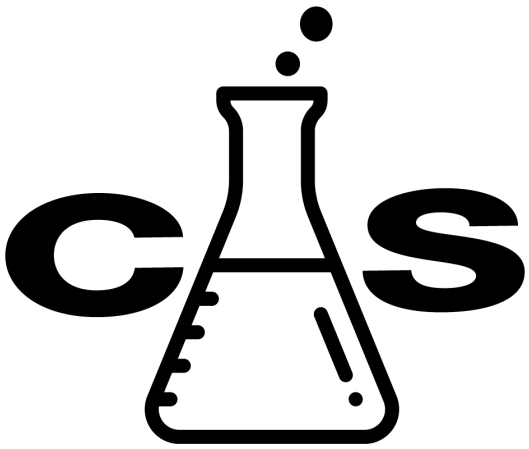
CSLabs Project Extension, Team 1 – 2021–2022

Test Cases



CS Labs

New User registration

Test Case #: 1.1	Test Case Name: User Registration
System: Auth	Subsystem: Registration
Designed by: Barel	Design Date: 12/17/2019
Executed by: Barel	Execution Date:02/19/2020
Short Description: Test all steps needed for a successful registration	

Pre-conditions

Have a valid email, choose a strong password

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to register page	The user will need to navigate to registration page	Pass	
2	Provide personal information	The user will have to provide their first and last name, phone number, graduation year and email	Pass	
3	Email validation	Restrict school email to have @iu.edu or @ius.edu	Pass	
4	Password	Check password length, mixing characters and numbers to make sure the password is strong enough.	Pass	

5	Password validation	User confirm their password to make sure they match. Use special characters to have a strong password.	Pass	

Post-conditions
1. User successfully registered

User Login

Test Case #: 1.2 Test Case Name: User Login

System: Auth Subsystem: Login

Designed by: Chase Design Date: 12/17/2019

Executed by: Chase Execution Date:02/19/2020

Short Description: Test all steps to make sure that the user login successfully

Pre-conditions
Have a valid combination of username or email and password

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to login page	The user will need to navigate to login page	Pass	
2	Input username and password	The user input the correct email and password combination.	Pass	

3	User validation	If a user enters the wrong email or password or both, the validation fails.	Pass	
4	Login success	User enter the correct email and password to login	Pass	

Post-conditions
1. User successfully logged in

Lab Destruction

Test Case #: 1.3 Test Case Name: User lab

System: Lab Subsystem: Destruction

Designed by: Barel Design Date: 12/17/2019

Executed by: Barel Execution Date:02/19/2020

Short Description: The system will destroy a lab and mark it as completed after 30 days

Pre-conditions
Join a module, create lab and start the lab

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to Module Page	If not authenticated, the user navigate to explore page and see published module	Pass	

2	Navigate to Module Page 2	If authenticated, the user can see the module, join then and start a lab	Pass	
3	Lab track	The lab is tracked since the day it is started of a period of 30 days.	Pass	
4	Lab timer	A timer is activated when the started and show to the user how much time is left for the lab to deconstruct	Pass	
5	User inactivity	The user inactivity doesn't stop the timer	Pass	
6	Lab deconstruction	30 days after the lab was started, the deconstruct and marked as complete even if the user did not literally complete the lab.	Pass	

Post-conditions
1. Lab deconstructed and marked as complete.

A user should be able to start a public module

Test Case #: 1.4 Test Case Name: Start Public Module

System: Modules Subsystem: Start

Designed by: Jason Design Date: 12/17/2019

Executed by: Jason Execution Date:02/19/2020

Short Description: A user should be able to start a public module

Pre-conditions

The user must be logged in.
There must be one published module

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to the explore page	The system displays a list of modules that are available to the public	Pass	
2	Click on a public module	The system navigates the user to the module page	Pass	
3	User clicks on the start button	The system displays a message of successful operation and changes start button to a go	Pass	
4	Click 'YES' button	The system displays the main menu	Pass	
5	Check post-condition 1			

Post-conditions

1. The UserModule is added to the database with a reference to the Module

A user should be able to start a private module

Test Case #: 1.5 Test Case Name: Start Private Module

System: Modules Subsystem: Start

Designed by: Jason Design Date: 12/17/2019

Executed by: Jason Execution Date:02/19/2020

Short Description: A user should be able to start a private module

Pre-conditions

The user must be logged in.

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to a private url given by a share link	The system navigates the user to the module page	Pass	
3	User clicks on the start button	The system displays a message of successful operation and changes start button to a go	Pass	
4	Click 'YES' button	The system displays the main menu	Pass	
5	Check post-condition 1			

Post-conditions

1. The UserModule is added to the database with a reference to the Module

A user should be able to accept the cookie policy

Test Case #: 1.6	Test Case Name: Cookie Policy
System: Legal	Subsystem: GDPR
Designed by: Jason	Design Date: 12/17/2019
Executed by: Jason	Execution Date:02/19/2020

Short Description: A user should be able to accept the cookie policy and the message disappear

Pre-conditions

The user has never been to the website before or their local storage has been cleared

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigates to any page in the app	The system will display a message at the bottom of the page with a link to the cookie policy and a button to accept it	Pass	
3	User clicks on the link	The cookie policy is displayed.	Pass	
4	User clicks the 'Accept' button	The message disappears	Pass	
5	Check post-condition 1			

Post-conditions

1. accepted_cookie_policy key is stored as the boolean true in local storage

A user should be able to perform a forgot password reset

Test Case #: 1.7 Test Case Name: Forgot Password

System: Auth Subsystem: Password Reset

Designed by: Jason Design Date: 12/17/2019

Executed by: Jason Execution Date:02/19/2020

Short Description: A user should be able to send a forgot password email to themselves to then reset their password

Pre-conditions

User has an account and is not logged in. The user navigated to the login page.

