

# TEAM REPORT

Iteration 1

## Team 07

2019/03/22

**Members:**

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# 1.How to run the server

## Upon opening a new Codio project:

- git clone git@git.shefcompsci.org.uk:com1001-2018-19/team07/project.git
- bundle install
- cd project
- ruby head\_controller.rb

Open the Codio box's URL using "{word1}-{word2}-4567.codio.io"

User Login using:

- Email: test@gmail.com
- Password: test

Admin Login using:

- Email: admin@gmail.com
- Password: admin123

Admin Page search term for incoming tweets: #ise19team07

Tweet table, each tweet has a menu of 4 options:

1. Reply opens the tweet thread in a new window
2. Book autofill's the username into the booking form
  - ❖ Use the list on the right to determine car registrations, further authentication to be implemented
3. Warn and Barn are currently not connected as the rest of the page's functionality was priority

## 2. Story Cards and completion

Story cards were split up into three priority levels: MUST, SHOULD and COULD in descending priority. For the first iteration the MUST story cards were targeted.

MUST STORY CARDS	Verification	Finished?	Done by
As a customer, I can access a webpage with the details of the company to view what types of taxis are available e.g. minibus, standard etc.	Verify you can access the webpage and see what all the information is	Yes by <b>first iteration</b>	Joe Worley Callum Bailey
As a customer, I can create an account on the website, containing my Twitter handle and a personal password	Verify your account is added to the database, Check if the Handle is valid, + set password rules. Then create an account you can login later on.	Yes by <b>first iteration</b>	Joe Worley Callum Bailey
As a customer I can update my details via the website e.g. Twitter handle, email address, name and password	Verify the new details are valid and then updated in the database, Check the new email is valid, new password follows rules	Yes by <b>first iteration</b>	Joe Worley Callum Bailey
As a customer, I can view my previous rides, details and the costs via a section on the website	Verify the details of the previous ride are shown in a chronological, easily readable way	No by <b>first iteration</b>	Joe Worley Callum Bailey
As an admin, I can access a database on the back end which contains tables for cars, customer accounts, admin accounts, current journeys, previous journeys and misused accounts	Verify there is a fully normalised database containing the correct relationships and no repeat data, Verify admin queries are correctly linked to the database to allow reliable data transfer	Yes by <b>first iteration</b>	Joe Worley Callum Bailey
As an admin, I can view which cars are available at any given time, then change these around as required	Verify the details (status) of cars can be viewed only by an admin, and any changes/new cars are correctly communicated into	Yes by <b>first iteration</b>	Joe Worley Callum Bailey

MUST STORY CARDS	Verification	Finished?	Done by
	the database and stored		
As an admin, I will have my own account for the website, allowing me to access the taxi booking form and access customer details	Verify admin accounts are correctly created and stored, and they have the correct permissions to view the right areas of the website	Yes by <b>first Iteration</b>	Joe Worley Callum Bailey
As an admin, I can view any incoming tweets and book the taxi accordingly	Verify if an Admin can access the embedded twitter page	Yes by <b>first Iteration</b>	Joe Worley Callum Bailey
As a customer, I can send a tweet to the taxi company, containing the taxi type, locations of journey start and end, and any other specific details that may be necessary	Verify tweet appears in the feed	Yes by <b>first Iteration</b>	Joe Worley Callum Bailey
As a customer, I can cancel a taxi via a tweet, allowing the admin to free up the currently allocated vehicle	Verify the created journey is cancelled and the related taxi is made available, details should be discarded for cancellations	No by <b>first Iteration</b>	Joe Worley Callum Bailey
As an admin, I can reply to tweets to learn any further details that may be required, such as estimated time, or a more in depth location	Verify response tweets are correctly sent to users where required	Yes by <b>first Iteration</b>	Joe Worley Callum Bailey
As an admin, once I have booked a journey, I can respond to the customer, with confirmation details and the reg number of the allocated taxi	Verify the customer knows the details of the booking from the Admin	Yes by <b>first Iteration</b>	Joe Worley Callum Bailey

