COM 1001 Team Software Project: Report

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System Instructions

Setup

Install

Create the codio box using the ruby on rails preset for the framework and clone the team repository while in your home directory, use the following command:

```
git clone https://git.shefcompsci.org.uk/com1001-2019-20/team04/project
```

Once you have your codio box set up and the repository cloned into your home directory navigate so that you are within the repository and ensure that you are on the latest version of the master branch. Then you will need to run the bundler as follows:

```
gem install bundler
bundle install
```

If this produces any errors then it is either a problem with the setup of the box in which case setting up from scratch may solve the issue. Check that your ruby version is 2.6.5 using the command:

```
ruby -v
```

Or it's an issue with the compatibility of the gems that are being bundled and they are no longer compatible, if this happens there's not a lot we can do. Simply try to install the gems separately and follow the errors as they usually contain a version fix to make things work.

Testing Setup

The system should now be set up and now we need to test that everything is functioning as is expected, use the following command to run the unit tests:

```
rake unittest
```

Then run the full system testing using the command:

```
cucumber
```

If any of these fail then the best course of action is to delete the box and try the setup again from scratch, the master branch is set up so that it will never fail these tests in the codio box environment.

Running the system

Use rake to run the system, currently there are 2 modes to do this in, you can either wipe the database and rebuild it with a fresh set of data before you launch or you can launch with the database as is. To rebuild the database use:

rake testrun

If you don't want to erase the data set then use:

rake run

System Pointers

User accounts

Overall there are 6 different user accounts which have the following usernames, passwords and roles:

Username	Password	Role
admin	admin	Admin of the system, has access to all the admin tools like verifying users and suspending them.
user	user	Standard verified user, can make bookmarks and add ratings.
role 1	role 1	Unverified user, cannot login until verified by the system admin.
role 2	role 2	Same as role 1.
role 3	role 3	Same as user.
role 4	role 4	Same as user.

Admin tools

All of the admin tools are accessible by heading to the Admin button at the top of the page while logged in as an admin user. When on this page you will be presented with the following options:

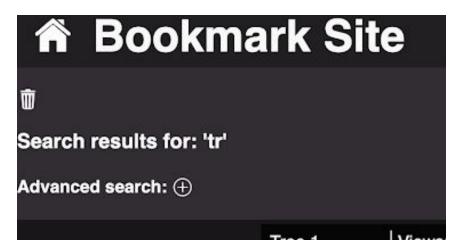
- Approve New Users Takes you to a list of all the unapproved accounts on the system, you can choose to verify users here and this will mean that they can log in and create bookmarks and add ratings.
- Reported Bookmarks From here you can see all the reports on different bookmarks, when you click view details you will be able to see the message about the report that the user has left, edit or delete the bookmark and also mark the report as resolved.

- View Suspended Accounts Will show all the suspended accounts with the option to reinstate each account.
- List of Verified users This is the list that lets you promote users to admin, reset their
 passwords or suspend each account. Will however not let you do so to an admin
 account as all admin accounts are trusted to demote themselves when needed.

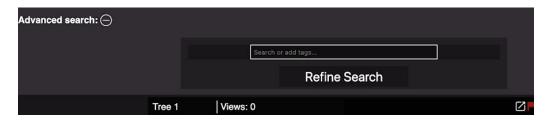
Searching

Don't miss the search bar in the header of the site that will search through all of the bookmarks in the database. However when you do this you will get the option to do an 'advanced search' which lets you see only bookmarks that need the original searched phrase and have the tag selected in them. This system is a little complicated at the moment so here's a quick guide to using it:

1. Click the + sign next to the advance search text.



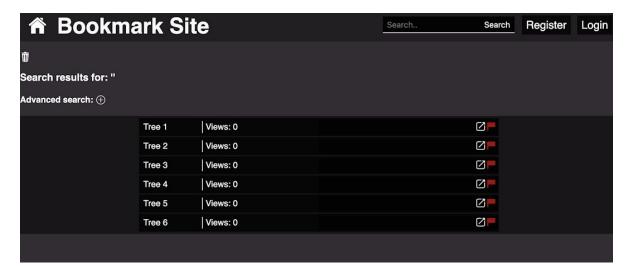
2. This should open the advanced search window, type the name of or the start of the name of the tag that you want to search for into the 'search or add tags...' textbox.



3. Select your tag using the checkbox next to it's name in the dropdown list that appears.



4. Click refine search and you should be on a page with only results that fit the query string and the tags you've set.



The add bookmarks page also uses this system for adding tags to each bookmark and the editing page for bookmarks, the only difference is if you want to add bookmarks then you type as if you're searching the name that you want to add and then click the add tag button and it will make a new tag for you.

Registration

Please note that there is a restriction on the type of password that you can use, to quote the site: '*Note: Password must be at least 8 characters long and contain a number and a special character (#?!@\$%^&*-_)' (The number of times people have gotten this wrong when testing has been astounding.)

User Stories

Initial Stories

Essential Features

- As a guest, I should be able to access the system without a login.
- As a guest, I should be able to click on and view a bookmark.
- As a guest, I am able to search through the bookmarks using tags.
- As a guest, I am able to search through the bookmarks using keywords.
- As an employee, I will need to register an account but I should be able to use all the guest features whilst waiting for admin approval.
- As an employee, I should login with a username and password.
- As an employee, I would want to add a bookmark.
- As an employee, I would want to tag a bookmark with keywords.
- As an employee, I would want to remove a bookmark created by me.
- As an employee, I would want to leave a comment on the bookmark.
- As an employee, I would want to rate a bookmark.
- As a guest, I am able to report a bookmark to the admin.
- As an employee, I would want to edit my bookmark.
- As an employee, I would want to add a bookmark to my favourites list.
- As a guest, I am able to supply an explanation of the error with my report.
- As an admin I should be able to view a list of unapproved user accounts and verify those that are employees at the company.
- As an admin I should be able to view a list of reported bookmarks sorted by date reported.
- As an admin I should be able to resolve reports on bookmarks by either deleting, editing or marking the report as resolved.
- As an admin I should be able to view a list of all the suspended user accounts.
- As an admin I should be able to suspend a users account so that they can no longer log in to the system.
- As an admin I should be able to delete a suspended user account so that it is no longer on the system.
- As an admin I should be able to reinstate a user's account once suspended.
- As an admin I should be able to promote another user to an admin.
- As an admin I should be able to demote my own account to a regular user.
- As an admin I should be able to reset the password of any user.
- As an admin I want users making accounts to use sufficiently secure passwords.

Non-essential Features

- As a guest, I am able to sort search results by date created.
- As a guest, I am able to sort search results by their rating.
- As a guest, I am able to sort a search result by how frequently used.
- As an admin I should be able to view a list of verified users.

- As an admin I should be able to sort the list of verified users by name.
- As an admin I should be able to sort the list of verified users by date created.
- As an admin I should be able to view a specific user's edit history.
- As an admin I should be able to view the edit history of a specific bookmark.
- As an employee, I would want to sort my favourites list of bookmarks into folders.
- As an employee, I would want to be able to see my viewing history.
- As an admin, I should be able to sort the reported bookmarks by category.
- As an employee, I should be restricted in the number of tags I can assign to a single bookmark.
- As an employee, I should have my department details on my account.
- As an employee, When i make a bookmark my departmental details should automatically be tagged to the bookmark.
- As an employee, I can restore recently deleted bookmarks.
- As an employee, I can make private bookmarks which can only be seen by myself, and selected people.

