^.*application_.*}
4 end
5
6 # This file was generated by the `rails generate rspec:install` command. Conventionally, all
7 # specs live under a `spec` directory, which RSpec adds to the `LOAD_PATH`.
8 # The generated `rspec` file contains `--require spec_helper` which will cause
9 # this file to always be loaded, without a need to explicitly require it in any
10 # files.
11 #
12 # Given that it is always loaded, you are encouraged to keep this file as
13 # light-weight as possible. Requiring heavyweight dependencies from this file
14 # will add to the boot time of your test suite on EVERY test run, even for an
15 # individual file that may not need all of that loaded. Instead, consider making
16 # a separate helper file that requires the additional dependencies and performs
17 # the additional setup, and require it from the spec files that actually need
18 # it.
19 #
20 # See http://rubydoc.info/gems/rspec-core/RSpec/Core/Configuration
21 RSpec.configure do |config|
22   # rspec-expectations config goes here. You can use an alternate
23   # assertion/expectation library such as wrong or the stdlib/minitest
24   # assertions if you prefer.
25   config.expect_with :rspec do |expectations|
26     # This option will default to `true` in RSpec 4. It makes the `description`
27     # and `failure_message` of custom matchers include text for helper methods
28     # defined using `chain`, e.g.:
29     #   be_bigger_than(2).and_smaller_than(4).description
30     #   # => "be bigger than 2 and smaller than 4"
31     # ...rather than:
32     #   # => "be bigger than 2"
33     expectations.include_chain_clauses_in_custom_matcher_descriptions = true
34   end
35
36   # rspec-mocks config goes here. You can use an alternate test double
37   # library (such as bogus or mocha) by changing the `mock_with` option here.
38   config.mock_with :rspec do |mocks|
39     # Prevents you from mocking or stubbing a method that does not exist on
40     # a real object. This is generally recommended, and will default to
41     # `true` in RSpec 4.
42     mocks.verify_partial_doubles = true
43   end
44
45   # This option will default to `:apply_to_host_groups` in RSpec 4 (and will
46   # have no way to turn it off -- the option exists only for backwards
47   # compatibility in RSpec 3). It causes shared context metadata to be
48   # inherited by the metadata hash of host groups and examples, rather than
49   # triggering implicit auto-inclusion in groups with matching metadata.
50   config.shared_context_metadata_behavior = :apply_to_host_groups
51
52   # The settings below are suggested to provide a good initial experience
53   # with RSpec, but feel free to customize to your heart's content.
54   =begin
55     # This allows you to limit a spec run to individual examples or groups
56     # you care about by tagging them with `:focus` metadata. When nothing
57     # is tagged with `:focus`, all examples get run. RSpec also provides
58     # aliases for `it`, `describe`, and `context` that include `:focus`
59     # metadata: `fit`, `fdescribe` and `fcontext`, respectively.
60     config.filter_run_when_matching :focus
61
62     # Allows RSpec to persist some state between runs in order to support

```

```

63 # the `--only-failures` and `--next-failure` CLI options. We recommend
64 # you configure your source control system to ignore this file.
65 config.example_status_persistence_file_path = "spec/examples.txt"
66
67 # Limits the available syntax to the non-monkey patched syntax that is
68 # recommended. For more details, see:
69 # - http://rspec.info/blog/2012/06/rspecs-new-expectation-syntax/
70 # - http://www.teaisaweso.me/blog/2013/05/27/rspecs-new-message-expectation-syntax/
71 # - http://rspec.info/blog/2014/05/notable-changes-in-rspec-3/#zero-monkey-patching-mode
72 config.disable_monkey_patching!
73
74 # Many RSpec users commonly either run the entire suite or an individual
75 # file, and it's useful to allow more verbose output when running an
76 # individual spec file.
77 if config.files_to_run.one?
78   # Use the documentation formatter for detailed output,
79   # unless a formatter has already been configured
80   # (e.g. via a command-line flag).
81   config.default_formatter = "doc"
82 end
83
84 # Print the 10 slowest examples and example groups at the
85 # end of the spec run, to help surface which specs are running
86 # particularly slow.
87 config.profile_examples = 10
88
89 # Run specs in random order to surface order dependencies. If you find an
90 # order dependency and want to debug it, you can fix the order by providing
91 # the seed, which is printed after each run.
92 # --seed 1234
93 config.order = :random
94
95 # Seed global randomization in this process using the `--seed` CLI option.
96 # Setting this allows you to use `--seed` to deterministically reproduce
97 # test failures related to randomization by passing the same `--seed` value
98 # as the one that triggered the failure.
99 Kernel.srand config.seed
100 =end
101 end

```

spec/features/hint_spec.rb

```

1 require "rails_helper"
2
3 RSpec.feature "Requirement 10: hints", :type => :feature do
4   let!(:challenge) { create(:challenge) }
5   before do
6     login_as(create(:user, role: "student"), :scope => :user)
7   end
8
9   context "with no compilation errors" do
10     context "but wrong query" do
11       scenario "it shows hints" do
12         visit "challenges/#{challenge.id}/submissions/new"
13
14         fill_in "Sql query", with: "SELECT 20 from t1;"
15
16         click_button "Submit"
17
18         expect(page.current_path).to eq("/challenges/#{challenge.id}/submissions/#{Submission.last.id}")
19         expect(page).to have_text("Successfully submitted!")
20         expect(page).to have_text("Check what columns you are selecting.")
21       end
22     end
23   end

```

```

23 end
24 end

spec/features/authentication_spec.rb

1 require "rails_helper"
2
3 RSpec.feature "Requirement R2: Authentication", :type => :feature do
4   let!(:user) { create(:user, email: "test@gmail.com", password: "test123") }
5
6   context "signin" do
7     context "with right details" do
8       it "signs in" do
9         visit "/users/sign_in"
10
11         fill_in "Email", with: "test@gmail.com"
12         fill_in "Password", with: "test123"
13
14         click_button "Log in"
15
16         expect(page).to have_text("Signed in successfully.")
17         expect(page).to have_text("test@gmail.com")
18       end
19     end
20
21     context "with wrong details" do
22       it "shos an error" do
23         visit "/users/sign_in"
24
25         fill_in "Email", with: "test@gmail.com"
26         fill_in "Password", with: "wrongpswd"
27
28         click_button "Log in"
29
30         expect(page).to have_selector('.alert.alert-warning > .container', exact_text: "Invalid Email or
        ↳ password.")
31       end
32     end
33   end
34
35   context "sign out" do
36     before do
37       login_as(user, :scope => :user)
38     end
39
40     it "logs out" do
41       visit "/"
42       expect(page).to have_text("test@gmail.com")
43       click_link "Sign out", visible: false
44       expect(page).to_not have_text("test@gmail.com")
45       expect(page.current_path).to eq("/users/sign_in")
46     end
47   end
48
49   context "edit account" do
50     before do
51       login_as(user, :scope => :user)
52     end
53
54     it 'should update the user' do
55       visit('/users/edit')
56
57       expect(page).to have_text("test@gmail.com")
58

```

