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Sprint 4-1: Part 2

Github: https://github.com/UCCS-CS3300/group1_spring2020
Heroku: http://dog-friendly.herokuapp.com/
Website: https://dog-friendly.net/

Rake Stats:
Our Rake Stats can be used to show the ratio of lines of code to lines of test code.
Sprint 3-2: Rake stats results

Name	Lines	LOC	Classes	Methods	M/C	LOC/M
Controllers	123	92	5	16	3	3
Helpers	8	8	0	0	0	0
Jobs	2	2	1	0	0	0
Models	15	12	2	1	0	10
Mailers	16	12	2	1	0	10
Channels	8	8	2	0	0	0
JavaScripts	535	412	0	19	0	19
Libraries	126	92	0	0	0	0
Controller tests	14	6	2	0	0	0
Helper tests	0	0	0	0	0	0
Model tests	0	0	0	0	0	0
Mailer tests	0	0	0	0	0	0
Integration tests	0	0	0	0	0	0
System tests	0	0	0	0	0	0
Routing specs	38	29	0	0	0	0
View specs	91	75	0	0	0	0
Helper specs	15	4	0	0	0	0
Request specs	10	9	0	0	0	0
Controller specs	141	94	0	0	0	0
Model specs	5	4	0	0	0	0
Cucumber features	173	67	0	0	0	0
Total	1320	926	14	37	2	23

```
Code LOC: 638    Test LOC: 288    Code to Test Ratio: 1:0.5
```

Sprint 4-2: Rake stats results

```
+----------------------+-------+--------+---------+---------+-----+-------+
| Name                 | Lines |   LOC  | Classes | Methods | M/C | LOC/M |
+----------------------+-------+--------+---------+---------+-----+-------+
| Controllers          |    96 |    66  |       4 |      11 |   2 |     4 |
| Helpers              |    12 |     8  |       0 |       0 |   0 |     0 |
| Jobs                 |     3 |     2  |       1 |       0 |   0 |     0 |
| Models               |    10 |     6  |       2 |       0 |   0 |     0 |
| Mailers              |    18 |    12  |       2 |       1 |   0 |    10 |
| Channels             |    10 |     8  |       2 |       0 |   0 |     0 |
| JavaScripts          |   731 |   550  |       0 |      18 |   0 |    28 |
| Libraries            |   126 |    92  |       0 |       0 |   0 |     0 |
| Controller tests     |    14 |     6  |       2 |       0 |   0 |     0 |
| Helper tests         |     0 |     0  |       0 |       0 |   0 |     0 |
| Model tests          |     0 |     0  |       0 |       0 |   0 |     0 |
| Mailer tests         |     0 |     0  |       0 |       0 |   0 |     0 |
| Integration tests    |     0 |     0  |       0 |       0 |   0 |     0 |
| System tests         |     0 |     0  |       0 |       0 |   0 |     0 |
| Routing specs        |    38 |    29  |       0 |       0 |   0 |     0 |
| View specs           |    91 |    75  |       0 |       0 |   0 |     0 |
| Helper specs         |    15 |     4  |       0 |       0 |   0 |     0 |
| Request specs        |    10 |     9  |       0 |       0 |   0 |     0 |
| Controller specs     |   141 |    94  |       0 |       0 |   0 |     0 |
| Model specs          |    23 |    17  |       0 |       0 |   0 |     0 |
| Cucumber features    |   186 |    76  |       0 |       0 |   0 |     0 |
+----------------------+-------+--------+---------+---------+-----+-------+
| Total                |  1524 |  1054  |      13 |      30 |   2 |    33 |
+----------------------+-------+--------+---------+---------+-----+-------+
  Code LOC: 744      Test LOC: 310      Code to Test Ratio: 1:0.4
```

From sprint 3-2 to sprint 4-2 our Rake results went down, despite the fact that we added more test code, and barely added any production code. We believe that the cause of this is rake not counting our javascript tests as test code. If rake counted our javascript tests as test code then we would be well above the required ratio.