SHOULD STORY CARDS	Verification	Finished?	Done by
As a customer, I can view instructions of how to use the system, like how to structure a tweet and what information is necessary	Verify the instructions are clear so that a new user can work out how the system works.	Yes by <b>first Iteration</b>	Maxime Fontana Jooho Lee Joshua Robert Junfan Chen
As a customer, I can view other details about the service in the website, like rewards or benefits of an account.	Verify the website contains the list of benefits/rewards, and these are correctly updated as an admin changes them.	Yes by <b>first Iteration</b>	Maxime Fontana Jooho Lee Joshua Robert Junfan Chen
As an admin, I can view previous ride details, like the start/finish locations, taxi type and the final cost	Verify he can access the table in the database, and check if all the information is stored accordingly.		
As an admin, I can delete irrelevant tweets as they are received	Verify tweet is removed when deleted by the admin.		
As an admin, I can receive the final price of the ride and add this to the journey when it is archived.	*Verify if an admin can add this price. *Verify if the final price is stored in the database.		

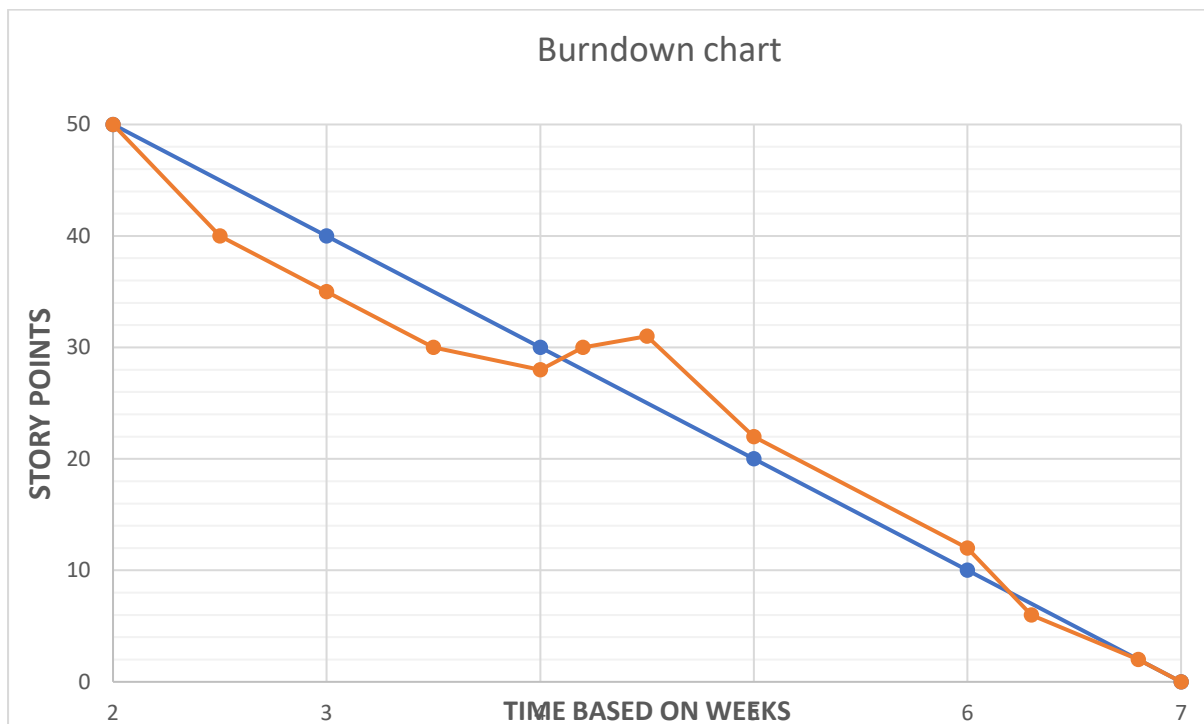
SHOULD STORY CARDS	Verification	Finished?	Done by
As an admin, i can maintain the database with a variety of options, such as adding/removing cars, unbanning users etc	*Verify queries are run correctly by checking the database		
As an admin, I can update my own details as and when required	verify the queries ruin correctly by checking database		

COULD STORY CARDS	VERIFICATION	Finished?	Done by
As a user i can fill out a contact form to ask any questions or alert admins to issues	verify email sends containing the required information	Yes by <b>first Iteration</b>	Maxime Fontana
A super admin account can be used to ad/remove admins as and when staff changes occur	*Verify only the super admin has access/permission to do this *verify queries run by checking database	No by <b>first Iteration</b>	
As an admin, I can use the Twitter account to tweet publicly about any offers or giveaways available	Verify the admin can access the Twitter account of the company, and verify the tweets are sent.	No by <b>first Iteration</b>	