Final Stories

The edits here are marked with green to indicate an addition and red with strikethrough to indicate a deletion.

Essential Features

- As a guest, I should be able to access the system without a login.
- As a guest, I should be able to click on and view a bookmark.
- As a guest, I am able to search through the bookmarks using tags.
- As a guest, I am able to search through the bookmarks titles using keywords.
- As an employee, I will need to register an account but I should be able to use all the guest features whilst waiting for an admin to verify my account admin approval.
- As an employee, I should login with an email username and password.
- As an employee, I would want to add a bookmark.
- As an employee, I would want to tag a bookmark with keywords.
- As an employee, I would want to remove a bookmark created by me.
- As an employee, I would want to leave a comment on a the bookmark.
- As an employee, I would want to rate a bookmark.
- As a guest, I am able to report a bookmark to the admin.
- As an employee, I would want to edit my bookmark.
- As an employee, I would want to add a bookmark to my favourites list.
- As a guest, I am able to supply an explanation of the error with my report.
- As an admin I should be able to view a list of unapproved user accounts and verify those that are employees at the company.
- As an admin I should be able to view a list of reported bookmarks sorted by date reported.
- As an admin I should be able to resolve reports on bookmarks by either deleting, editing or marking the report as resolved.
- As an admin I should be able to view a list of all the suspended user accounts.

- As an admin I should be able to suspend a users account so that they can no longer log in to the system.
- As an admin I should be able to delete a suspended user account so that it is no longer on the system.
- As an admin I should be able to reinstate a user's account once suspended.
- As an admin I should be able to promote another user to an admin.
- As an admin I should be able to demote my own account to a regular user.
- As an admin I should be able to reset the password of any user.
- As an admin I want users making accounts to use sufficiently secure passwords.

Non-essential Features

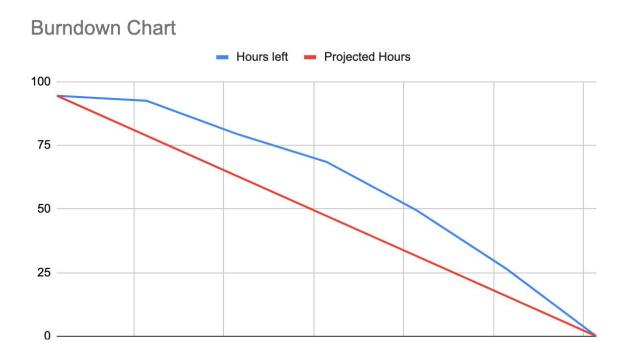
- As a guest, I am able to sort search results by date created.
- As a guest, I am able to sort search results by their rating.
- As a guest, I am able to sort a search result by how frequently used.
- As an admin I should be able to view a list of verified users.
- As an admin I should be able to sort the list of verified users by name.
- As an admin I should be able to sort the list of verified users by date created.
- As an admin I should be able to view a specific user's edit history.
- As an admin I should be able to view the edit history of a specific bookmark.
- As an employee, I would want to sort my favourites list of bookmarks into folders.
- As an employee, I would want to be able to see my viewing history.
- As an admin, I should be able to sort the reported bookmarks by category.
- As an employee, I should be restricted in the number of tags I can assign to a single bookmark.
- As an employee, I should have my department details on my account.
- As an employee, When i make a bookmark my departmental details should automatically be tagged to the bookmark.
- As an employee, I can restore recently deleted bookmarks.
- As an employee, I can make private bookmarks which can only be seen by myself, and selected people.

Explanation of changes

Not a lot actually changed in our stories from the initial set that we pitched to the clients at the end of the last meeting, most of the changes listed above are to do with specificity of the system like the admin account approval story. One change did occur on review of the client meetings we changed the login from a user name to an email as it makes things a lot easier and from what we were given having an email as a login name shouldn't be a problem for the client and may improve how well employees retain their 'usernames' if they are their emails.

Iteration Breakdown

Graph 1 - This shows the graph for both iterations this was done as the second iteration was only the last data point on this graph as the progress was marked off once every 2 weeks, thus the second iteration does not reveal anything useful about the progress in this period.



Iteration 1

Planned Stories

- As a guest, I should be able to access the system without a login.
- As a guest, I should be able to click on and view a bookmark.
- As a guest, I am able to search through the bookmarks using tags.
- As a guest, I am able to search through the bookmark titles using keywords.
- As an employee, I will need to register an account but I should be able to use all the guest features whilst waiting for an admin to verify my account.
- As an employee, I should login with an email and password.
- As an employee, I would want to add a bookmark.
- As an employee, I would want to tag a bookmark with keywords.
- As an employee, I would want to remove a bookmark created by me.
- As a guest, I am able to report a bookmark to the admin.
- As an employee, I would want to edit my bookmark.
- As a guest, I am able to supply an explanation of the error with my report.
- As an admin I should be able to view a list of reported bookmarks sorted by date reported.
- As an admin I should be able to resolve reports on bookmarks by either deleting, editing or marking the report as resolved.

- As an admin I should be able to view a list of all the suspended user accounts.
- As an admin I should be able to reinstate a user's account once suspended.
- As an admin I should be able to promote another user to an admin.
- As an admin I should be able to demote my own account to a regular user.
- As an admin I should be able to reset the password of any user.
- As an admin I want users making accounts to use sufficiently secure passwords.

Work Breakdown

Zbigniew Lisak and Jacob Crawley took on most of the development of the meat of the system for these stories, this includes things like making the class that deals with the database, adding all the sites to the controller and dropping the outputs into the correct points using the templated HTML.

Samuel Kent handled almost all of the testing for this iteration as well as designing the HTML and CSS for each of the stories. PingChen Lin also assisted with the design of the HTML. A little design for the database was done by Modestas Talanskas, Yi Jing Ng and Yao Li on the database.

Iteration 2

The second iteration had a much smaller time frame and so is considerably less packed with things to do. That is why there are a lot less items in this section.

Planned Stories

- As an employee, I would want to leave a comment on a bookmark.
- As an employee, I would want to rate a bookmark.
- As an employee, I would want to add a bookmark to my favourites list.
- As an admin I should be able to view a list of unapproved user accounts and verify those that are employees at the company.
- As an admin I should be able to suspend a users account so that they can no longer log in to the system.
- As an admin I should be able to delete a suspended user account so that it is no longer on the system.

Work Breakdown

Samuel Kent, Zbigniew Lisak, Jacob Crawley handled different stories in this iteration with each person testing and merging their own branches using the assign feature on gitlab to ensure that someone else checked each branch before it was merged. PingChen Lin also did a little work on this iteration making the profile page for the user.