```

59 fill_in('user[email]', :with => 'test@example.com')
60 fill_in('user[current_password]', :with => 'test123')
61
62 click_button('Update')
63
64 expect(page).to_not have_text("test@gmail.com")
65 expect(page).to have_text("test@example.com")
66 expect(page).to have_selector('.alert.alert-secondary > .container', exact_text: "Your account has been
  ↳ updated successfully.")
67 end
68 end
69 end

spec/features/authorization_spec.rb

1 require "rails_helper"
2
3 RSpec.feature "Requirement R3: Permissions", :type => :feature do
4   let!(:user) { create(:user, email: "test@gmail.com", password: "test123") }
5
6   context "as an admin" do
7     before do
8       login_as(create(:user, role: "admin"), :scope => :user)
9     end
10
11     scenario "I can create challenges" do
12       visit "/challenges/new"
13       expect(page.status_code).to eq(200)
14       expect(page.body).to include("New Challenge")
15     end
16   end
17
18   context "as a student" do
19     before do
20       login_as(create(:user, role: "student"), :scope => :user)
21     end
22
23     scenario "I can't create challenges" do
24       visit "/challenges/new"
25       expect(page.status_code).to eq(401)
26       expect(page.body).to eq("Not Authorized")
27     end
28   end
29 end

spec/features/submissions_results_spec.rb

1 require "rails_helper"
2
3 RSpec.feature "Requirement 12: Submissions results", :type => :feature do
4   let(:challenge) { create(:challenge) }
5   let(:user1) { create(:user) }
6   let(:user2) { create(:user) }
7   let(:user3) { create(:user) }
8
9   before do
10     create(:submission, user: user1, challenge: challenge).tap do |sub|
11       sub.update_attribute(:grade, 55)
12     end
13
14     create(:submission, user: user1, challenge: challenge).tap do |sub|
15       sub.update_attribute(:grade, 60)
16     end
17
18     create(:submission, user: user1, challenge: challenge).tap do |sub|

```

```

19   sub.update_attribute(:grade, 48)
20 end
21
22 create(:submission, user: user2, challenge: challenge).tap do |sub|
23   sub.update_attribute(:grade, 48)
24 end
25
26 create(:submission, user: user2, challenge: challenge).tap do |sub|
27   sub.update_attribute(:grade, 44)
28 end
29
30 login_as(create(:user, role: "admin"), :scope => :user)
31 end
32
33 context "tabular view" do
34   it 'should show the results' do
35     visit("/challenges/#{challenge.id}")
36     click_link('View Submissions')
37
38     expect(page).to have_selector(
39       'html > body > .container > .table > tbody > tr:nth-child(1)',
40       exact_text: "#{user1.email} 55.0 View submission"
41     )
42
43     expect(page).to have_selector(
44       'html > body > .container > .table > tbody > tr:nth-child(2)',
45       exact_text: "#{user1.email} 60.0 View submission"
46     )
47
48     expect(page).to have_selector(
49       'html > body > .container > .table > tbody > tr:nth-child(3)',
50       exact_text: "#{user1.email} 48.0 View submission"
51     )
52
53     expect(page).to have_selector(
54       'html > body > .container > .table > tbody > tr:nth-child(4)',
55       exact_text: "#{user2.email} 48.0 View submission"
56     )
57
58     expect(page).to have_selector(
59       'html > body > .container > .table > tbody > tr:nth-child(5)',
60       exact_text: "#{user2.email} 44.0 View submission"
61     )
62   end
63 end
64
65 context "downloading csv" do
66   it "downloads the correct csv" do
67     visit("/challenges/#{challenge.id}")
68     click_link('View Submissions')
69     click_link('Download CSV')
70     expect(page.response_headers["Content-Disposition"])
71       .to eq("attachment; filename=\"grades_for_#{challenge.title}.csv\"")
72
73     expect(CSV.parse(page.source)).to eq([
74       ["email", "grade"],
75       [user1.email, "60.0"],
76       [user2.email, "48.0"]
77     ])
78   end
79 end
80 end

```

spec/features/create_a_challenge_spec.rb

```

1 require "rails_helper"
2
3 RSpec.feature "Requirement 4 and 5: Challenge creation", :type => :feature do
4   before do
5     login_as(create(:user, role: "admin"), :scope => :user)
6   end
7
8   context "Requirements 4: with no errors" do
9     it "creates the challenge" do
10       visit "/challenges/new"
11
12       fill_in "Title", with: "Challenge 1"
13       fill_in "Content", with: "Challenge 1 content"
14       fill_in "Sql schema", with: "CREATE TABLE t1(id integer);"
15       fill_in "Sql seed", with: "INSERT INTO t1(id) VALUES (1), (2);"
16       fill_in "Sql correct query", with: "SELECT * FROM t1"
17
18       click_button "Create"
19
20       expect(page.current_path).to eq("/challenges/#{Challenge.last.id}")
21       expect(page).to have_text("Successfully created")
22
23       expect(page).to have_text("CREATE TABLE t1(id integer);")
24       expect(page).to have_text("INSERT INTO t1(id) VALUES (1), (2);")
25       expect(page).to have_text("SELECT * FROM t1")
26     end
27   end
28
29   context "Requirement 5: with errors" do
30     it "creates the challenge" do
31       visit "/challenges/new"
32
33       fill_in "Title", with: "Challenge 1"
34       fill_in "Content", with: "Challenge 1 content"
35       fill_in "Sql schema", with: "CREATE TABLE t1(id integer);"
36       fill_in "Sql seed", with: "INSERT INTO t1(id) VALUES (1), (2);"
37       fill_in "Sql correct query", with: "SELECT * FROM t2"
38
39       click_button "Create"
40
41       expect(page.current_path).to eq("/challenges")
42       expect(page).to have_text(".t2' doesn't exist")
43     end
44   end
45 end

```

spec/features/submission_spec.rb

```

1 require "rails_helper"
2
3 RSpec.feature "Requirement 8: Submitting solutions", :type => :feature do
4   let!(:challenge) { create(:challenge) }
5   before do
6     login_as(create(:user, role: "student"), :scope => :user)
7   end
8
9   context "with compilation errors" do
10     scenario "it displays the errors" do
11       visit "challenges/#{challenge.id}/submissions/new"
12
13       fill_in "Sql query", with: "SELECT * from abc;"
14
15       click_button "Submit"
16

```

```

17     expect(page.current_path).to eq("/challenges/#{challenge.id}/submissions")
18     expect(page).to have_text(".abc' doesn't exist")
19   end
20 end
21
22 context "with no compilation errors" do
23   scenario "it creates the submission" do
24     visit "challenges/#{challenge.id}/submissions/new"
25
26     fill_in "Sql query",      with: "SELECT * from t1"
27
28     click_button "Submit"
29
30     expect(page.current_path).to eq("/challenges/#{challenge.id}/submissions/#{Submission.last.id}")
31     expect(page).to have_text("Successfully submitted!")
32     expect(page).to have_text("Your solutions is correct")
33   end
34 end
35 end
36
37 spec/features/edit_a_challenge_spec.rb
38
39 1 require "rails_helper"
40
41 2
42 3 RSpec.feature "Requirement 6: Challenge edit", :type => :feature do
43   4 let!(:challenge) { create(:challenge) }
44   5 before do
45     6 login_as(create(:user, role: "admin"), :scope => :user)
46   7 end
47
48   8
49   9 scenario "it updates the challenge" do
50     10 visit "/challenges/#{challenge.id}"
51
52     11
53     12 click_link "Edit"
54
55     13
56     14 fill_in "Title",      with: "Updated title"
57
58     15
59     16 click_button "Update"
60
61     17
62     18 expect(page).to have_selector('.alert.alert-success > .container', exact_text: "Successfully Updated")
63     19 expect(page).to have_text("Updated title")
64   20 end
65 21 end
66
67 spec/features/view_schema_spec.rb
68
69 1 require "rails_helper"
70
71 2
72 3 RSpec.feature "Requirement 9: Schema view", :type => :feature do
73   4 let!(:challenge) { create(:challenge) }
74   5 before do
75     6 login_as(create(:user, role: "student"), :scope => :user)
76   7 end
77
78   8
79   9 scenario "show the sql schema" do
80     10 visit "/challenges/#{challenge.id}/submissions/new"
81
82     11
83     12 expect(page).to have_text(challenge.sql_schema)
84   13 end
85
86   14
87   15 scenario "show the schema as table" do
88     16 visit "/challenges/#{challenge.id}/submissions/new"
89
90     17
91     18 expect(page).to have_selector('html > body > .container > h3', exact_text: "t1")

```