COULD STORY CARDS	VERIFICATION	Finished?	Done by
As an admin, I can get all users who have responded to a giveaway and use a system to randomly pick a winner.	Verify all replies are stored. *Verify the generated random number for the winner.	No by <b>first iteration</b>	
<p>As an admin, I can apply temporary or permanent bans to Twitter accounts with multiple counts of misuse.</p> <p>Only “permanent” bans will be assigned, but there will be an option to unban users if required</p>	<p>*Verify these bans are tracked for temporary, and are marked permanent when persistent misuse occurs.</p> <p>*Ensure the banned users are correctly filtered from the live tweet feed viewed by the admin.</p>	No by <b>first iteration</b>	
As an admin, I can mark Twitter accounts misusing the twitter system to a table.	Verify the twitter handle is added to the database table.	No by <b>first iteration</b>	

COULD STORY CARDS	VERIFICATION	Finished?	Done by
<p>As a customer, I can view any special promotions available to my account, such as 10th ride free, or any discounts for certain periods of time.</p> <p>As a customer I can view when i may be eligible for a free ride (every 10)</p> <p>As a customer i can see public tweets from the company regarding offers, discounts, etc.</p> <p>Split to be more precise. The only one specific to being logged in is the free ride, all the rest are publicly shown via twitter</p>	<p>*Verify, once a user reaches a 10th ride, the correct offer is displayed in its own unique location.</p>	<p>No by <b>first iteration</b></p>	

### 3. Burndown Chart





# 5. Testing

Tests on this iteration were mostly done using cucumber to test the flow of the website, aside from features not testable with it. These automated tests were done mostly on the login and account related functions.

## Automated testing

### Overall Coverage

All Files (76.92% covered at 3.69 hits/line)

4 files in total. 169 relevant lines. 130 lines covered and 39 lines missed

Search: <input type="text"/>						
File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line
Q admin.rb	62.96 %	73	54	34	20	1.1
Q account.rb	77.78 %	106	72	56	16	3.5
Q error_handling.rb	85.71 %	11	7	6	1	0.9
Q head_controller.rb	94.44 %	67	36	34	2	8.5

Showing 1 to 4 of 4 entries

As shown in the coverage, most of the functionality across all parts of the website was tested. Two files had low coverage in the automated testing.

The first, admin.rb, had low coverage due to the difficulty of checking the specific area of the car table which showed which cars were currently busy or not. In addition, the functionality where clicking on the specific car's booking would fill out the form and ask for it to be completed was not tested due to the same difficulty of letting the cucumber test application know where said button was located.

```
1
if(params[:enterForm] == 'Complete Booking')
  @timeCheck = !@endTime.nil? && @endTime!=" "
  @posCheck = !@endPos.nil? && @endPos!=" "
  @priceCheck = !@price.nil? && @price!=" "
  if(@timeCheck && @posCheck && @priceCheck)
    @availUpdate = 0
    @updateQuery = 'UPDATE ride_history SET end_point = ?, end_time = ?, price = ? WHERE
twitter_handle = ? AND date = ? AND car_registration = ?'
    @database.execute @updateQuery, @endPos, @endTime, @price, @handle, @date, @reg

    @carUpdate = 'UPDATE car_details SET availability = ? WHERE car_registration = ?'
    @database.execute @carUpdate, @availUpdate, @reg
    flash[:success] = "Ride complete, details saved, car is now free to allocate."
  else
    flash[:error] = "Failed to submit booking, not all information was correct."
  end
end
```

The low coverage in account.rb is due to the difficulty with testing automated user information editing.

```
post '/changeinfo' do
  @firstname = params[:username].strip
  @email = params[:email].strip
  @password = params[:password].strip

  @firstname_ok = !@firstname.nil? && @firstname != ""
  @email_ok = !@email.nil? && @email =~ VALID_EMAIL_REGEX
  @password_ok = !@password.nil? && @password != ""
  @all_ok = @firstname_ok && @password_ok && @email_ok

  if @all_ok
    @query = 'UPDATE user_details
      SET twitter_handle = ?,email = ?,password = ?
      WHERE email = ?;'
    @database.execute @query, @firstname, @email, @password, session[:logged_email]
    redirect '/session_clear'
  else
    erb :accountInfo
  end
end
```

It should be noted, however, that this function works as intended when manually tested.