Testing

Testing Strategy

Each branch has been tested using the automated system testing and the unit testing before being merged into the development, this means that we can always check if we have broken the system by running 'cucumber' or 'rake unittest'.

features/add_new_bookmark.feature:2

Cucumber Tests

This is the full output of the final cucumber test:

Feature: Adding bookmarks

Scenario: Adding bookmarks as default user

```
# features/step_definitions/database_steps.rb:13
 Given database is reset
 Given I am on the homepage
                                                             # features/step_definitions/web_steps.rb:12
 When I follow "Login" within "header"
                                                              # features/step_definitions/web_steps.rb:26
                                                                 # features/step_definitions/web_steps.rb:38
When I fill in "user-email" with "user" within "section"
When I fill in "user-password" with "user" within "section"
                                                                    # features/step_definitions/web_steps.rb:38
                                                                # features/step_definitions/web_steps.rb:20
 When I press "submit-login" within "section"
 Then I should be on the homepage
                                                               # features/step_definitions/web_steps.rb:194
 When I follow "Create Bookmark" within "header"
                                                                    # features/step_definitions/web_steps.rb:26
When I fill in "bookmark-title" with "BBC" within "main"
                                                                   # features/step_definitions/web_steps.rb:38
 When I fill in "bookmark-link" with "bbc.co.uk" within "main"
                                                                     # features/step_definitions/web_steps.rb:38
 When I fill in "bookmark-description" with "Link to the BBC." within "main" # features/step_definitions/web_steps.rb:38
 When I click "#create-bookmark" within "main"
                                                                  # features/step_definitions/web_steps.rb:32
 Then I should see "Bookmark added" within "main"
                                                                     # features/step_definitions/web_steps.rb:106
 When I follow "Go back" within "main'
                                                               # features/step definitions/web steps.rb:26
 Then I should see "BBC" within "main"
                                                               # features/step_definitions/web_steps.rb:106
When I follow "BBC" within "main"
                                                              # features/step definitions/web steps.rb:26
 Then I should see "BBC" within ".bookmark-title"
                                                                   # features/step_definitions/web_steps.rb:106
 Then I should see "Link to the BBC." within ".bookmark-description"
                                                                          # features/step_definitions/web_steps.rb:106
 Then I should see "by Testing User" within ".detailed-info"
                                                                     # features/step_definitions/web_steps.rb:106
 Then I should see "Rating: 0/5 (0)" within ".rating"
                                                                 # features/step_definitions/web_steps.rb:106
Scenario: Try adding the same exact bookmark again
                                                                      # features/add_new_bookmark.feature:24
 Given I am on the homepage
                                                             # features/step_definitions/web_steps.rb:12
 When I follow "Login" within "header"
                                                              # features/step_definitions/web_steps.rb:26
 When I fill in "user-email" with "user" within "section"
                                                                 # features/step_definitions/web_steps.rb:38
 When I fill in "user-password" with "user" within "section"
                                                                    # features/step_definitions/web_steps.rb:38
                                                                # features/step_definitions/web_steps.rb:20
When I press "submit-login" within "section"
 Then I should be on the homepage
                                                               # features/step_definitions/web_steps.rb:194
 When I follow "Create Bookmark" within "header"
                                                                    # features/step_definitions/web_steps.rb:26
When I fill in "bookmark-title" with "BBC1" within "main"
                                                                    # features/step_definitions/web_steps.rb:38
 When I fill in "bookmark-link" with "bbc.co.uk" within "main"
                                                                     # features/step definitions/web steps.rb:38
 When I fill in "bookmark-description" with "Link to the BBC." within "main" # features/step_definitions/web_steps.rb:38
 When I click "#create-bookmark" within "main"
                                                                  # features/step definitions/web steps.rb:32
 Then I should see "Bookmark added" within "main"
                                                                     # features/step_definitions/web_steps.rb:106
                                                               # features/step_definitions/web_steps.rb:26
When I follow "Go back" within "main"
 Then I should see "BBC1" within "main"
                                                                # features/step_definitions/web_steps.rb:106
 When I follow "BBC1" within "main"
                                                              # features/step_definitions/web_steps.rb:26
Then I should see "BBC1" within ".bookmark-title"
                                                                   # features/step_definitions/web_steps.rb:106
 Then I should see "Link to the BBC." within ".bookmark-description"
                                                                          # features/step definitions/web steps.rb:106
 Then I should see "by Testing User" within ".detailed-info"
                                                                     # features/step_definitions/web_steps.rb:106
 Then I should see "Rating: 0/5 (0)" within ".rating"
                                                                 # features/step definitions/web steps.rb:106
Scenario: Add the same bookmark as an Admin
                                                                     # features/add_new_bookmark.feature:45
 Given I am on the homepage
                                                             # features/step_definitions/web_steps.rb:12
When I follow "Login" within "header"
                                                              # features/step_definitions/web_steps.rb:26
When I fill in "user-email" with "admin" within "section"
                                                                   # features/step_definitions/web_steps.rb:38
When I fill in "user-password" with "admin" within "section"
                                                                     # features/step_definitions/web_steps.rb:38
When I press "submit-login" within "section"
                                                                # features/step definitions/web steps.rb:20
```

Then I should be on the homepage # features/step_definitions/web_steps.rb:194 When I follow "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "bookmark-title" with "BBC2" within "main" # features/step_definitions/web_steps.rb:38 When I fill in "bookmark-link" with "bbc.co.uk" within "main" # features/step_definitions/web_steps.rb:38 When I fill in "bookmark-description" with "Link to the BBC." within "main" # features/step definitions/web steps.rb:38 # features/step_definitions/web_steps.rb:32 When I click "#create-bookmark" within "main" Then I should see "Bookmark added" within "main" # features/step definitions/web steps.rb:106 # features/step_definitions/web_steps.rb:26 When I follow "Go back" within "main" Then I should see "BBC2" within "main" # features/step definitions/web steps.rb:106 # features/step_definitions/web_steps.rb:26 When I follow "BBC2" within "main" Then I should see "BBC2" within ".bookmark-title" # features/step definitions/web steps.rb:106 Then I should see "Link to the BBC." within ".bookmark-description" # features/step_definitions/web_steps.rb:106 Then I should see "by Testing Admin" within ".detailed-info" # features/step_definitions/web_steps.rb:106 Then I should see "Rating: 0/5 (0)" within ".rating" # features/step_definitions/web_steps.rb:106 Feature: Approve new users Scenario: Admin approves role 1 # features/approve_new_users.feature:2 Given I am on the homepage # features/step_definitions/web_steps.rb:12 # features/step_definitions/web_steps.rb:26 When I follow "Login" within "header" When I fill in "user-email" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 # features/step_definitions/web_steps.rb:194 Then I should be on the homepage When I follow "Admin" within "header" # features/step_definitions/web_steps.rb:26 Then I should see "Approve New Users" # features/step definitions/web steps.rb:106 # features/step_definitions/web_steps.rb:26 When I follow "Approve New Users" Then I should see "Testing Unapproved User" # features/step_definitions/web_steps.rb:106 # features/step_definitions/web_steps.rb:106 Then I should see "role1" Then I should see "Customer Service" Then I should see "TestingRole2" # features/step_definitions/web_steps.rb:106 # features/step_definitions/web_steps.rb:106 Then I should see "role2" # features/step_definitions/web_steps.rb:106 Then I should see "Customer Service" # features/step_definitions/web_steps.rb:106 When I click "#verify-user3" # features/step_definitions/web_steps.rb:32 Then I should see "Are you sure you verify this user and grant them access to the system?" # features/step_definitions/web_steps.rb:106 When I press "Yes" within "main"
Then I should see "Verification successful" # features/step_definitions/web_steps.rb:20 # features/step_definitions/web_steps.rb:106 When I follow "Go back" # features/step_definitions/web_steps.rb:26 # features/step_definitions/web_steps.rb:194 Then I should be on the homepage # features/step_definitions/web_steps.rb:26 When I follow "Admin" within "header" Then I should see "Approve New Users" # features/step_definitions/web_steps.rb:106 When I follow "Approve New Users" # features/step definitions/web steps.rb:26 # features/step_definitions/web_steps.rb:127 Then I should not see "Testing Unapproved User" Then I should not see "role1" # features/step_definitions/web_steps.rb:127 Then I should see "TestingRole2" # features/step_definitions/web_steps.rb:106 Then I should see "role2" # features/step_definitions/web_steps.rb:106 # features/step_definitions/web_steps.rb:106 Then I should see "Customer Service" Scenario: Admin approves role 2 # features/approve_new_users.feature:33 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "admin" within "section" # features/step_definitions/web_steps.rb:38 # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "admin" within "section" When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 # features/step_definitions/web_steps.rb:194 Then I should be on the homepage When I follow "Admin" within "header" # features/step_definitions/web_steps.rb:26 # features/step definitions/web steps.rb:106 Then I should see "Approve New Users" # features/step_definitions/web_steps.rb:26 When I follow "Approve New Users" Then I should see "TestingRole2" # features/step definitions/web steps.rb:106 Then I should see "role2" # features/step_definitions/web_steps.rb:106 Then I should see "Customer Service" # features/step_definitions/web_steps.rb:106 When I click "#verify-user4" # features/step_definitions/web_steps.rb:32 Then I should see "Are you sure you verify this user and grant them access to the system?" # features/step_definitions/web_steps.rb:106 When I press "Yes" within "main" # features/step definitions/web steps.rb:20 # features/step_definitions/web_steps.rb:106 Then I should see "Verification successful" When I follow "Go back" # features/step definitions/web steps.rb:26 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 When I follow "Admin" within "header" # features/step definitions/web steps.rb:26 Then I should see "Approve New Users" # features/step_definitions/web_steps.rb:106