```

19     expect(page).to have_selector('html > body > .container > .table.table-bordered > thead > tr > th',
    ↪     exact_text: "id int(11)")
20   end
21 end

spec/features/destroy_a_challenge_spec.rb

1 require "rails_helper"
2
3 RSpec.feature "Requirement 7: Challenge destroy", :type => :feature do
4   let!(:challenge) { create(:challenge) }
5
6   before do
7     login_as(create(:user, role: "admin"), :scope => :user)
8   end
9
10  scenario "it updates the challenge" do
11    visit "/challenges/#{challenge.id}"
12
13    click_button "Destroy"
14
15    expect(page).to have_selector('.alert.alert-success > .container', exact_text: "Sucesfully destroyed")
16    expect(page).to_not have_text(challenge.title)
17  end
18 end

spec/models/submission_spec.rb

1 require "rails_helper"
2
3 describe Challenge do
4   subject { build(:submission) }
5   it { should belong_to(:challenge) }
6   it { should belong_to(:user) }
7   it { should validate_presence_of(:sql_query) }
8
9   context "#compile_sql" do
10     context "with no errors" do
11       it "saves metadata" do
12         expect(subject).to be_valid
13         expect(subject.success).to eq(true)
14         expect(subject.grade).to eq(100)
15         expect(subject.message).to be_a(String)
16         expect(subject.metadata).to match({
17           "instructor" => an_instance_of(Hash),
18           "student" => an_instance_of(Hash)
19         })
20         expect(subject.attribute_grades).to be_a(Hash)
21       end
22     end
23
24     context "with errors in the query sql" do
25       before do
26         subject.sql_query = "SELECT a from t1"
27       end
28
29       it "adds an appropriate error" do
30         expect(subject).to_not be_valid
31         expect(subject.errors.count).to eq(1)
32         expect(subject.errors[:sql_query].count).to eq(1)
33         expect(subject.errors[:sql_query]).to eq([
34           "Unknown column 'a' in 'field list'"
35         ])
36       end
37     end

```



```

38 context "with parsing errors in the query sql" do
39   before do
40     subject.sql_query = "SELECT ROUND(id, 2) from t1"
41   end
42
43   it "adds an appropriate error" do
44     expect(subject).to_not be_valid
45     expect(subject.errors.count).to eq(1)
46     expect(subject.errors[:sql_query].count).to eq(1)
47     expect(subject.errors[:sql_query]).to eq([
48       "Cannot canonicalize query"
49     ])
50   end
51 end
52 end
53 end
54 end

```

spec/models/challenge_spec.rb

```

1 require "rails_helper"
2
3 describe Challenge do
4   subject { build(:challenge) }
5   it { should have_many(:submissions) }
6   it { should belong_to(:user) }
7   it { should validate_presence_of(:content) }
8   it { should validate_presence_of(:title) }
9   it { should validate_presence_of(:sql_schema) }
10  it { should validate_presence_of(:sql_correct_query) }
11  it { should validate_presence_of(:sql_seed) }
12
13  context "#best_submissions" do
14    subject { create(:challenge) }
15    let(:user1) { create(:user) }
16    let(:user2) { create(:user) }
17    let(:user3) { create(:user) }
18
19    before do
20      create(:submission, user: user1, challenge: subject).tap do |sub|
21        sub.update_attribute(:grade, 55)
22      end
23
24      create(:submission, user: user1, challenge: subject).tap do |sub|
25        sub.update_attribute(:grade, 60)
26      end
27
28      create(:submission, user: user1, challenge: subject).tap do |sub|
29        sub.update_attribute(:grade, 48)
30      end
31
32      create(:submission, user: user2, challenge: subject).tap do |sub|
33        sub.update_attribute(:grade, 48)
34      end
35
36      create(:submission, user: user2, challenge: subject).tap do |sub|
37        sub.update_attribute(:grade, 44)
38      end
39    end
40
41    it "returns the correct results" do
42      result = subject.best_submissions.map do |sub|
43        [sub.user_id, sub.max_grade]
44      end.to_h

```

```

45     expect(result).to eq({
46       user1.id => 60,
47       user2.id => 48,
48     })
49   end
50 end
51
52
53 context "#compile_sql" do
54   context "with no errors" do
55     it "saves metadata" do
56       expect(subject).to be_valid
57       expect(subject.metadata).to eq([
58         {
59           "name" => "t1",
60           "columns" => [{ "name" => "id", "type" => "int(11)" }],
61           "data"=>[{ "id" => 1 }],
62         }
63       ])
64     end
65   end
66
67   context "with errors in the schema sql" do
68     before do
69       subject.sql_schema = "CREATE TABLE t1(id sda)"
70     end
71
72     it "adds an appropriate error" do
73       expect(subject).to_not be_valid
74       expect(subject.errors.count).to eq(1)
75       expect(subject.errors[:sql_schema].count).to eq(1)
76       expect(subject.errors[:sql_schema]).to eq([
77         "You have an error in your SQL syntax; check the manual that corresponds to your MySQL server
78         ↪ version for the right syntax to use near 'sda)' at line 1"
79       ])
80     end
81
82     context "with errors in the seed sql" do
83       before do
84         subject.sql_seed = "INSERT INTO t1(id sda) VALUES(1)"
85       end
86
87       it "adds an appropriate error" do
88         expect(subject).to_not be_valid
89         expect(subject.errors.count).to eq(1)
90         expect(subject.errors[:sql_seed].count).to eq(1)
91         expect(subject.errors[:sql_seed]).to eq([
92           "You have an error in your SQL syntax; check the manual that corresponds to your MySQL server
93           ↪ version for the right syntax to use near 'sda) VALUES(1)' at line 1"
94         ])
95       end
96
97       context "with errors in the instructor sql" do
98         before do
99           subject.sql_correct_query = "SELECT a from t1"
100         end
101
102         it "adds an appropriate error" do
103           expect(subject).to_not be_valid
104           expect(subject.errors.count).to eq(1)
105           expect(subject.errors[:sql_correct_query].count).to eq(1)

```

```

06     expect(subject.errors[:sql_correct_query]).to eq([
07       "Unknown column 'a' in 'field list'"
08     ])
09   end
10 end
11
12 context "with parsing errors in the query sql" do
13   before do
14     subject.sql_correct_query = "SELECT ROUND(id, 2) from t1"
15   end
16
17   it "adds an appropriate error" do
18     expect(subject).to_not be_valid
19     expect(subject.errors.count).to eq(1)
20     expect(subject.errors[:sql_correct_query].count).to eq(1)
21     expect(subject.errors[:sql_correct_query]).to eq([
22       "Cannot canonicalize query"
23     ])
24   end
25 end
26 end
27 end

```

spec/models/user_spec.rb