Reek Results:
Our Reek results can be used to tell us what code may be problematic. What code "smells".
Sprint 3-2 reek results:

84355696bb66:~/environment/dogfriendly/group1_spring2020# reek Inspecting 59 file(s): SSSS............S..S.................SSSSSSSSSSSSSSSS......
test/application_system_test_case.rb -- 1 warning: [3]:IrresponsibleModule: ApplicationSystemTestCase has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
test/controllers/dog_friendly_controller_test.rb -- 1 warning: [3]:IrresponsibleModule: DogFriendlyControllerTest has no descriptive comment

[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
test/controllers/test_controller_test.rb -- 1 warning: [3]:IrresponsibleModule:
TestControllerTest has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
test/test_helper.rb -- 1 warning: [5]:IrresponsibleModule: ActiveSupport::TestCase has
no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
db/migrate/20200304232234_create_users.rb -- 3 warnings: [4, 5, 6, 8]:FeatureEnvy:
CreateUsers#change refers to 't' more than self (maybe move it to another class?)
[https://github.com/troessner/reek/blob/v6.0.0/docs/Feature-Envy.md]
[1]:IrresponsibleModule: CreateUsers has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
[3]:UncommunicativeVariableName: CreateUsers#change has the variable name 't'
[https://github.com/troessner/reek/blob/v6.0.0/docs/Uncommunicative-Variable-Name.m
d] config/application.rb -- 1 warning: [10]:IrresponsibleModule: DogFriendly::Application
has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/channels/application_cable/channel.rb -- 1 warning: [2]:IrresponsibleModule:
ApplicationCable::Channel has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/channels/application_cable/connection.rb -- 1 warning: [2]:IrresponsibleModule:
ApplicationCable::Connection has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/controllers/application_controller.rb -- 1 warning: [1]:IrresponsibleModule:
ApplicationController has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/controllers/dog_friendly_controller.rb -- 1 warning: [1]:IrresponsibleModule:
DogFriendlyController has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/controllers/logins_controller.rb -- 2 warnings: [16, 18]:DuplicateMethodCall:
LoginsController#authenticate_with_google calls 'flash[:google_sign_in]' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md]
[1]:IrresponsibleModule: LoginsController has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/controllers/sessions_controller.rb -- 2 warnings: [1]:InstanceVariableAssumption:
SessionsController assumes too much for instance variable '@user'
[https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md]
[1]:IrresponsibleModule: SessionsController has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]

app/controllers/users_controller.rb -- 9 warnings: [31, 34]:DuplicateMethodCall: UsersController#create calls 'format.html' 2 times [https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [32, 35]:DuplicateMethodCall: UsersController#create calls 'format.json' 2 times [https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [45, 48]:DuplicateMethodCall: UsersController#update calls 'format.html' 2 times [https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [46, 49]:DuplicateMethodCall: UsersController#update calls 'format.json' 2 times [https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [1]:InstanceVariableAssumption: UsersController assumes too much for instance variable '@user' [https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md] [1]:IrresponsibleModule: UsersController has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] [26]:TooManyStatements: UsersController#create has approx 10 statements [https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md] [56]:TooManyStatements: UsersController#destroy has approx 6 statements [https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md] [42]:TooManyStatements: UsersController#update has approx 9 statements [https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md] app/helpers/application_helper.rb -- 1 warning: [1]:IrresponsibleModule: ApplicationHelper has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] app/helpers/dog_friendly_helper.rb -- 1 warning: [1]:IrresponsibleModule: DogFriendlyHelper has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] app/helpers/test_helper.rb -- 1 warning: [1]:IrresponsibleModule: TestHelper has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] app/helpers/users_helper.rb -- 1 warning: [1]:IrresponsibleModule: UsersHelper has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] app/jobs/application_job.rb -- 1 warning: [1]:IrresponsibleModule: ApplicationJob has no descriptive comment [https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] app/mailers/application_mailer.rb -- 3 warnings: [7]:InstanceVariableAssumption: UserMailer assumes too much for instance variable '@user' [https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md] [1]:IrresponsibleModule: ApplicationMailer has no descriptive comment

[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
[7]:IrresponsibleModule: UserMailer has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/models/application_record.rb -- 1 warning: [1]:IrresponsibleModule:
ApplicationRecord has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md]
app/models/user.rb -- 3 warnings: [4, 5, 6]:DuplicateMethodCall:
User#self.from_omniauth calls 'auth.info' 3 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [4,
6]:DuplicateMethodCall: User#self.from_omniauth calls 'auth.info.email' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md]
[1]:IrresponsibleModule: User has no descriptive comment
[https://github.com/troessner/reek/blob/v6.0.0/docs/Irresponsible-Module.md] 37 total
warnings