## Basic Navigation functionality

Run with “cucumber features/header.feature” in console

```
Feature: Header

#Different nav buttons (accountInfo) after login
Scenario: Header of Homepage after Login # features/header.feature:4
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should see "Account Info" # features/step_definitions/web_steps.rb:100

#Account Home button
Scenario: header link from Homepage to homepage # features/header.feature:12
  Given I am on the home page # features/step_definitions/web_steps.rb:12
  When I follow "Home" # features/step_definitions/web_steps.rb:26
  Then I should see "Booking Instructions" # features/step_definitions/web_steps.rb:100

#Account Info button
Scenario: header link from Homepage to accountInformation # features/header.feature:18
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  When I follow "Account Info" # features/step_definitions/web_steps.rb:26
  Then the "email" field within "form" should contain "test10@qq.com" # features/step_definitions/web_steps.rb:142
  Then the "password" field within "form" should contain "123123" # features/step_definitions/web_steps.rb:142
```

```

#Log Out button
Scenario: Header of Log out after Login # features/header.feature:28
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  When I follow "Log Out" # features/step_definitions/web_steps.rb:26
  Then I should see "Login" # features/step_definitions/web_steps.rb:100

#Login button
Scenario: Header of Login # features/header.feature:37
  Given I am on the home page # features/step_definitions/web_steps.rb:12
  When I follow "Login" # features/step_definitions/web_steps.rb:26
  Then I should see "Login" # features/step_definitions/web_steps.rb:100

#Contact us button
Scenario: Header of Contact Us # features/header.feature:43
  Given I am on the home page # features/step_definitions/web_steps.rb:12
  When I follow "Contact Us" # features/step_definitions/web_steps.rb:26
  Then I should see "Help us" # features/step_definitions/web_steps.rb:100

6 scenarios (6 passed)
27 steps (27 passed)
0m0.135s

```

## Remarks

Overall the tests show that the basic navigation using the header buttons work as intended, with each link correctly directing the user to the corresponding page. Login and Log out buttons are also shown only when needed; that is, while logged in the user would not see the login link and would see the log out link only, and vice versa.

## Login functionality testing

Run with “cucumber features/login.feature” in console

```

Feature: Login

Scenario: correct login userDetails # features/login.feature:4
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should see "You are logged in" # features/step_definitions/web_steps.rb:100

Scenario: correct login userDetails # features/login.feature:11
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should not be on the login page # features/step_definitions/web_steps.rb:197

Scenario: incorrect login userDetails # features/login.feature:18
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "nonsense" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "wrong password" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the login page # features/step_definitions/web_steps.rb:188

```

```

Scenario: Correct email, but wrong password # features/login.feature:25
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "wrong password" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the login page # features/step_definitions/web_steps.rb:188

```

```

Scenario: Trying to access login page while already logged in # features/login.feature:32
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Given I am on the home page # features/step_definitions/web_steps.rb:12
  When I go to the login page # features/step_definitions/web_steps.rb:16
  Then I should be on the home page # features/step_definitions/web_steps.rb:188

```

```

Scenario: Go to homepage without account # features/login.feature:41
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I press "Home without Login" within "section" # features/step_definitions/web_steps.rb:20
  Then I should be on the home page # features/step_definitions/web_steps.rb:188
    expected: "/home"
    got: "/login" (using ==) (RSpec::Expectations::ExpectationNotMetError)
    ./features/step_definitions/web_steps.rb:191:in `/(?:|I )should be on (.+)/'
    features/login.feature:44:in `Then I should be on the home page'

```

```

Scenario: Go to the register page # features/login.feature:46
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I press "Register" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the register page # features/step_definitions/web_steps.rb:188
    expected: "/create_account"
    got: "/login" (using ==) (RSpec::Expectations::ExpectationNotMetError)
    ./features/step_definitions/web_steps.rb:191:in `/(?:|I )should be on (.+)/'
    features/login.feature:49:in `Then I should be on the register page'

```

#### Failing Scenarios:

```

cucumber features/login.feature:41 # Scenario: Go to homepage without account
cucumber features/login.feature:46 # Scenario: Go to the register page

```

```

7 scenarios (2 failed, 5 passed)
33 steps (2 failed, 31 passed)
0m0.142s

```

#### Remarks

The failed tests here showed us that a few bugs exist. Namely, the current version of the website uses button elements that then direct the user to certain pages, but these methods of linking were not identifiable with cucumber. However, since in manual testing the buttons did take the user to the intended parts of the website, there should be no problems with the functionality of the website. However, it should be noted that as they use javascript they would break if the users disabled javascript on the client side. In any case, there is an argument to be made about whether they should be switched to <a> elements.