```

1 require "rails_helper"
2
3 describe User do
4   subject { build(:user) }
5
6   it { should validate_inclusion_of(:role).in_array(%w[admin student]) }
7
8   context "#admin?" do
9     before do
10       subject.role = role
11     end
12
13     context 'as an admin' do
14       let(:role) { 'admin' }
15
16       it "returns true" do
17         expect(subject.admin?).to eq(true)
18       end
19     end
20
21     context 'as an student' do
22       let(:role) { 'student' }
23
24       it "returns true" do
25         expect(subject.admin?).to eq(false)
26       end
27     end
28   end
29 end

```

spec/requests/submissions_spec.rb

```

1 require 'rails_helper'
2
3 RSpec.describe 'challenges controller', type: :request do
4   let!(:challenge) { create(:challenge, title: "Challenge for spec") }
5
6   context "#index" do
7     context 'when logged out' do
8       it "redirects to login page" do

```

```

9     get "/challenges/#{challenge.id}/submissions"
10     expect(response).to redirect_to "/users/sign_in"
11 end
12 end
13
14 context "when logged in" do
15   context "as an admin" do
16     before do
17       login_as(create(:user, role: "admin"), :scope => :user)
18     end
19
20     context "for a challenge that doesn't exist" do
21       it "returns 404" do
22         get '/challenges/asadad/submissions'
23         expect(response.status).to eq(404)
24       end
25     end
26
27     context "for a challenge that exists" do
28       it "returns 200" do
29         get "/challenges/#{challenge.id}/submissions"
30         expect(response.status).to eq(200)
31         expect(response.body).to include(challenge.title)
32       end
33     end
34   end
35
36   context "as a student" do
37     before do
38       login_as(create(:user, role: "student"), :scope => :user)
39     end
40
41     it "returns 401" do
42       get "/challenges/#{challenge.id}/submissions"
43       expect(response.status).to eq(401)
44     end
45   end
46 end
47
48 context '#show' do
49   let!(:submission) { create(:submission, challenge: challenge, user: create(:user)) }
50
51   context 'when logged out' do
52     it "redirects to login page" do
53       get "/challenges/#{challenge.id}/submissions/#{submission.id}"
54       expect(response).to redirect_to "/users/sign_in"
55     end
56   end
57
58   context "when logged in" do
59     before do
60       login_as(create(:user, role: "admin"), :scope => :user)
61     end
62
63     context "requesting a submissions that doesn't exist" do
64       it 'returns a 404' do
65         get "/challenges/#{challenge.id}/submissions/sda"
66
67         expect(response.status).to eq(404)
68       end
69     end
70   end
71

```

```

72 context "as an admin" do
73   it "returns 200" do
74     get "/challenges/#{challenge.id}/submissions/#{submission.id}"
75     expect(response.status).to eq(200)
76   end
77 end
78
79 context "as a student" do
80   let(:user) { create(:user, role: "student") }
81   let(:submission2) { create(:submission, challenge: challenge, user: user)}
82   before do
83     login_as(user, :scope => :user)
84   end
85
86   context "someone's elses submission" do
87     it "returns 401" do
88       get "/challenges/#{challenge.id}/submissions/#{submission.id}"
89       expect(response.status).to eq(401)
90     end
91   end
92
93   context "students's submission" do
94     it "returns 200" do
95       get "/challenges/#{challenge.id}/submissions/#{submission2.id}"
96       expect(response.status).to eq(200)
97     end
98   end
99 end
100 end
101 end
102
103 context '#report' do
104   let!(:submission) { create(:submission, challenge: challenge, user: create(:user)) }
105
106   context 'when logged out' do
107     it "redirects to login page" do
108       get "/challenges/#{challenge.id}/submissions/#{submission.id}/report"
109       expect(response).to redirect_to "/users/sign_in"
110     end
111   end
112
113   context "when logged in" do
114     before do
115       login_as(create(:user, role: "admin"), :scope => :user)
116     end
117
118     context "requesting a submissions that doesn't exit" do
119       it 'returns a 404' do
120         get "/challenges/#{challenge.id}/submissions/sda/report"
121
122         expect(response.status).to eq(404)
123       end
124     end
125
126     context "as an admin" do
127       it "returns 200" do
128         get "/challenges/#{challenge.id}/submissions/#{submission.id}/report"
129         expect(response.status).to eq(200)
130       end
131     end
132
133     context "as a student" do
134       let(:user) { create(:user, role: "student") }

```

```

35 let(:submission2) { create(:submission, challenge: challenge, user: user)}
36 before do
37   login_as(user, :scope => :user)
38 end
39
40 context "someone's else's submission" do
41   it "returns 401" do
42     get "/challenges/#{challenge.id}/submissions/#{submission.id}/report"
43     expect(response.status).to eq(401)
44   end
45 end
46
47 context "students's submission" do
48   it "returns 401" do
49     get "/challenges/#{challenge.id}/submissions/#{submission2.id}/report"
50     expect(response.status).to eq(401)
51   end
52 end
53 end
54 end
55 end
56
57 context '#new' do
58   context 'when logged out' do
59     it "redirects to login page" do
60       get "/challenges/#{challenge.id}/submissions/new"
61       expect(response).to redirect_to "/users/sign_in"
62     end
63   end
64
65   context "when logged in" do
66     before do
67       login_as(create(:user, role: "admin"), :scope => :user)
68     end
69
70     context "for a challenge that does not exist" do
71       it "returns 404" do
72         get "/challenges/#{challenge.id-1111}/submissions/new"
73         expect(response.status).to eq(404)
74       end
75     end
76
77     context "as an admin" do
78       it "returns 200" do
79         get "/challenges/#{challenge.id}/submissions/new"
80         expect(response.status).to eq(200)
81       end
82     end
83
84     context "as a student" do
85       before do
86         login_as(create(:user, role: "student"), :scope => :user)
87       end
88
89       it "returns 200" do
90         get "/challenges/#{challenge.id}/submissions/new"
91         expect(response.status).to eq(200)
92       end
93     end
94   end
95 end
96
97 context '#create' do

```

```

08 context 'when logged out' do
09   it "redirects to login page" do
10     post "/challenges/#{challenge.id}/submissions"
11     expect(response).to redirect_to "/users/sign_in"
12   end
13 end
14
15 context "when logged in" do
16   before do
17     login_as(create(:user, role: "admin"), :scope => :user)
18   end
19
20   context "for a challenge that doesn't exist" do
21     it "returns 404" do
22       post '/challenges/asadad/submissions'
23       expect(response.status).to eq(404)
24     end
25   end
26
27   context "for a challenge that exists" do
28     context "without errors" do
29       it "returns 302" do
30         body = { submission: { sql_query: challenge.sql_correct_query } }
31         expect do
32           post "/challenges/#{challenge.id}/submissions", params: body
33         end.to change { Submission.count }.by(1)
34         expect(response.status).to eq(302)
35       end
36     end
37
38     context "with errors" do
39       it "returns 200" do
40         body = { submission: { sql_query: "SMS" } }
41         expect do
42           post "/challenges/#{challenge.id}/submissions", params: body
43         end.to change { Submission.count }.by(0)
44         expect(response.status).to eq(200)
45         expect(response.body).to include("You have an error in your SQL syntax;")
46       end
47     end
48   end
49 end

```

spec/requests/root_spec.rb

```

1 require 'rails_helper'
2
3 RSpec.describe 'root controller', type: :request do
4   context '#show' do
5     context "when not logged in" do
6       it "redirects to login page" do
7         get '/'
8         expect(response).to redirect_to "/users/sign_in"
9       end
10    end
11
12    context "when logged in" do
13      before do
14        login_as(create(:user, role: "admin"), :scope => :user)
15      end
16
17      it "renders the root page" do

```