features/step_definitions/web_steps.rb:26 When I follow "Approve New Users" Then I should not see "Testing Unapproved User" # features/step_definitions/web_steps.rb:127 # features/step definitions/web steps.rb:127 Then I should not see "role1" Then I should not see "TestingRole2" # features/step_definitions/web_steps.rb:127 Then I should not see "role2" # features/step definitions/web steps.rb:127 Then I should not see "Customer Service" # features/step_definitions/web_steps.rb:127 Feature: Deleting bookmarks. Scenario: Admin deleting their own bookmarks backs out at confirmation. # features/delete_bookmark.feature:2 Given database is reset # features/step definitions/database steps.rb:13 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 When I click "#delete-button-3" within "main" # features/step_definitions/web_steps.rb:32 Then I should see "Are you sure you want to delete this bookmark?" # features/step_definitions/web_steps.rb:106 When I click "#back-button" # features/step definitions/web steps.rb:32 Then I should see "Youtube Video" # features/step_definitions/web_steps.rb:106 Scenario: User deleting their own bookmarks. # features/delete_bookmark.feature:15 Given database is reset # features/step definitions/database steps.rb:13 # features/step_definitions/web_steps.rb:12 Given I am on the homepage # features/step_definitions/web_steps.rb:26 When I follow "Login" within "header" When I fill in "user-email" with "user" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "user" within "section" # features/step definitions/web steps.rb:38 # features/step_definitions/web_steps.rb:20 When I press "submit-login" within "section" Then I should be on the homepage # features/step_definitions/web_steps.rb:194 When I click "#delete-button-7" within "main" # features/step_definitions/web_steps.rb:32 Then I should see "Are you sure you want to delete this bookmark?" # features/step_definitions/web_steps.rb:106 # features/step_definitions/web_steps.rb:32 When I click "#delete-bookmark" Then I should see "Bookmark successfully deleted" # features/step_definitions/web_steps.rb:106 # features/step_definitions/web_steps.rb:32 When I click "#back-button" Then I should not see "Tree 1" # features/step_definitions/web_steps.rb:127 Scenario: User tries to delete admin bookmark # features/delete_bookmark.feature:30 Given database is reset # features/step_definitions/database_steps.rb:13 # features/step_definitions/web_steps.rb:12 Given I am on the homepage When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "user" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "user" within "section" # features/step definitions/web steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 Then I should not see "#delete-button-1" within "main" # features/step_definitions/web_steps.rb:127 Scenario: Admin tries to delete user bookmark # features/delete_bookmark.feature:40 Given database is reset # features/step_definitions/database_steps.rb:13 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 Then I should not see "#delete-button-8" within "main" # features/step_definitions/web_steps.rb:127 Feature: Editing Bookmarks Scenario: Admin editing their own bookmarks. # features/edit bookmark.feature:2 Given database is reset features/step definitions/database steps.rb:13 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step definitions/web steps.rb:26 When I fill in "user-email" with "admin" within "section" # features/step definitions/web steps.rb:38 When I fill in "user-password" with "admin" within "section" # features/step definitions/web steps.rb:38 When I press "submit-login" within "section"