Sprint 4-2 reek results:
2c5cd40126ad:~/environment/project/group1_spring2020# reek Inspecting 58 file(s):
....SS.....S.S.....................S..................... app/controllers/sessions_controller.rb -- 1
warning: [2]:InstanceVariableAssumption: SessionsController assumes too much for
instance variable '@user'
[https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md]
app/controllers/users_controller.rb -- 8 warnings: [32, 35]:DuplicateMethodCall:
UsersController#create calls 'format.html' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [33,
36]:DuplicateMethodCall: UsersController#create calls 'format.json' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [46,
49]:DuplicateMethodCall: UsersController#update calls 'format.html' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md] [47,
50]:DuplicateMethodCall: UsersController#update calls 'format.json' 2 times
[https://github.com/troessner/reek/blob/v6.0.0/docs/Duplicate-Method-Call.md]
[2]:InstanceVariableAssumption: UsersController assumes too much for instance
variable '@user'
[https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md]
[27]:TooManyStatements: UsersController#create has approx 10 statements
[https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md]
[57]:TooManyStatements: UsersController#destroy has approx 6 statements
[https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md]
[43]:TooManyStatements: UsersController#update has approx 9 statements
[https://github.com/troessner/reek/blob/v6.0.0/docs/Too-Many-Statements.md]

app/mailers/application_mailer.rb -- 1 warning: [9]:InstanceVariableAssumption: UserMailer assumes too much for instance variable '@user' [https://github.com/troessner/reek/blob/v6.0.0/docs/Instance-Variable-Assumption.md] app/models/user.rb -- 3 warnings: [4]:Attribute: User#email is a writable attribute [https://github.com/troessner/reek/blob/v6.0.0/docs/Attribute.md] [4]:Attribute: User#password is a writable attribute [https://github.com/troessner/reek/blob/v6.0.0/docs/Attribute.md] [4]:Attribute: User#username is a writable attribute [https://github.com/troessner/reek/blob/v6.0.0/docs/Attribute.md] db/migrate/20200304232234_create_users.rb -- 2 warnings: [5, 6, 7, 9]:FeatureEnvy: CreateUsers#change refers to 't' more than self (maybe move it to another class?) [https://github.com/troessner/reek/blob/v6.0.0/docs/Feature-Envy.md] [4]:UncommunicativeVariableName: CreateUsers#change has the variable name 't' [https://github.com/troessner/reek/blob/v6.0.0/docs/Uncommunicative-Variable-Name.md] 15 total warnings

We reduced our total reek warning from 37 to 15. We added descriptive comments to the controller, helper, and model methods to give an accurate description of what each one does.

Flog Results:
Our Flog results can be used to tell us how torturous our code is and how hard it could be to test. The higher the score the harder it will be to test our code.
Sprint 3-2 flog results:
 961.5: flog total
    9.6: flog/method average

  363.3: main#none
   21.9: it#renders attributes in <p>   ./spec/views/users/show.html.erb_spec.rb:12-16
   19.2: describe(PUT #update)::context(with valid params)::it#redirects to the user ./spec/controllers/users_controller_spec.rb:110-113
   18.3: describe(DELETE #destroy)::it#redirects to the users list ./spec/controllers/users_controller_spec.rb:134-137
   18.3: UsersController#create   ./app/controllers/users_controller.rb:26-35
   18.1: before#each   ./spec/views/users/show.html.erb_spec.rb:4-8
   18.1: describe(PUT #update)::context(with invalid params)::it(returns a success response (i.e. to display the 'edit' template))#returns a success response (i.e. to display the 'edit' template) ./spec/controllers/users_controller_spec.rb:118-121
   17.4: UsersController#update   ./app/controllers/users_controller.rb:42-49

17.3: describe(DELETE #destroy)::it#destroys the requested user
./spec/controllers/users_controller_spec.rb:127-131
15.9: describe(POST #create)::context(with valid params)::it#redirects to the created
user ./spec/controllers/users_controller_spec.rb:83-85
15.4: describe(GET #edit)::it#returns a success response
./spec/controllers/users_controller_spec.rb:68-71
15.4: describe(GET #show)::it#returns a success response
./spec/controllers/users_controller_spec.rb:53-56
15.2: describe(PUT #update)::context(with valid params)::it#updates the requested
user ./spec/controllers/users_controller_spec.rb:103-107
14.7: describe(POST #create)::context(with valid params)::it#creates a new User
./spec/controllers/users_controller_spec.rb:77-80

