

## Databases

```
1 require "logger"
2 require "sequel"
3
4 #Allows switching test -> production db
5 type = ENV.fetch("APP_ENV", "production_db")
6
7 #Finds the path to the database file
8 db_path = File.dirname(__FILE__)
9 db = "#{db_path}/#{type}.sqlite3"
10
11
12 #Finds the path to the log
13 log_path = "#{File.dirname(__FILE__)}/../log/"
14 log = "#{log_path}/#{type}.log"
15
16 #Creates the log directory if it does not exist
17 Dir.mkdir(log_path) unless File.exist?(log_path)
18
19 #Sets up the Sequel database instance
20 DB = Sequel.sqlite(db, logger: Logger.new(log))
```

Listing A project/db/db.rb

## Controllers

```
6
7 ▾ post '/' do
8   @user = User.new
9   @user.load(params)
10  @error = nil
11
12  #Checks if user is valid, sends them to the correct my-account page
13  ▾ if @user.exist?
14    puts @user.get_type
15    session[:logged_in] = true
16    ▾ if @user.get_type == "admin"
17      email = params.fetch("email", "").strip
18      @admin= Admin.where(Sequel.like(:email, "%#{email}%"))
19      session[:id] = @admin.first.get_id
20      redirect "/my-account-admin"
21    ▾ elsif @user.get_type == "mentor"
22      email = params.fetch("email", "").strip
23      @mentor = Mentor.where(Sequel.like(:email, "%#{email}%"))
24      session[:id] = @mentor.first.get_id
25      redirect "/my-account-mentor"
26    ▾ else
27      email = params.fetch("email", "").strip
28      @mentee = Mentee.where(Sequel.like(:email, "%#{email}%"))
29      session[:id] = @mentee.first.get_id
30      redirect "/my-account-mentee"
31    end
32  ▾ else
33    @error = "Username/Password combination incorrect"
34  end
35 ▾
```

Listing B project/controllers/index.rb

## Views

```
1 <%= erb : "commons/header" %>
2 <div id="page">
3   <section id="welcome-section">
4     <h1>
5       WELCOME TO THE MENTOR-MENTEE MATCHING SYSTEM!
6     </h1>
7     <P>
8       This system is created by team33 to help mentees finding the suitable mentor in a more effec
9     </P>
10   </section>
11   <section id="sign-in-section">
12     <div class="container">
13       <h2>sign in</h2>
14       <form method="post" action="/" name="sign-in" id="sign-in">
15         <% unless @error.nil? %>
16           <p><strong class="error"><%= @error %></strong></p>
17         <% end %>
18         <label for="email">Enter your Email</label>
19         <input type="email" name="email" id="email" required>
20         <label for="password">Password</label>
21         <input type="password" name="password" id="password" required>
22         <button type="submit" action="submit" id="button" name="signin"> Sign in</button>
23       </form>
24       <p> not a member? </p>
25       <form class="signup">
26         <button type="submit" id="button" name="mentee-signup">
27           <a href="mentee-form"> sign up as a mentee</a>
28         </button>
```

*Listing C project/views/index.erb*

## Models

```
1 class Mentor < Sequel::Model
2   def load(params)
3     self.first_name = params.fetch("first_name", "").strip
4     self.surname = params.fetch("surname", "").strip
5     self.gender = params.fetch("gender", "").strip
6     self.industry = params.fetch("industry", "").strip
7     self.company = params.fetch("company", "").strip
8     self.sheffield_graduate = params.fetch("sheffield_graduate", "").strip
9     self.degree_field = params.fetch("degree_field", "").strip
10    self.email = params.fetch("email", "").strip
11    self.password = params.fetch("password", "").strip
12  end
13
14  #Different param set for editing after sign-up
15  def load_edit(params)
16    self.email = params.fetch("email", "").strip
17    self.first_name = params.fetch("first_name", "").strip
18    self.surname = params.fetch("surname", "").strip
19    self.industry = params.fetch("industry", "").strip
20    self.company = params.fetch("company", "").strip
21    self.biography = params.fetch("biography", "").strip
22  end
23
24
25  def self.id_exists?(id)
26    return false if id.nil? # check the id is not nil
27    return false if Mentor[id].nil? # check the database has a record with this id
28
29    true # all checks are ok - the id exists
30  end
```

*Listing D project/models/mentor.rb*

## Testing Unit

```
1 require_relative "../../helpers/spec_helper"
2
3 RSpec.describe "Index" do
4   describe "GET /" do
5     it "has a status code of 200 (OK)" do
6       post "/"
7       expect(last_response.status).to eq(200)
8     end
9
10    it "includes a sign-in" do
11      post "/"
12      expect(last_response.body).to include('form method="post"')
13    end
14  end
15
16  describe "Index Form Submission" do
17
18    before(:all) do
19      user = User.new(email: "testtest@test.test", password: "test1234", user_type: "admin")
20      user.save_changes
21      admin = Admin.new(first_name: "A", surname: "B", admin_code: "1234", email: "testtest@test.test", password: "test1234")
22      admin.save_changes
23    end
24
25    after(:all) do
26      DB.from("mentees").delete
27      DB.from("mentors").delete
28      DB.from("admins").delete
29      DB.from("users").delete
30    end
31
32    it "Redirects on a success" do
33      post "/", "email" => "testtest@test.test", "password" => "test1234"
34      expect(last_response).to be_redirect
35      expect(last_response.location).to include('/my-account-admin')
36    end
37
38    it "Fails when there's no password" do
39      post "/", "email" => "testtest@test.test"
40      expect(last_response.body).to include('Username/Password combination incorrect')
41    end
42
43    it "Fails when there's no email" do
44      post "/", "password" => "test1234"
45      expect(last_response.body).to include('Username/Password combination incorrect')
46    end
47
48    it "Fails when there's no parameters" do
49      post "/"
50      expect(last_response.body).to include('Username/Password combination incorrect')
51    end
52
53    it "Fails when a false email is inputted" do
54      post "/", "email" => "test", "password" => "test1234"
55      expect(last_response.body).to include('Username/Password combination incorrect')
56    end
57  end
58 end
```

*Listing E project/spec/unit/index\_spec.rb*