features/step definitions/web steps.rb:20

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Then I should be on the homepage
features/step definitions/web steps.rb:194
  When I click "#edit-button-1" within "main"
features/step_definitions/web_steps.rb:32
  Then I should see "Edit Google bookmark"
features/step_definitions/web_steps.rb:106
  When I fill in "bookmark-title" with "ELGOOG" within "main"
features/step_definitions/web_steps.rb:38
  When I fill in "bookmark-link" with "elgoog.com" within "main"
features/step_definitions/web_steps.rb:38
  When I fill in "bookmark-description" with "elgoog enigne horaes ralupop os ton eht ot knil" within "main" #
features/step_definitions/web_steps.rb:38
  When I click "#edit-bookmark" within "main"
features/step_definitions/web_steps.rb:32
  Given I am on the homepage
                                                                                  # features/step_definitions/web_steps.rb:12
  Then I should see "ELGOOG"
features/step_definitions/web_steps.rb:106
  When I follow "ELGOOG" within "main"
                                                                                      #
features/step definitions/web steps.rb:26
  Then I should see "elgoog enigne hcraes ralupop os ton eht ot knil" within ".bookmark-description"
features/step_definitions/web_steps.rb:106
  Then I should see "by Testing Admin" within ".detailed-info"
features/step_definitions/web_steps.rb:106
  Then I should see "Rating: 2.5/5 (4)" within ".rating"
features/step_definitions/web_steps.rb:106
  Then I should see "#Search engine"
                                                                                   #
features/step_definitions/web_steps.rb:106
 Scenario: User editing their own bookmarks.
                                                                                      # features/edit_bookmark.feature:25
  Given database is reset
features/step_definitions/database_steps.rb:13
  Given I am on the homepage
                                                                                  # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
                                                                                   # features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "user" within "section"
                                                                                      #
features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "user" within "section"
                                                                                        #
features/step_definitions/web_steps.rb:38
  When I press "submit-login" within "section"
                                                                                     #
features/step_definitions/web_steps.rb:20
  Then I should be on the homepage
features/step definitions/web steps.rb:194
  When I click "#edit-button-7" within "main"
features/step definitions/web steps.rb:32
  Then I should see "Edit Tree 1 bookmark"
features/step_definitions/web_steps.rb:106
  When I fill in "bookmark-title" with "ELGOOG" within "main"
features/step_definitions/web_steps.rb:38
  When I fill in "bookmark-link" with "elgoog.com" within "main"
features/step_definitions/web_steps.rb:38
  When I fill in "bookmark-description" with "elgoog enigne hcraes ralupop os ton eht ot knil" within "main" #
features/step_definitions/web_steps.rb:38
  When I click "#edit-bookmark" within "main"
features/step_definitions/web_steps.rb:32
  Given I am on the homepage
                                                                                  # features/step_definitions/web_steps.rb:12
  Then I should see "ELGOOG"
                                                                                   #
features/step definitions/web steps.rb:106
                                                                                     #
  When I follow "ELGOOG" within "main"
features/step definitions/web steps.rb:26
  Then I should see "elgoog enigne hcraes ralupop os ton eht ot knil" within ".bookmark-description"
features/step definitions/web steps.rb:106
  Then I should see "by Testing User" within ".detailed-info"
features/step definitions/web steps.rb:106
  Then I should see "Rating: 3.5/5 (2)" within ".rating"
                                                                                      #
features/step definitions/web steps.rb:106
  Then I should see "#Tree"
                                                                               # features/step_definitions/web_steps.rb:106
Feature: Employee login
 Scenario: login as default user
                                                  # features/employee_login.feature:2
  Given database is reset
                                                 # features/step definitions/database steps.rb:13
  Given I am on the homepage
                                                    # features/step_definitions/web_steps.rb:12
```

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When I follow "Login" within "header"
                                                      # features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "user" within "section"
                                                         # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "user" within "section" # features/step definitions/web steps.rb:38
                                                        # features/step_definitions/web_steps.rb:20
  When I press "submit-login" within "section"
  Then I should be on the homepage
                                                       # features/step definitions/web steps.rb:194
  Then I should see "Profile" within "header"
                                                       # features/step_definitions/web_steps.rb:106
  Then I should see "Create Bookmark" within "header"
                                                             # features/step definitions/web steps.rb:106
  Then I should not see "Login" within "header"
                                                         # features/step_definitions/web_steps.rb:127
  Then I should not see "Register" within "header"
                                                          # features/step definitions/web steps.rb:127
 Scenario: login as role1 user
                                                                                 # features/employee login.feature:15
                                                                                   # features/step_definitions/web_steps.rb:12
  Given I am on the homepage
  When I follow "Login" within "header"
features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "role1" within "section"
                                                                                        #
features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "role1" within "section"
features/step_definitions/web_steps.rb:38
  When I press "submit-login" within "section"
features/step definitions/web steps.rb:20
  Then I should see "Your account has not been verified yet, but you can still view bookmarks without a login" #
features/step_definitions/web_steps.rb:106
 Scenario: login as role2 user
                                                                                 # features/employee login.feature:23
  Given I am on the homepage
                                                                                    # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "role2" within "section"
features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "role2" within "section"
features/step_definitions/web_steps.rb:38
  When I press "submit-login" within "section"
features/step_definitions/web_steps.rb:20
  Then I should see "Your account has not been verified yet, but you can still view bookmarks without a login" #
features/step_definitions/web_steps.rb:106
                                                   # features/employee_login.feature:31
 Scenario: login as role3 user
  Given I am on the homepage
                                                     # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
                                                      # features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "role3" within "section"
                                                          # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "role3" within "section" # features/step definitions/web steps.rb:38
                                                        # features/step_definitions/web_steps.rb:20
  When I press "submit-login" within "section"
  Then I should be on the homepage
                                                       # features/step_definitions/web_steps.rb:194
  Then I should see "Profile" within "header"
                                                        # features/step_definitions/web_steps.rb:106
  Then I should see "Create Bookmark" within "header"
                                                              # features/step_definitions/web_steps.rb:106
  Then I should not see "Login" within "header"
                                                          # features/step_definitions/web_steps.rb:127
  Then I should not see "Register" within "header"
                                                           # features/step_definitions/web_steps.rb:127
 Scenario: login as role4 user
                                                   # features/employee_login.feature:43
  Given I am on the homepage
                                                      # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
                                                      # features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "role4" within "section"
                                                          # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "role4" within "section" # features/step_definitions/web_steps.rb:38
  When I press "submit-login" within "section"
                                                        # features/step_definitions/web_steps.rb:20
  Then I should be on the homepage
                                                       # features/step_definitions/web_steps.rb:194
  Then I should see "Profile" within "header"
                                                        # features/step_definitions/web_steps.rb:106
  Then I should see "Create Bookmark" within "header"
                                                              # features/step_definitions/web_steps.rb:106
  Then I should not see "Login" within "header"
                                                          # features/step definitions/web steps.rb:127
  Then I should not see "Register" within "header"
                                                          # features/step_definitions/web_steps.rb:127
Feature: Logout
 Scenario: Logout of default user
                                                    # features/logout.feature:2
  Given database is reset
                                                 # features/step definitions/database steps.rb:13
  Given I am on the homepage
                                                     # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
                                                      # features/step definitions/web steps.rb:26
  When I fill in "user-email" with "user" within "section"
                                                        # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "user" within "section" # features/step definitions/web steps.rb:38
  When I press "submit-login" within "section"
                                                        # features/step_definitions/web_steps.rb:20
  Then I should be on the homepage
                                                       # features/step_definitions/web_steps.rb:194
  Then I should see "Profile" within "header"
                                                       # features/step_definitions/web_steps.rb:106
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Then I should see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:106 Then I should not see "Login" within "header" # features/step definitions/web steps.rb:127 Then I should not see "Register" within "header" # features/step definitions/web steps.rb:127 When I follow "Log Out" within "header" # features/step_definitions/web_steps.rb:26 Then I should not see "Profile" within "header" # features/step definitions/web steps.rb:127 Then I should not see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:127 Then I should see "Login" within "header" # features/step definitions/web steps.rb:106 Then I should see "Register" within "header" # features/step_definitions/web_steps.rb:106 Scenario: Logout of default user then login again # features/logout.feature:20 Given database is reset # features/step definitions/database steps.rb:13 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "user" within "section" # features/step_definitions/web_steps.rb:38 When I fill in "user-password" with "user" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 Then I should see "Profile" within "header" # features/step_definitions/web_steps.rb:106 Then I should see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:106 Then I should not see "Login" within "header" # features/step definitions/web steps.rb:127 Then I should not see "Register" within "header" # features/step_definitions/web_steps.rb:127 When I follow "Log Out" within "header" # features/step_definitions/web_steps.rb:26 Then I should not see "Profile" within "header" # features/step_definitions/web_steps.rb:127 Then I should not see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:127 # features/step_definitions/web_steps.rb:106 Then I should see "Login" within "header" Then I should see "Register" within "header" # features/step definitions/web steps.rb:106 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "user" within "section" # features/step definitions/web steps.rb:38 When I fill in "user-password" with "user" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step_definitions/web_steps.rb:20 # features/step_definitions/web_steps.rb:194 Then I should be on the homepage Then I should see "Profile" within "header" # features/step_definitions/web_steps.rb:106 Then I should see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:106 Then I should not see "Login" within "header" # features/step_definitions/web_steps.rb:127 Then I should not see "Register" within "header" # features/step_definitions/web_steps.rb:127 Scenario: Logout of admin # features/logout.feature:47 Given database is reset # features/step_definitions/database_steps.rb:13 Given I am on the homepage # features/step_definitions/web_steps.rb:12 When I follow "Login" within "header" # features/step_definitions/web_steps.rb:26 When I fill in "user-email" with "admin" within "section" # features/step definitions/web steps.rb:38 When I fill in "user-password" with "admin" within "section" # features/step_definitions/web_steps.rb:38 When I press "submit-login" within "section" # features/step definitions/web steps.rb:20 Then I should be on the homepage # features/step_definitions/web_steps.rb:194 Then I should see "Profile" within "header" # features/step_definitions/web_steps.rb:106 Then I should see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:106 Then I should not see "Login" within "header" # features/step_definitions/web_steps.rb:127 Then I should not see "Register" within "header" # features/step_definitions/web_steps.rb:127 When I follow "Log Out" within "header" # features/step_definitions/web_steps.rb:26 Then I should not see "Profile" within "header" # features/step_definitions/web_steps.rb:127 Then I should not see "Create Bookmark" within "header" # features/step_definitions/web_steps.rb:127 Then I should see "Login" within "header" # features/step_definitions/web_steps.rb:106 Then I should see "Register" within "header" # features/step_definitions/web_steps.rb:106 Feature: register new user Scenario: register user with valid credentials. # features/register new user.feature:2 Given database is reset # features/step_definitions/database_steps.rb:13 Given I am on the homepage. # features/step definitions/web steps.rb:12 When I follow "Register" within "header" # features/step definitions/web steps.rb:26 When I fill in "display-name" with "Added By Testing User" within "section" # features/step definitions/web steps.rb:38 When I fill in "user-email" with "addnew@user.com" within "section" # features/step definitions/web steps.rb:38 When I fill in "confirm-user-email" with "addnew@user.com" within "section"

features/step definitions/web steps.rb:38

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# features/step definitions/web steps.rb:38
  When I fill in "confirm-user-password" with "NewUserPa55word!" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "department" with "Head Office" within "section"
# features/step_definitions/web_steps.rb:38
  When I press "register-user" within "section"
# features/step_definitions/web_steps.rb:20
  Then I should see "Thank you for registration in our system. Your aplication is now being processed. In the meantime you
can view and report bookmarks as well as view your profile details." within "main" # features/step_definitions/web_steps.rb:106
 Scenario: Register user with valid credentials but no department.
# features/register_new_user.feature:15
  Given database is reset
# features/step_definitions/database_steps.rb:13
  Given I am on the homepage.
# features/step_definitions/web_steps.rb:12
  When I follow "Register" within "header"
# features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew@user.com" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew@user.com" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "NewUserPa55word!" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "NewUserPa55word!" within "section"
# features/step_definitions/web_steps.rb:38
  When I press "register-user" within "section"
# features/step_definitions/web_steps.rb:20
  Then I should see "Thank you for registration in our system. Your aplication is now being processed. In the meantime you
can view and report bookmarks as well as view your profile details." within "main" # features/step_definitions/web_steps.rb:106
 Scenario: Register user with the same email address as the previous user.
                                                                                 # features/register_new_user.feature:27
  Given I am on the homepage
                                                                 # features/step definitions/web steps.rb:12
  When I follow "Register" within "header"
                                                                   # features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
                                                                               # features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew@user.com" within "section"
                                                                             # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew@user.com" within "section"
                                                                                # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "NewUserPa55word!" within "section"
                                                                                # features/step definitions/web steps.rb:38
  When I fill in "confirm-user-password" with "NewUserPa55word!" within "section" # features/step_definitions/web_steps.rb:38
  When I fill in "department" with "Head Office" within "section"
                                                                         # features/step definitions/web steps.rb:38
  When I press "register-user" within "section"
                                                                    # features/step_definitions/web_steps.rb:20
  Then I should see "Email already in use" within "main"
                                                                        # features/step_definitions/web_steps.rb:106
 Scenario: Register user with the same display name as the previous user.
# features/register_new_user.feature:39
  Given I am on the homepage
# features/step_definitions/web_steps.rb:12
  When I follow "Register" within "header"
# features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew2@user.com" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew2@user.com" within "section"
# features/step definitions/web steps.rb:38
  When I fill in "user-password" with "NewUserPa55word2!" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "NewUserPa55word2!" within "section"
# features/step definitions/web steps.rb:38
  When I fill in "department" with "Head Office" within "section"
# features/step definitions/web steps.rb:38
  When I press "register-user" within "section"
# features/step definitions/web steps.rb:20
  Then I should see "Thank you for registration in our system. Your aplication is now being processed. In the meantime you
can view and report bookmarks as well as view your profile details." within "main" # features/step definitions/web steps.rb:106
 Scenario: Register user with the same password as the previous user.
```