```

18     get '/'
19     expect(response.body).to include("Welcome to SQL Assess")
20   end
21 end
22 end
23 end

spec/requests/challenges_spec.rb

1 require 'rails_helper'
2
3 RSpec.describe 'challenges controller', type: :request do
4   let!(:challenge) { create(:challenge, title: "Challenge for spec") }
5
6   context "#index" do
7     context 'when logged out' do
8       it "redirects to login page" do
9         get '/challenges'
10        expect(response).to redirect_to "/users/sign_in"
11      end
12    end
13
14    context "when logged in" do
15      context "as an admin" do
16        before do
17          login_as(create(:user, role: "admin"), :scope => :user)
18        end
19
20        it "returns 200" do
21          get '/challenges'
22          expect(response.status).to eq(200)
23          expect(response.body).to include(challenge.title)
24        end
25      end
26    end
27  end
28
29  context '#show' do
30    context 'when logged out' do
31      it "redirects to login page" do
32        get '/challenges/ab'
33        expect(response).to redirect_to "/users/sign_in"
34      end
35    end
36
37    context "when logged in" do
38      before do
39        login_as(create(:user, role: "admin"), :scope => :user)
40      end
41
42      context "requesting a challenge that doesn't exist" do
43        it 'returns a 404' do
44          get '/challenges/ab'
45
46          expect(response.status).to eq(404)
47        end
48      end
49
50      context "as an admin" do
51        it "returns 200" do
52          get "/challenges/#{challenge.id}"
53          expect(response.status).to eq(200)
54        end
55      end
56    end
57  end

```



```

56 context "as a student" do
57   before do
58     login_as(create(:user, role: "student"), :scope => :user)
59   end
60
61   it "returns 401" do
62     get "/challenges/#{challenge.id}"
63     expect(response.status).to eq(401)
64   end
65 end
66
67 end
68
69 end
70
71 context '#edit' do
72   context 'when logged out' do
73     it "redirects to login page" do
74       get '/challenges/ab/edit'
75       expect(response).to redirect_to "/users/sign_in"
76     end
77   end
78
79   context "when logged in" do
80     before do
81       login_as(create(:user, role: "admin"), :scope => :user)
82     end
83
84     context "requesting a challenge that doesn't exist" do
85       it 'returns a 404' do
86         get '/challenges/ab/edit'
87
88         expect(response.status).to eq(404)
89       end
90     end
91
92     context "as an admin" do
93       it "returns 200" do
94         get "/challenges/#{challenge.id}/edit"
95         expect(response.status).to eq(200)
96       end
97     end
98
99     context "as a student" do
100       before do
101         login_as(create(:user, role: "student"), :scope => :user)
102       end
103
104       it "returns 401" do
105         get "/challenges/#{challenge.id}/edit"
106         expect(response.status).to eq(401)
107       end
108     end
109   end
110
111   context '#new' do
112     context 'when logged out' do
113       it "redirects to login page" do
114         get '/challenges/new'
115         expect(response).to redirect_to "/users/sign_in"
116       end
117     end
118
119   end

```

```

19 context "when logged in" do
20   before do
21     login_as(create(:user, role: "admin"), :scope => :user)
22   end
23
24   context "as an admin" do
25     it "returns 200" do
26       get "/challenges/new"
27       expect(response.status).to eq(200)
28     end
29   end
30
31   context "as a student" do
32     before do
33       login_as(create(:user, role: "student"), :scope => :user)
34     end
35
36     it "returns 401" do
37       get "/challenges/new"
38       expect(response.status).to eq(401)
39     end
40   end
41 end
42
43 context '#update' do
44   context 'when logged out' do
45     it "redirects to login page" do
46       put '/challenges/ab'
47       expect(response).to redirect_to "/users/sign_in"
48     end
49   end
50 end
51
52 context "when logged in" do
53   before do
54     login_as(create(:user, role: "admin"), :scope => :user)
55   end
56
57   context "requesting a challenge that doesn't exist" do
58     it 'returns a 404' do
59       put '/challenges/ab'
60
61       expect(response.status).to eq(404)
62     end
63   end
64
65   context "as an admin" do
66     it "returns 302" do
67       put "/challenges/#{challenge.id}", params: { challenge: { title: "Challenge 2"} }
68       expect(response.status).to eq(302)
69       expect(challenge.reload.title).to eq("Challenge 2")
70     end
71
72     context "with errors" do
73       it "shows them" do
74         put "/challenges/#{challenge.id}", params: { challenge: { sql_schema: "Challenge 2"} }
75         expect(response.status).to eq(200)
76         expect(response.body).to include("You have an error in your SQL syntax;")
77       end
78     end
79   end
80
81   context "as a student" do

```

```

82     before do
83       login_as(create(:user, role: "student"), :scope => :user)
84     end
85
86     it "returns 401" do
87       put "/challenges/#{challenge.id}"
88       expect(response.status).to eq(401)
89     end
90   end
91 end
92 end
93
94 context '#destroy' do
95   context 'when logged out' do
96     it "redirects to login page" do
97       delete '/challenges/ab'
98       expect(response).to redirect_to "/users/sign_in"
99     end
100   end
101
102   context "when logged in" do
103     before do
104       login_as(create(:user, role: "admin"), :scope => :user)
105     end
106
107     context "requesting a challenge that doesn't exist" do
108       it 'returns a 404' do
109         delete '/challenges/ab'
110
111         expect(response.status).to eq(404)
112       end
113     end
114
115     context "as an admin" do
116       it "returns 302" do
117         delete "/challenges/#{challenge.id}"
118         expect(Challenge.find_by_id(challenge.id)).to be_nil
119         expect(response.status).to eq(302)
120       end
121     end
122
123     context "as a student" do
124       before do
125         login_as(create(:user, role: "student"), :scope => :user)
126       end
127
128       it "returns 401" do
129         delete "/challenges/#{challenge.id}"
130         expect(response.status).to eq(401)
131       end
132     end
133   end
134 end
135
136 context '#update' do
137   context 'when logged out' do
138     it "redirects to login page" do
139       post '/challenges'
140       expect(response).to redirect_to "/users/sign_in"
141     end
142   end
143
144   context "when logged in" do

```

```

45 before do
46   login_as(create(:user, role: "admin"), :scope => :user)
47 end
48
49 context "as an admin" do
50   it "returns 200" do
51     challenge = build(:challenge)
52     post "/challenges", params: { challenge: JSON.parse(challenge.to_json) }
53     expect(response.status).to eq(302)
54     expect(response.body).to redirect_to "/challenges/#{Challenge.last.id}"
55   end
56
57   context "with errors" do
58     it "displays them" do
59       challenge = build(:challenge)
60       challenge.title = ""
61       post "/challenges", params: { challenge: JSON.parse(challenge.to_json) }
62       expect(response.status).to eq(200)
63       expect(response.body).to include("be blank")
64     end
65   end
66 end
67
68 context "as a student" do
69   before do
70     login_as(create(:user, role: "student"), :scope => :user)
71   end
72
73   it "returns 401" do
74     post "/challenges"
75     expect(response.status).to eq(401)
76   end
77 end
78 end
79 end
80 end

```

spec/factories/challenge.rb

```

1 FactoryBot.define do
2   factory :challenge, class: 'Challenge' do
3     user
4     sequence(:title) { |n| "Challenge #{n}" }
5     sequence(:content) { |n| "Content for challenge #{n}" }
6     sql_schema "CREATE TABLE t1(id integer)"
7     sql_seed "INSERT INTO t1(id) VALUES (1)"
8     sql_correct_query "SELECT * FROM t1"
9   end
10 end

```

spec/factories/submission.rb