Sprint 4-2 flog results:
  966.5: flog total
   9.7: flog/method average

  368.7: main#none
  21.9: it#renders attributes in <p>   ./spec/views/users/show.html.erb_spec.rb:12-16
  19.2: describe(PUT #update)::context(with valid params)::it#redirects to the user
./spec/controllers/users_controller_spec.rb:110-113
  18.3: describe(DELETE #destroy)::it#redirects to the users list
./spec/controllers/users_controller_spec.rb:134-137
  18.3: UsersController#create   ./app/controllers/users_controller.rb:27-36
  18.1: before#each   ./spec/views/users/show.html.erb_spec.rb:4-8
  18.1: describe(PUT #update)::context(with invalid params)::it(returns a success
response (i.e. to display the 'edit' template))#returns a success response (i.e. to display
the 'edit' template) ./spec/controllers/users_controller_spec.rb:118-121
  17.4: UsersController#update   ./app/controllers/users_controller.rb:43-50
  17.3: describe(DELETE #destroy)::it#destroys the requested user
./spec/controllers/users_controller_spec.rb:127-131
  15.9: describe(POST #create)::context(with valid params)::it#redirects to the created
user ./spec/controllers/users_controller_spec.rb:83-85
  15.4: describe(GET #edit)::it#returns a success response
./spec/controllers/users_controller_spec.rb:68-71
  15.4: describe(GET #show)::it#returns a success response
./spec/controllers/users_controller_spec.rb:53-56
  15.2: describe(PUT #update)::context(with valid params)::it#updates the requested
user ./spec/controllers/users_controller_spec.rb:103-107

14.7: describe(POST #create)::context(with valid params)::it#creates a new User
./spec/controllers/users_controller_spec.rb:77-80

Our flog scores stayed relatively the same from sprint3-2 to sprint 4-2. We analyzed the warning generated by flog, and decided that there is nothing pressing for us to fix, and since our scores our well within the allowed range, we can focus on improving our other scores.

SimpleCov Results:
Our SimpleCov results show us our test coverage in our application. It will be able to show us which lines of code in our application were run by one or more tests.
Sprint 3-2 SimpleCov Results:

All Files (21.3% covered at 0.21 hits/line)

15 files in total.
108 relevant lines, 23 lines covered and 85 lines missed. (21.3%)

File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line
app/channels/application_cable/channel.rb	0.00 %	4	4	0	4	0.00
app/channels/application_cable/connection.rb	0.00 %	4	4	0	4	0.00
app/controllers/application_controller.rb	100.00 %	2	1	1	0	1.00
app/controllers/dog_friendly_controller.rb	0.00 %	10	7	0	7	0.00
app/controllers/logins_controller.rb	0.00 %	23	21	0	21	0.00
app/controllers/sessions_controller.rb	0.00 %	14	12	0	12	0.00
app/controllers/users_controller.rb	42.42 %	74	33	14	19	0.42
app/helpers/application_helper.rb	100.00 %	2	1	1	0	1.00
app/helpers/dog_friendly_helper.rb	100.00 %	2	1	1	0	1.00
app/helpers/test_helper.rb	100.00 %	2	1	1	0	1.00
app/helpers/users_helper.rb	100.00 %	2	1	1	0	1.00
app/jobs/application_job.rb	0.00 %	2	2	0	2	0.00
app/mailers/application_mailer.rb	0.00 %	16	12	0	12	0.00
app/models/application_record.rb	100.00 %	3	2	2	0	1.00
app/models/user.rb	33.33 %	12	6	2	4	0.33

Sprint 4-2 SimpleCov Results:

All Files (100.0% covered at 1.0 hits/line)

6 files in total.
8 relevant lines, **8** lines covered and **0** lines missed. (100.0%)

File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line
app/helpers/application_helper.rb	100.00 %	3	1	1	0	1.00
app/helpers/dog_friendly_helper.rb	100.00 %	3	1	1	0	1.00
app/helpers/test_helper.rb	100.00 %	3	1	1	0	1.00
app/helpers/users_helper.rb	100.00 %	3	1	1	0	1.00
app/models/application_record.rb	100.00 %	4	2	2	0	1.00
app/models/user.rb	100.00 %	6	2	2	0	1.00

Since sprint 3-2 we worked extensively to raise our percent coverage from the previous reported 21.3% to 100% code coverage. The steps that we took to achieve this were:

1. Removing the inclusion of mailers, jobs, controllers, and channel files. We felt that this was an appropriate action to take since we did not have any code in those files.
2. We rewrote the user.rb file and included tests for this file.