When I fill in "user-password" with "NewUserPa55word!" within "section"

features/register_new_user.feature:51

```
# features/step definitions/web steps.rb:12
  When I follow "Register" within "header"
# features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew3@user.com" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew3@user.com" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "NewUserPa55word2!" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "NewUserPa55word2!" within "section"
# features/step_definitions/web_steps.rb:38
  When I fill in "department" with "Head Office" within "section"
# features/step_definitions/web_steps.rb:38
  When I press "register-user" within "section"
# features/step_definitions/web_steps.rb:20
  Then I should see "Thank you for registration in our system. Your aplication is now being processed. In the meantime you
can view and report bookmarks as well as view your profile details." within "main" # features/step definitions/web steps.rb:106
 Scenario: Register user with invalid password (Not long enough).
                                                                           # features/register_new_user.feature:63
  Given I am on the homepage
                                                               # features/step_definitions/web_steps.rb:12
  When I follow "Register" within "header"
                                                                 # features/step definitions/web steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section" # features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew4@user.com" within "section"
                                                                             # features/step definitions/web steps.rb:38
  When I fill in "confirm-user-email" with "addnew4@user.com" within "section" # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "1!" within "section"
                                                                     # features/step definitions/web steps.rb:38
                                                                        # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "1!" within "section"
  When I fill in "department" with "Head Office" within "section"
                                                                       # features/step_definitions/web_steps.rb:38
  When I press "register-user" within "section"
                                                                  # features/step_definitions/web_steps.rb:20
  Then I should see "Display name:" within "main"
                                                                     # features/step_definitions/web_steps.rb:106
 Scenario: Register user with invalid password (No number).
                                                                            # features/register_new_user.feature:75
  Given I am on the homenage
                                                                 # features/step_definitions/web_steps.rb:12
  When I follow "Register" within "header"
                                                                   # features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
                                                                               # features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew4@user.com" within "section"
                                                                              # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew4@user.com" within "section"
                                                                                 # features/step definitions/web steps.rb:38
  When I fill in "user-password" with "TestingPassword!" within "section"
                                                                              # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "TestingPassword!" within "section" # features/step definitions/web steps.rb:38
  When I fill in "department" with "Head Office" within "section"
                                                                          # features/step_definitions/web_steps.rb:38
  When I press "register-user" within "section"
                                                                    # features/step definitions/web steps.rb:20
  Then I should see "Please enter valid password" within "main"
                                                                            # features/step_definitions/web_steps.rb:106
 Scenario: Register user with invalid password (No special char).
                                                                            # features/register_new_user.feature:87
  Given I am on the homepage
                                                                 # features/step_definitions/web_steps.rb:12
  When I follow "Register" within "header"
                                                                   # features/step_definitions/web_steps.rb:26
  When I fill in "display-name" with "Added By Testing User" within "section"
                                                                               # features/step_definitions/web_steps.rb:38
  When I fill in "user-email" with "addnew4@user.com" within "section"
                                                                              # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-email" with "addnew4@user.com" within "section"
                                                                                 # features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "TestingPassword1" within "section"
                                                                              # features/step_definitions/web_steps.rb:38
  When I fill in "confirm-user-password" with "TestingPassword1" within "section" # features/step_definitions/web_steps.rb:38
                                                                         # features/step_definitions/web_steps.rb:38
  When I fill in "department" with "Head Office" within "section"
  When I press "register-user" within "section"
                                                                    # features/step_definitions/web_steps.rb:20
  Then I should see "Please enter valid password" within "main"
                                                                            # features/step_definitions/web_steps.rb:106
 Scenario: Log in as new user.
                                                                                  # features/register new user.feature:99
  Given I am on the homepage
                                                                                   # features/step_definitions/web_steps.rb:12
  When I follow "Login" within "header"
features/step_definitions/web_steps.rb:26
  When I fill in "user-email" with "addnew@user.com" within "section"
features/step_definitions/web_steps.rb:38
  When I fill in "user-password" with "NewUserPa55word!" within "section"
features/step_definitions/web_steps.rb:38
  When I press "submit-login" within "section"
features/step_definitions/web_steps.rb:20
  Then I should see "Your account has not been verified yet, but you can still view bookmarks without a login" #
features/step_definitions/web_steps.rb:106
```