```

1 FactoryBot.define do
2   factory :submission, class: 'Submission' do
3     user
4     challenge
5     sql_query "SELECT * FROM t1"
6     grade 55
7   end
8 end

```

spec/factories/user.rb

```

1 FactoryBot.define do
2   factory :user, class: 'User' do

```

```

3     sequence(:email) { |n| "person#{n}@example.com" }
4     password "password"
5 end
6 end

spec/rails_helper.rb

1 # This file is copied to spec/ when you run 'rails generate rspec:install'
2 require 'spec_helper'
3 ENV['RAILS_ENV'] ||= 'test'
4 require File.expand_path('../config/environment', __FILE__)
5 # Prevent database truncation if the environment is production
6 abort("The Rails environment is running in production mode!") if Rails.env.production?
7 require 'rspec/rails'
8 require 'shoulda/matchers'
9 # require 'support/factory_bot'
10 # Add additional requires below this line. Rails is not loaded until this point!
11
12 # Requires supporting ruby files with custom matchers and macros, etc, in
13 # spec/support/ and its subdirectories. Files matching `spec/**/*_spec.rb` are
14 # run as spec files by default. This means that files in spec/support that end
15 # in *_spec.rb will both be required and run as specs, causing the specs to be
16 # run twice. It is recommended that you do not name files matching this glob to
17 # end with *_spec.rb. You can configure this pattern with the --pattern
18 # option on the command line or in ~/.rspec, .rspec or .rspec-local`.
19 #
20 # The following line is provided for convenience purposes. It has the downside
21 # of increasing the boot-up time by auto-requiring all files in the support
22 # directory. Alternatively, in the individual `*_spec.rb` files, manually
23 # require only the support files necessary.
24 #
25 # Dir[Rails.root.join('spec/support/**/*.rb')].each { |f| require f }
26
27 # Checks for pending migrations and applies them before tests are run.
28 # If you are not using ActiveRecord, you can remove this line.
29 ActiveRecord::Migration.maintain_test_schema!
30
31 RSpec.configure do |config|
32   # Remove this line if you're not using ActiveRecord or ActiveRecord fixtures
33   config.fixture_path = "#{::Rails.root}/spec/fixtures"
34
35   # If you're not using ActiveRecord, or you'd prefer not to run each of your
36   # examples within a transaction, remove the following line or assign false
37   # instead of true.
38   config.use_transactional_fixtures = true
39
40   # RSpec Rails can automatically mix in different behaviours to your tests
41   # based on their file location, for example enabling you to call `get` and
42   # `post` in specs under `spec/controllers`.
43   #
44   # You can disable this behaviour by removing the line below, and instead
45   # explicitly tag your specs with their type, e.g.:
46   #
47   #     RSpec.describe UsersController, :type => :controller do
48   #       # ...
49   #     end
50   #
51   # The different available types are documented in the features, such as in
52   # https://relishapp.com/rspec/rspec-rails/docs
53   config.infer_spec_type_from_file_location!
54
55   # Filter lines from Rails gems in backtraces.
56   config.filter_rails_from_backtrace!
57   # arbitrary gems may also be filtered via:

```

```

58 # config.filter_gems_from_backtrace("gem name")
59
60 config.include Warden::Test::Helpers
61 config.include FactoryBot::Syntax::Methods
62 config.include Devise::Test::ControllerHelpers, :type => :controller
63 end

```

public/favicon.ico

public/422.html

```

1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>The change you wanted was rejected (422)</title>
5   <meta name="viewport" content="width=device-width,initial-scale=1">
6   <style>
7     .rails-default-error-page {
8       background-color: #EFEFEF;
9       color: #2E2F30;
10      text-align: center;
11      font-family: arial, sans-serif;
12      margin: 0;
13    }
14
15    .rails-default-error-page div.dialog {
16      width: 95%;
17      max-width: 33em;
18      margin: 4em auto 0;
19    }
20
21    .rails-default-error-page div.dialog > div {
22      border: 1px solid #CCC;
23      border-right-color: #999;
24      border-left-color: #999;
25      border-bottom-color: #BBB;
26      border-top: #B00100 solid 4px;
27      border-top-left-radius: 9px;
28      border-top-right-radius: 9px;
29      background-color: white;
30      padding: 7px 12% 0;
31      box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);
32    }
33
34    .rails-default-error-page h1 {
35      font-size: 100%;
36      color: #730E15;
37      line-height: 1.5em;
38    }
39
40    .rails-default-error-page div.dialog > p {
41      margin: 0 0 1em;
42      padding: 1em;
43      background-color: #F7F7F7;
44      border: 1px solid #CCC;
45      border-right-color: #999;
46      border-left-color: #999;
47      border-bottom-color: #999;
48      border-bottom-left-radius: 4px;
49      border-bottom-right-radius: 4px;
50      border-top-color: #DADADA;
51      color: #666;
52      box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);

```

```

53     }
54   </style>
55 </head>
56
57 <body class="rails-default-error-page">
58   <!-- This file lives in public/422.html -->
59   <div class="dialog">
60     <div>
61       <h1>The change you wanted was rejected.</h1>
62       <p>Maybe you tried to change something you didn't have access to.</p>
63     </div>
64     <p>If you are the application owner check the logs for more information.</p>
65   </div>
66 </body>
67 </html>

```

public/apple-touch-icon.png

1

public/500.html

```

1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>We're sorry, but something went wrong (500)</title>
5   <meta name="viewport" content="width=device-width,initial-scale=1">
6   <style>
7     .rails-default-error-page {
8       background-color: #EFEFEF;
9       color: #2E2F30;
10      text-align: center;
11      font-family: arial, sans-serif;
12      margin: 0;
13    }
14
15    .rails-default-error-page div.dialog {
16      width: 95%;
17      max-width: 33em;
18      margin: 4em auto 0;
19    }
20
21    .rails-default-error-page div.dialog > div {
22      border: 1px solid #CCC;
23      border-right-color: #999;
24      border-left-color: #999;
25      border-bottom-color: #BBB;
26      border-top: #B00100 solid 4px;
27      border-top-left-radius: 9px;
28      border-top-right-radius: 9px;
29      background-color: white;
30      padding: 7px 12% 0;
31      box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);
32    }
33
34    .rails-default-error-page h1 {
35      font-size: 100%;
36      color: #730E15;
37      line-height: 1.5em;
38    }
39
40    .rails-default-error-page div.dialog > p {
41      margin: 0 0 1em;
42      padding: 1em;
43      background-color: #F7F7F7;

```

```

44 border: 1px solid #CCC;
45 border-right-color: #999;
46 border-left-color: #999;
47 border-bottom-color: #999;
48 border-bottom-left-radius: 4px;
49 border-bottom-right-radius: 4px;
50 border-top-color: #DADADA;
51 color: #666;
52 box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);
53 }
54 </style>
55 </head>
56
57 <body class="rails-default-error-page">
58   <!-- This file lives in public/500.html -->
59   <div class="dialog">
60     <div>
61       <h1>We're sorry, but something went wrong.</h1>
62     </div>
63     <p>If you are the application owner check the logs for more information.</p>
64   </div>
65 </body>
66 </html>

```

public/404.html