## Registration functionality testing

Run with "cucumber features/register.feature" in console

```
Feature: register

Scenario: Creating an account # features/register.feature:3
  Given I am on the register page # features/step_definitions/web_steps.rb:12
  When I fill in "userhandle" with "test03@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "email" with "test103@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I fill in "repeat_password" with "123123" # features/step_definitions/web_steps.rb:32
all ok
  When I press "submit" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the login page # features/step_definitions/web_steps.rb:188
    expected: "/login"
    got: "/makeaccount" (using ==) (RSpec::Expectations::ExpectationNotMetError)
    ./features/step_definitions/web_steps.rb:191:in `/(?:|I )should be on (.+)$/'
    features/register.feature:10:in `Then I should be on the login page'

Scenario: Returning to login page # features/register.feature:12
  Given I am on the register page # features/step_definitions/web_steps.rb:12
  When I press "login page" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the login page # features/step_definitions/web_steps.rb:188
    expected: "/login"
    got: "/create_account" (using ==) (RSpec::Expectations::ExpectationNotMetError)
    ./features/step_definitions/web_steps.rb:191:in `/(?:|I )should be on (.+)$/'
    features/register.feature:15:in `Then I should be on the login page'

Failing Scenarios:
cucumber features/register.feature:3 # Scenario: Creating an account
cucumber features/register.feature:12 # Scenario: Returning to login page

2 scenarios (2 failed)
10 steps (2 failed, 8 passed)
0m0.086s
```

## Remarks

Testing showed us that if redundant entries were put into the registration form it would cause the SQL query to not execute and cause a 404 error, so this will have to be fixed as soon as possible. The second failure in testing was, again, caused by the fact that the button used javascript to redirect the user and cucumber does not recognise this.

## Admin functionality testing

Run with “cucumber features/admin.feature” in console

```
Feature: Admin

Scenario: Logging in with admin details # features/admin.feature:3
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "admin@gmail.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "admin123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should see "Administrator" # features/step_definitions/web_steps.rb:100

Scenario: Accessing admin page # features/admin.feature:10
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "admin@gmail.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "admin123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Given I am on the home page # features/step_definitions/web_steps.rb:12
  When I follow "Administrator" # features/step_definitions/web_steps.rb:26
  Then I should see "Administrator System" # features/step_definitions/web_steps.rb:100

Scenario: Attempting admin access without proper credentials # features/admin.feature:19
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "test10@qq.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "123123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should not see "Administrator" # features/step_definitions/web_steps.rb:121
```

```
Scenario: Correct admin email, but wrong password # features/admin.feature:26
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "admin@gmail.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "wrong password" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Then I should be on the login page # features/step_definitions/web_steps.rb:188

Scenario: Admin searching for relevant tweets # features/admin.feature:33
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "admin@gmail.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "admin123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Given I am on the admin page # features/step_definitions/web_steps.rb:12
  When I fill in "search" with "ise19team07" # features/step_definitions/web_steps.rb:32
  When I press "Update" # features/step_definitions/web_steps.rb:20
  Then I should see "@ise19team07" # features/step_definitions/web_steps.rb:100
  expected to find text "@ise19team07" in "Home Log Out Administrator Contact Us Administrator System Search: User Tweet Tim
Options No tweets found. User Handle Car Registration Start Time End Time Date Start Location End Location Price Reg. Type Sea
s Available? TE57 C4R Standard 4 Free M1N1 V4N Minivan 7 Free DE1 UX3 Luxury 4 Busy Last updated 22-03-2019 13:35:07" (RSpec::E
pectations::ExpectationNotMetError)
./features/step_definitions/web_steps.rb:103:in `block (2 levels) in <top (required)>'
./features/step_definitions/web_steps.rb:7:in `with_scope'
./features/step_definitions/web_steps.rb:101:in `/^(?:[I ]should see "([^\"]*)"(?: within "([^\"]*)"?)?$/
features/admin.feature:41:in `Then I should see "@ise19team07"
```

```
Scenario: Admin booking form save # features/admin.feature:43
  Given I am on the login page # features/step_definitions/web_steps.rb:12
  When I fill in "useremail" with "admin@gmail.com" # features/step_definitions/web_steps.rb:32
  When I fill in "password" with "admin123" # features/step_definitions/web_steps.rb:32
  When I press "Login" within "form" # features/step_definitions/web_steps.rb:20
  Given I am on the admin page # features/step_definitions/web_steps.rb:12
  When I fill in "handleIn" with "user1" # features/step_definitions/web_steps.rb:32
  When I fill in "regIn" with "DE1 UX3" # features/step_definitions/web_steps.rb:32
  When I fill in "startTimeIn" with "01:00" # features/step_definitions/web_steps.rb:32
  When I fill in "dateIn" with "2019-03-22" # features/step_definitions/web_steps.rb:32
  When I fill in "startPosIn" with "here" # features/step_definitions/web_steps.rb:32
  When I fill in "endPosIn" with "there" # features/step_definitions/web_steps.rb:32
  When I press "Save Booking" # features/step_definitions/web_steps.rb:20
  Then I should see "Details saved, awaiting completion." # features/step_definitions/web_steps.rb:100
```