Feature: Searching by keyword

Given I am on the homepage

```
Scenario: search for Google from homepage
                                                              # features/search via keyword.feature:2
 Given database is reset
                                                     # features/step definitions/database steps.rb:13
                                                         # features/step_definitions/web_steps.rb:12
 Given I am on the homepage
 When I fill in "search guery" with "Google" within "form"
                                                               # features/step definitions/web steps.rb:38
 When I press "Search" within "form"
                                                         # features/step_definitions/web_steps.rb:20
 Then I should see "Search results for: 'Google'" within "h3"
                                                                # features/step definitions/web steps.rb:106
 Then I should see "Google" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:106
 Then I should see "Google Maps" within "#homepage-bookmarks-table" # features/step definitions/web steps.rb:106
 Then I should see "Google News" within "#homepage-bookmarks-table"
                                                                         # features/step_definitions/web_steps.rb:106
 Then I should see "54" within "#homepage-bookmarks-table"
                                                                    # features/step definitions/web steps.rb:106
 Then I should see "0" within "#homepage-bookmarks-table"
                                                                    # features/step_definitions/web_steps.rb:106
 Then I should not see "Youtube" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "Repository" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
 Then I should not see "Tree" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:127
 Then I should not see "Bing" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:127
 Then I should not see "Jeeves" within "#homepage-bookmarks-table"
                                                                       # features/step_definitions/web_steps.rb:127
 Then I should not see "Laundry" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "RSI - NHS" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
Scenario: search for Tree from homepage
                                                             # features/search_via_keyword.feature:21
 Given I am on the homepage
                                                        # features/step_definitions/web_steps.rb:12
 When I fill in "search_query" with "Tree" within "form"
                                                              # features/step_definitions/web_steps.rb:38
 When I press "Search" within "form"
                                                           features/step definitions/web steps.rb:20
 Then I should see "Search results for: 'Tree" within "h3"
                                                               # features/step_definitions/web_steps.rb:106
 Then I should see "Tree 1" within "#homepage-bookmarks-table"
                                                                      # features/step definitions/web steps.rb:106
 Then I should see "Tree 2" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:106
 Then I should see "Tree 3" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:106
                                                                      # features/step_definitions/web_steps.rb:106
 Then I should see "Tree 4" within "#homepage-bookmarks-table"
 Then I should see "Tree 5" within "#homepage-bookmarks-table" Then I should see "Tree 6" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:106
                                                                      # features/step_definitions/web_steps.rb:106
 Then I should not see "Youtube" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "Repository" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
 Then I should not see "Google" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "Bing" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:127
 Then I should not see "Jeeves" within "#homepage-bookmarks-table"
                                                                       # features/step_definitions/web_steps.rb:127
 Then I should not see "Laundry" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "RSI - NHS" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
Scenario: search for bing from homepage
                                                            # features/search_via_keyword.feature:40
 Given I am on the homepage
                                                        # features/step definitions/web steps.rb:12
 When I fill in "search_query" with "Bing" within "form"
                                                              # features/step_definitions/web_steps.rb:38
 When I press "Search" within "form"
                                                           features/step definitions/web steps.rb:20
 Then I should see "Search results for: 'Bing'" within "h3"
                                                               # features/step_definitions/web_steps.rb:106
 Then I should see "Bing" within "#homepage-bookmarks-table"
                                                                     # features/step_definitions/web_steps.rb:106
 Then I should see "Bing News" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:106
 Then I should not see "Youtube" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "Repository" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
 Then I should not see "Tree" within "#homepage-bookmarks-table"
                                                                      # features/step_definitions/web_steps.rb:127
 Then I should not see "Google" within "#homepage-bookmarks-table"
                                                                       # features/step_definitions/web_steps.rb:127
 Then I should not see "Jeeves" within "#homepage-bookmarks-table"
                                                                       # features/step_definitions/web_steps.rb:127
 Then I should not see "Laundry" within "#homepage-bookmarks-table"
                                                                        # features/step_definitions/web_steps.rb:127
 Then I should not see "RSI - NHS" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:127
Scenario: search for nothing on homepage
                                                           # features/search_via_keyword.feature:55
 Given I am on the homepage
                                                      # features/step definitions/web steps.rb:12
 When I press "Search" within "form"
                                                       # features/step_definitions/web_steps.rb:20
 Then I should see "Search results for: "" within "h3"
                                                          # features/step definitions/web steps.rb:106
 Then I should see "Youtube" within "#homepage-bookmarks-table"
                                                                    # features/step_definitions/web_steps.rb:106
 Then I should see "Repository" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:106
 Then I should see "Tree" within "#homepage-bookmarks-table"
                                                                  # features/step_definitions/web_steps.rb:106
 Then I should see "Google" within "#homepage-bookmarks-table"
                                                                    # features/step definitions/web steps.rb:106
 Then I should see "Jeeves" within "#homepage-bookmarks-table"
                                                                    # features/step_definitions/web_steps.rb:106
 Then I should see "Laundry" within "#homepage-bookmarks-table"
                                                                    # features/step definitions/web steps.rb:106
 Then I should see "RSI - NHS" within "#homepage-bookmarks-table" # features/step_definitions/web_steps.rb:106
 Then I should see "Bing" within "#homepage-bookmarks-table"
                                                                  # features/step definitions/web steps.rb:106
Scenario: search for something not in the database from homepage
                                                                             # features/search via keyword.feature:68
 Given I am on the homepage
                                                               # features/step_definitions/web_steps.rb:12
 When I fill in "search guery" with "123450qwe85yuiofg24hjkl" within "form"
                                                                             # features/step definitions/web steps.rb:38
 When I press "Search" within "form"
                                                                # features/step_definitions/web_steps.rb:20
```

```
Then I should see "Search results for: '123450qwe85yuiofg24hjkl" within "main" #
features/step definitions/web steps.rb:106
  Then I should see "Try again with a different search..." within "main"
                                                                           # features/step definitions/web steps.rb:106
  Then I should not see "Youtube" within "section"
                                                                     # features/step_definitions/web_steps.rb:127
  Then I should not see "Repository" within "section"
                                                                      # features/step_definitions/web_steps.rb:127
  Then I should not see "Google" within "section"
                                                                    # features/step_definitions/web_steps.rb:127
  Then I should not see "Bing" within "section"
                                                                   # features/step definitions/web steps.rb:127
  Then I should not see "Jeeves" within "section"
                                                                    # features/step_definitions/web_steps.rb:127
  Then I should not see "Laundry" within "section"
                                                                     # features/step_definitions/web_steps.rb:127
  Then I should not see "RSI - NHS" within "section"
                                                                      # features/step definitions/web steps.rb:127
  Then I should not see "Tree" within "section"
                                                                   # features/step definitions/web steps.rb:127
 Scenario: Exit a blank search and head back to the homepage # features/search_via_keyword.feature:83
  Given I am on the homepage
                                                  # features/step_definitions/web_steps.rb:12
  When I press "Search" within "form"
                                                   # features/step_definitions/web_steps.rb:20
  Then I should see "Search results for: "" within "h3" # features/step_definitions/web_steps.rb:106
  When I follow "home-link" within "h3"
                                                   # features/step_definitions/web_steps.rb:26
                                                    # features/step_definitions/web_steps.rb:194
  Then I should be on the homepage
                                                              # features/search_via_keyword.feature:90
 Scenario: Exit a search and head back to the homepage
  Given I am on the homepage
                                                    # features/step_definitions/web_steps.rb:12
  When I fill in "search_query" with "Google" within "form" # features/step_definitions/web_steps.rb:38
  When I press "Search" within "form"
                                                     # features/step_definitions/web_steps.rb:20
  Then I should see "Search results for: 'Google'" within "h3" # features/step_definitions/web_steps.rb:106
  When I follow "home-link" within "h3"
                                                     # features/step_definitions/web_steps.rb:26
  Then I should be on the homepage
                                                      # features/step definitions/web steps.rb:194
                                                                   # features/search via keyword.feature:98
 Scenario: Exit a blank search and head back to the homepage
                                                       # features/step_definitions/web_steps.rb:12
  Given I am on the homepage
  When I fill in "search_query" with "----" within "form"
                                                           # features/step_definitions/web_steps.rb:38
  When I press "Search" within "form"
                                                        # features/step_definitions/web_steps.rb:20
  Then I should see "Search results for: '----" within "section" # features/step_definitions/web_steps.rb:106
  When I follow "home-link" within "section"
                                                         # features/step_definitions/web_steps.rb:26
  Then I should be on the homepage
                                                         # features/step_definitions/web_steps.rb:194
Feature: Viewing tags on Bookmarks
 Scenario: view tags on google boomark
                                             # features/tag_bookmarks.feature:2
  Given database is reset
                                      # features/step_definitions/database_steps.rb:13
                                          # features/step_definitions/web_steps.rb:12
  Given I am on the homepage
  When I follow "Google" within "div#1"
                                           # features/step definitions/web steps.rb:26
  Then I should see "#Search engines"
                                            # features/step_definitions/web_steps.rb:106
  Then I should not see "#Bad search engines" # features/step_definitions/web_steps.rb:127
  Then I should not see "#Tree"
                                         # features/step_definitions/web_steps.rb:127
                                          # features/tag_bookmarks.feature:10
 Scenario: view tags on Bing boomark
  Given I am on the homepage
                                       # features/step_definitions/web_steps.rb:12
                                       # features/step_definitions/web_steps.rb:26
  When I follow "Bing" within "div#2"
  Then I should see "#Search engines"
                                          # features/step_definitions/web_steps.rb:106
  Then I should see "#Bad search engines" # features/step_definitions/web_steps.rb:106
  Then I should not see "#Tree"
                                      # features/step_definitions/web_steps.rb:127
 Scenario: view tags on youtube video boomark # features/tag_bookmarks.feature:17
  Given I am on the homepage
                                          # features/step_definitions/web_steps.rb:12
  When I follow "Youtube Video" within "div#3" # features/step_definitions/web_steps.rb:26
                                              # features/step_definitions/web_steps.rb:127
  Then I should not see "#Search engines"
  Then I should not see "#Bad search engines" # features/step_definitions/web_steps.rb:127
  Then I should not see "#Tree"
                                         # features/step_definitions/web_steps.rb:127
 Scenario: view tags on youtube video boomark # features/tag bookmarks.feature:24
  Given I am on the homepage
                                          # features/step_definitions/web_steps.rb:12
  When I follow "Youtube Video" within "div#3" # features/step definitions/web steps.rb:26
  Then I should not see "#Search engines"
                                              # features/step_definitions/web_steps.rb:127
  Then I should not see "#Bad search engines" # features/step definitions/web steps.rb:127
  Then I should not see "#Tree"
                                         # features/step_definitions/web_steps.rb:127
 Scenario: view tags on tree1
                                        # features/tag_bookmarks.feature:31
  Given I am on the homepage
                                          # features/step definitions/web steps.rb:12
                                     # features/step_definitions/web_steps.rb:26
  When I follow "Tree 1"
  Then I should not see "#Search engines"
                                            # features/step_definitions/web_steps.rb:127
```