```

1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>The page you were looking for doesn't exist (404)</title>
5   <meta name="viewport" content="width=device-width,initial-scale=1">
6   <style>
7     .rails-default-error-page {
8       background-color: #EFEFEF;
9       color: #2E2F30;
10      text-align: center;
11      font-family: arial, sans-serif;
12      margin: 0;
13    }
14
15    .rails-default-error-page div.dialog {
16      width: 95%;
17      max-width: 33em;
18      margin: 4em auto 0;
19    }
20
21    .rails-default-error-page div.dialog > div {
22      border: 1px solid #CCC;
23      border-right-color: #999;
24      border-left-color: #999;
25      border-bottom-color: #BBB;
26      border-top: #B00100 solid 4px;
27      border-top-left-radius: 9px;
28      border-top-right-radius: 9px;
29      background-color: white;
30      padding: 7px 12% 0;
31      box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);
32    }
33
34    .rails-default-error-page h1 {
35      font-size: 100%;
36      color: #730E15;
37      line-height: 1.5em;
38    }

```



```

39 .rails-default-error-page div.dialog > p {
40   margin: 0 0 1em;
41   padding: 1em;
42   background-color: #F7F7F7;
43   border: 1px solid #CCC;
44   border-right-color: #999;
45   border-left-color: #999;
46   border-bottom-color: #999;
47   border-bottom-left-radius: 4px;
48   border-bottom-right-radius: 4px;
49   border-top-color: #DADADA;
50   color: #666;
51   box-shadow: 0 3px 8px rgba(50, 50, 50, 0.17);
52 }
53
54 </style>
55 </head>
56
57 <body class="rails-default-error-page">
58   <!-- This file lives in public/404.html -->
59   <div class="dialog">
60     <div>
61       <h1>The page you were looking for doesn't exist.</h1>
62       <p>You may have mistyped the address or the page may have moved.</p>
63     </div>
64     <p>If you are the application owner check the logs for more information.</p>
65   </div>
66 </body>
67 </html>

```

public/apple-touch-icon-precomposed.png

public/robots.txt

See <http://www.robotstxt.org/robotstxt.html> for documentation on how to use the robots.txt file

db/schema.rb

```

1 # This file is auto-generated from the current state of the database. Instead
2 # of editing this file, please use the migrations feature of Active Record to
3 # incrementally modify your database, and then regenerate this schema definition.
4 #
5 # Note that this schema.rb definition is the authoritative source for your
6 # database schema. If you need to create the application database on another
7 # system, you should be using db:schema:load, not running all the migrations
8 # from scratch. The latter is a flawed and unsustainable approach (the more migrations
9 # you'll amass, the slower it'll run and the greater likelihood for issues).
10 #
11 # It's strongly recommended that you check this file into your version control system.

```

```
ActiveRecord::Schema.define(version: 20180315180736) do
```

```

create_table "challenges", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
  t.string "title"
  t.bigint "user_id"
  t.datetime "created_at", null: false
  t.datetime "updated_at", null: false
  t.text "content"
  t.text "sql_schema"
  t.text "sql_seed"
  t.text "sql_correct_query"
  t.json "metadata"
  t.index ["user_id"], name: "index_challenges_on_user_id"

```

```

26 end
27
28 create_table "submissions", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
29   t.datetime "created_at", null: false
30   t.datetime "updated_at", null: false
31   t.text "sql_query"
32   t.boolean "success"
33   t.bigint "challenge_id"
34   t.json "metadata"
35   t.float "grade", limit: 53
36   t.bigint "user_id"
37   t.json "attribute_grades", null: false
38   t.string "message"
39   t.index ["challenge_id"], name: "index_submissions_on_challenge_id"
40   t.index ["user_id"], name: "index_submissions_on_user_id"
41 end
42
43 create_table "users", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
44   t.string "email", default: "", null: false
45   t.string "encrypted_password", default: "", null: false
46   t.string "reset_password_token"
47   t.datetime "reset_password_sent_at"
48   t.datetime "remember_created_at"
49   t.integer "sign_in_count", default: 0, null: false
50   t.datetime "current_sign_in_at"
51   t.datetime "last_sign_in_at"
52   t.string "current_sign_in_ip"
53   t.string "last_sign_in_ip"
54   t.datetime "created_at", null: false
55   t.datetime "updated_at", null: false
56   t.string "role", default: "student", null: false
57   t.index ["email"], name: "index_users_on_email", unique: true
58   t.index ["reset_password_token"], name: "index_users_on_reset_password_token", unique: true
59 end
60
61 add_foreign_key "challenges", "users"
62 add_foreign_key "submissions", "challenges"
63 add_foreign_key "submissions", "users"
64 end

```

db/seeds.rb

```

1 # frozen_string_literal: true
2
3 # This file should contain all the record creation needed to seed the database with its default values.
4 # The data can then be loaded with the rails db:seed command (or created alongside the database with
5 ↪ db:setup).
6 #
7 # Examples:
8 #   movies = Movie.create([ { name: 'Star Wars' }, { name: 'Lord of the Rings' } ])
9 #   Character.create(name: 'Luke', movie: movies.first)
10
11 admin = User.create!(
12   email: 'admin@example.com',
13   password: 'test123',
14   role: 'admin'
15 )
16
17 student = User.create!(
18   email: 'student@example.com',
19   password: 'test123'
20 )
21

```

```

22 challenge1 = Challenge.create!(
23     content: 'Challenge 1',
24     sql_schema: (
25 <<~SQL
26     CREATE TABLE table1(id integer, name varchar(255));
27 SQL
28     ),
29     sql_correct_query: (
30 <<~SQL
31     SELECT table1.id from table1 ORDER BY table1.id ASC
32 SQL
33     ),
34     sql_seed: (
35 <<~SQL
36     INSERT INTO table1 (id, name) VALUES (1, "Vlad"), (2, "Michael"), (3, "Jordan");
37 SQL
38     ),
39     title: 'Seed Challenge #1 - Simple query',
40     user: admin
41 )
42
43 Submission.create!(
44     user: student,
45     challenge: challenge1,
46     sql_query: 'SELECT * from table1'
47 )
48
49 Submission.create!(
50     user: student,
51     challenge: challenge1,
52     sql_query: 'SELECT id from table1'
53 )
54
55 Submission.create!(
56     user: student,
57     challenge: challenge1,
58     sql_query: 'SELECT id from table1 ORDER BY table1.id DESC'
59 )
60
61 Submission.create!(
62     user: student,
63     challenge: challenge1,
64     sql_query: 'SELECT table1.id from table1 ORDER BY table1.id DESC'
65 )
66
67 Submission.create!(
68     user: student,
69     challenge: challenge1,
70     sql_query: 'SELECT DISTINCT table1.id from table1 ORDER BY table1.id DESC'
71 )
72
73 Submission.create!(
74     user: student,
75     challenge: challenge1,
76     sql_query: 'SELECT table1.name from table1'
77 )
78
79 challenge2 = Challenge.create!(
80     content: 'Challenge 2',
81     sql_schema: (
82 <<~SQL
83     CREATE TABLE table1(id integer, name varchar(255));
84     CREATE TABLE table2(id integer, price integer, t1_id integer);

```