Failing Scenarios:

cucumber features/admin.feature:33 # Scenario: Admin searching for relevant tweets

6 scenarios (1 failed, 5 passed)

43 steps (1 failed, 42 passed)

0m0.544s

## Remarks

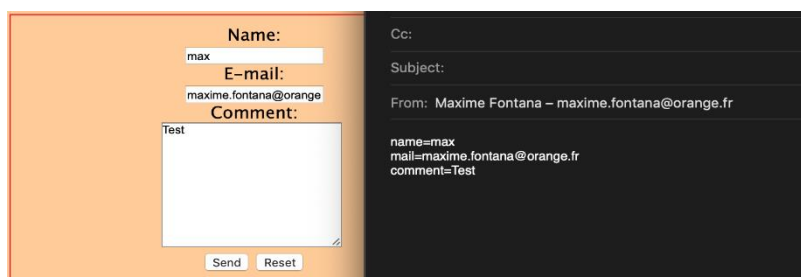
Tests show that administrators can correctly login with their information and can see a link on the home page that normal users cannot see and that this link correctly takes them to the admin functionality part of the website. Failures occurred for the search functionality which does not currently show tweets for @ise19team07, the twitter account used for this project, and which needs to be fixed. In addition, there are functions that could not be tested due to them revolving around a table without css ids to distinguish between the columns and rows. These work as intended manually but as such, are considered redundant in cucumber and were not able to be clicked on. Further feature file entries are needed for testing of the other admin functions as they are added.

## Contact functionality testing

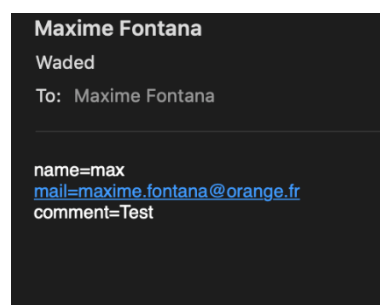
### Manual testing



A screenshot of a contact form on a website. The form is set against an orange background. It contains the following fields: 'Name:' with the value 'wad', 'E-mail:' with the value 'wad', and a 'Comment:' text area with the placeholder text 'Tell us how to improve our website...'. Below the text area are 'Send' and 'Reset' buttons. A tooltip 'Fill out this field' is visible over the E-mail field.



A screenshot showing the email content generated from the contact form. On the left, the form fields are shown with their values: 'Name: max', 'E-mail: maxime.fontana@orange', and 'Comment: Test'. On the right, the email content is displayed on a dark background, showing the 'From' address and the query string parameters: 'name=max', 'mail=maxime.fontana@orange.fr', and 'comment=Test'.



A screenshot of the final email received in an inbox. The email is from 'Maxime Fontana' with the subject 'Waded'. The 'To' field is 'Maxime Fontana'. The body of the email contains the query string parameters: 'name=max', 'mail=maxime.fontana@orange.fr' (which is a clickable link), and 'comment=Test'.

## Remarks

Tests show that users can correctly use the form which (currently) uses a mailto: action and opens the corresponding email client on the user's device with appropriate information supplied. As of now there are no good way to check these functions using cucumber as the email received would not be part of the website, so manual tests were done instead. It may be useful to make the form immediately send the message without a separate client program being opened as some devices do not have the capacity to handle mailto: links.