Then I should not see "#Bad search engines" # features/step_definitions/web_steps.rb:127

Then I should see "#Tree" # features/step_definitions/web_steps.rb:106

Feature: view bookmark

```
Scenario: Click on first bookmark
                                                                        # features/view bookmark.feature:2
  Given database is reset
                                                                     # features/step_definitions/database_steps.rb:13
                                                                        # features/step definitions/web steps.rb:12
  Given I am on the homepage
  When I click "bookmark-details" within "div#1"
                                                                            # features/step_definitions/web_steps.rb:32
  Then I should be on bookmark spesifics
                                                                            # features/step_definitions/web_steps.rb:194
  Then I should see "Google" within " bookmark-title"
                                                                              # features/step_definitions/web_steps.rb:106
  Then I should see "Link to the popular search engine google." within ".bookmark-description" #
features/step_definitions/web_steps.rb:106
  Then I should see "Created on 2020-04-06 by Testing Admin" within ".detailed-info"
features/step_definitions/web_steps.rb:106
  Then I should see "Rating: 2.5/5 (4)" within ".rating"
                                                                             # features/step_definitions/web_steps.rb:106
```

Feature: view homepage

```
Scenario: opens website # features/view_homepage.feature:2
Given database is reset # features/step_definitions/database_steps.rb:13
Given I am on the homepage # features/step_definitions/web_steps.rb:12
Then I should be on the homepage # features/step_definitions/web_steps.rb:194
```

43 scenarios (43 passed) 505 steps (505 passed) 0m11.134s

Coverage report generated for Cucumber Features to /Users/kent_sam/Documents/COM1001-group-project/coverage. 609 / 1119 LOC (54.42%) covered.

Final Screenshot:

```
43 scenarios (43 passed)
505 steps (505 passed)
1m6.498s
Coverage report generated for Cucumber Features
codio@invite-tommy:~/workspace/project$
```

Rake tests

Final output of all the unit tests run using rake:

```
codio@invite-tommy:~/workspace/project$ rake unittest
/usr/bin/ruby2.6 ruby-scripts/test_deletes.rb
Run options: --seed 58299
# Running:
Finished in 5.815764s, 1.3756 runs/s, 4.2987 assertions/s.
8 runs, 25 assertions, 0 failures, 0 errors, 0 skips
/usr/bin/ruby2.6 ruby-scripts/test_deployment_scripts.rb
Run options: --seed 59338
# Running:
Finished in 6.720086s, 0.2976 runs/s, 0.8928 assertions/s.
2 runs, 6 assertions, 0 failures, 0 errors, 0 skips
/usr/bin/ruby2.6 ruby-scripts/test_support_functions.rb
Run options: --seed 26101
# Running:
Finished in 3.488354s, 3.4400 runs/s, 16.6268 assertions/s.
12 runs, 58 assertions, 0 failures, 0 errors, 0 skips
/usr/bin/ruby2.6 ruby-scripts/test_updates.rb
Run options: --seed 48340
# Running:
Finished in 1.667405s, 3.5984 runs/s, 10.7952 assertions/s.
6 runs, 18 assertions, 0 failures, 0 errors, 0 skips
Run options: --seed 3559
# Running:
```

Finished in 14.772449s, 1.8954 runs/s, 7.2432 assertions/s. 28 runs, 107 assertions, 0 failures, 0 errors, 0 skips