```

85 SQL
86     ),
87     sql_correct_query: (
88 <<~SQL
89     SELECT table1.id from table1 LEFT JOIN table2 on table2.t1_id = table1.id
90 SQL
91     ),
92     sql_seed: (
93 <<~SQL
94     INSERT INTO table1 (id, name) VALUES (1, "Vlad"), (2, "Michael"), (3, "Jordan");
95     INSERT INTO table2 (id, price, t1_id) VALUES (6, 10, 1), (7, 11, 2), (8, 111, 3), (9, 111, 3);
96 SQL
97     ),
98     title: 'Seed Challenge #2 - Join Table',
99     user: admin
100 )
101
102 Submission.create!(
103     user: student,
104     challenge: challenge2,
105     sql_query: 'SELECT table1.name from table1'
106 )
107
108 Submission.create!(
109     user: student,
110     challenge: challenge2,
111     sql_query: 'SELECT table1.name from table1 LEFT JOIN table2 on table2.t1_id = table1.id'
112 )
113
114 Submission.create!(
115     user: student,
116     challenge: challenge2,
117     sql_query: 'SELECT table2.t1_id from table1 LEFT JOIN table2 on table2.t1_id = table1.id'
118 )
119
120 challenge3 = Challenge.create!(
121     content: 'Challenge 3',
122     sql_schema: (
123 <<~SQL
124     CREATE TABLE table1(id integer, name varchar(255));
125     CREATE TABLE table2(id integer, price integer, t1_id integer);
126 SQL
127     ),
128     sql_correct_query: (
129 <<~SQL.squish
130     SELECT SUM(table2.price)
131     FROM
132         table1
133         LEFT JOIN table2 on table2.t1_id = table1.id
134     WHERE
135         table1.id = 4 OR table2.price < 1
136 SQL
137     ),
138     sql_seed: (
139 <<~SQL
140     INSERT INTO table1 (id, name) VALUES (1, "Vlad"), (2, "Michael"), (3, "Jordan");
141     INSERT INTO table2 (id, price, t1_id) VALUES (6, 10, 1), (7, 11, 2), (8, 111, 3), (9, 111, 3);
142 SQL
143     ),
144     title: 'Seed Challenge #3 - Complicated query',
145     user: admin
146 )
147

```

```

48 Submission.create!(
49   user: student,
50   challenge: challenge3,
51   sql_query:
52   <<~SQL.squish
53     SELECT SUM(table2.price), table1.id
54     FROM
55       table1
56     LEFT JOIN table2 on table2.t1_id = table1.id
57     WHERE
58       table1.id = 4 OR table2.price < 1
59     GROUP BY 2
60     ORDER BY table1.id DESC
61   SQL
62 )
63
64   db/migrate/20180121214059_add_metadata_to_submission.rb
65
66 1 # frozen_string_literal: true
67 2
68 3 class AddMetadataToSubmission < ActiveRecord::Migration[5.1]
69 4   def change
70 5     add_column :submissions, :metadata, :json
71 6   end
72 7 end
73
74   db/migrate/20180118201356_add_sql_query_result_column.rb
75
76 1 # frozen_string_literal: true
77 2
78 3 class AddSqlQueryResultColumn < ActiveRecord::Migration[5.1]
79 4   def change
80 5     add_column :challenges, :sql_correct_query, :text
81 6   end
82 7 end
83
84   db/migrate/20180227110928_add_user_id_to_submission.rb
85
86 1 # frozen_string_literal: true
87 2
88 3 class AddUserIdToSubmission < ActiveRecord::Migration[5.1]
89 4   def change
90 5     add_reference :submissions, :user
91 6   end
92 7 end
93
94   db/migrate/20180315104459_add_message.rb
95
96 1 # frozen_string_literal: true
97 2
98 3 class AddMessage < ActiveRecord::Migration[5.1]
99 4   def change
100 5     add_column :submissions, :message, :string
101 6   end
102 7 end
103
104   db/migrate/20171114144500_devise_create_users.rb
105
106 1 # frozen_string_literal: true
107 2
108 3 class DeviseCreateUsers < ActiveRecord::Migration[5.1]
109 4   def change
110 5     create_table :users do |t|
111 6       ## Database authenticatable
112 7       t.string :email, null: false, default: ''
113 8       t.string :encrypted_password, null: false, default: ''

```

```

    ## Recoverable
    t.string :reset_password_token
    t.datetime :reset_password_sent_at

    ## Rememberable
    t.datetime :remember_created_at

    ## Trackable
    t.integer :sign_in_count, default: 0, null: false
    t.datetime :current_sign_in_at
    t.datetime :last_sign_in_at
    t.string :current_sign_in_ip
    t.string :last_sign_in_ip

    ## Confirmable
    # t.string :confirmation_token
    # t.datetime :confirmed_at
    # t.datetime :confirmation_sent_at
    # t.string :unconfirmed_email # Only if using reconfirmable

    ## Lockable
    # t.integer :failed_attempts, default: 0, null: false # Only if lock strategy is :failed_attempts
    # t.string :unlock_token # Only if unlock strategy is :email or :both
    # t.datetime :locked_at

    t.timestamps null: false
  end

  add_index :users, :email, unique: true
  add_index :users, :reset_password_token, unique: true
  # add_index :users, :confirmation_token, unique: true
  # add_index :users, :unlock_token, unique: true
end
end

db/migrate/20180206164854_add_role_attribute_to_user.rb

# frozen_string_literal: true

class AddRoleAttributeToUser < ActiveRecord::Migration[5.1]
  def change
    add_column :users, :role, :string, default: 'student', null: false
  end
end

db/migrate/20180116142200_add_fields_to_challenge.rb

# frozen_string_literal: true

class AddFieldsToChallenge < ActiveRecord::Migration[5.1]
  def change
    add_column :challenges, :content, :text
    add_column :challenges, :sql_schema, :text
    add_column :challenges, :sql_seed, :text
  end
end

db/migrate/20180118203143_create_submission.rb

# frozen_string_literal: true

class CreateSubmission < ActiveRecord::Migration[5.1]
  def change
    create_table :submissions do |t|

```

```

6         t.timestamps
7         t.text :sql_query
8         t.boolean :success
9     end
10 end
11 end

db/migrate/20180315180736_add_foreign_key.rb

1 # frozen_string_literal: true
2
3 class AddForeignKey < ActiveRecord::Migration[5.1]
4     def change
5         change_column :challenges, :user_id, :bigint
6         add_foreign_key :challenges, :users
7
8         change_column :submissions, :challenge_id, :bigint
9         add_foreign_key :submissions, :challenges
10
11         change_column :submissions, :user_id, :bigint
12         add_foreign_key :submissions, :users
13     end
14 end

db/migrate/20180206161537_add_grade_to_submission.rb

1 # frozen_string_literal: true
2
3 class AddGradeToSubmission < ActiveRecord::Migration[5.1]
4     def change
5         add_column :submissions, :grade, :double
6     end
7 end

db/migrate/20180123122725_add_metadata_to_challenge.rb

1 # frozen_string_literal: true
2
3 class AddMetadataToChallenge < ActiveRecord::Migration[5.1]
4     def change
5         add_column :challenges, :metadata, :json
6     end
7 end

db/migrate/20171127124230_add_challenge.rb

1 # frozen_string_literal: true
2
3 class AddChallenge < ActiveRecord::Migration[5.1]
4     def change
5         create_table :challenges do |t|
6             t.string :title
7             t.references :user
8             t.timestamps
9         end
10     end
11 end

db/migrate/20180301115554_add_attribute_grading.rb

1 # frozen_string_literal: true
2
3 class AddAttributeGrading < ActiveRecord::Migration[5.1]
4     def change
5         add_column :submissions, :attribute_grades, :json, null: false
6     end
7 end

```

db/migrate/20180118203655_add_challenge_column_to_submission.rb

```
1  # frozen_string_literal: true
2
3  class AddChallengeColumnToSubmission < ActiveRecord::Migration[5.1]
4    def change
5      add_reference :submissions, :challenge
6    end
7  end
```