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Press “Forgot Password?”	The system navigates to the password recovery page	Pass	
3	User enters their email address and presses send confirmation	A success message is displayed regardless if the email is found or not to prevent database scanning. Email is sent if the email is valid	Pass	
4	User checks their email box for email		Pass	
	User pressed on reset password in email	The reset password page is displayed		

	User enters new password twice for confirmation and presses reset	A success message is shown if the password is strong enough		
5	Check post-condition 1			

Post-conditions

1. The user can login with the new password. The PasswordRecoveryCode column in the database for that user is cleared.

A user should be able to start a lab

Test Case #: 1.8 Test Case Name: Lab Start

System: Lab Subsystem: Successful Lab Start

Designed by: Chase Design Date: 12/17/2019

Executed by: Chase Execution Date:02/19/2020

Short Description: Test all steps needed for a successful lab start

Pre-conditions

A user must be registered in a module to have access to the lab

Step	Action	Expected System Response	Pass/ Fail	Comment

1	Navigate to lab page	The system will display the labs in the module	Pass	
2	Start lab with button	Starts a lab after user clicks the start lab button	Pass	

Post-conditions
1. User successfully started lab

User Logout

Test Case #: 1.9 Test Case Name: User Logout

System: Sign In Subsystem: Successful Logout

Designed by: Chase Design Date: 12/17/2019

Executed by: Chase Execution Date:02/19/2020

Short Description: Test all steps needed for a successful Logout

Pre-conditions
User must be logged in and on any page

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate to profile page by clicking the icon in the header	The system will display the profile page	Pass	

2	Click logout	The system should log the user out and return them to the registration page	Pass	

Post-conditions
1. User successfully logged out

System Shutdown After 30 Minutes of Inactivity

Test Case #: 2.0 Test Case Name: Lab Inactivity

System: Lab Subsystem: Successful Inactivity Shutdown

Designed by: Chase Design Date: 12/17/2019

Executed by: Chase Execution Date:02/19/2020

Short Description: Test all steps needed for a successful registration

Pre-conditions
User must be logged in and on the lab page with the lab started

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Navigate away from the page by clicking on the statuses button	The system will display the status page	Pass	

2	Wait 30 minutes	The system should time out after 30 minutes	Pass	
3	Check that the lab has shutdown	The status icon should show up in gray	Pass	

Post-conditions
1. User's lab must be shutdown

User Can Add and Delete Tags to Modules

Test Case #: 2.1 Test Case Name: User Logout

System: Module Editor Subsystem: Tag Editor

Designed by: Jason Henry Design Date: 10/12/2021

Executed by: Jason Henry Execution Date:02/6/2022

Short Description: Test all steps needed for a successful Logout

Pre-conditions
The module must exist before adding tags.

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Adding new tags to a module from the module editor	The tag should be added, and a new one associated with it is created in the database	Pass	

2	Adding existing tags to a module from the module editor	The tags already created in the database are associated to this module, new ones are not created again	Pass	
3	Not adding any tags	Tags are optional, so this behavior is valid	Pass	
4	Add tag over 32 characters	Unable to add tag	Pass	
5	Add tag with multiple “bad words”	Unable to add tag	Pass	
6	Add tag with capital letter(s)	Unable to add tag	Pass	
7	Add tag with symbol other than ‘-‘	Unable to add tag	Pass	
8	Delete tag from beginning of list	Deletes tag	Pass	
9	Delete tag from middle of list	Deletes tag	Pass	
10	Delete tag from end of list	Deletes tag	Pass	

Post-conditions

The tags user wanted to add to or delete from the module are added / deleted successfully.

Search and Filter Modules

Test Case #: 2.2

Test Case Name: Module Exploration

System: Modules Explorer

Subsystem: Modules Search and Filter

Designed by: Zaid Hussain

Design Date: 11/21/2021

Executed by: Zaid Hussain

Execution Date:02/7/2022

Short Description: Test all steps needed for a successful Logout

Pre-conditions

There exists at least one module to show display modules.

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Searching modules by one or more of the flowing: name, description, difficulty, tags	Modules matching the parameters are displayed	Pass	The search for name and description is a full-text search
2	Filtering modules	Modules are displayed in the arrangement of the specified option	Pass	Filtering is rearranging existing modules to fit a criteria. It can result in not displaying some modules depending on the filtering option
3	Searching with no parameters	No modules are displayed	Pass	

Post-conditions

The modules matching the parameters are displayed for search and filter options.

Lab Editor GUI

Test Case #: 2.3 Test Case Name: Cluster Management

System: Lab Editor Subsystem: Lab Editor GUI

Designed by: Justin Hurst Design Date: 09/12/2021

Executed by: Justin Hurst Execution Date:02/6/2022

Short Description: Test all steps needed for a successful Logout

Pre-conditions

The module must exist before adding tags.

Step	Action	Expected System Response	Pass/ Fail	Comment
1	Using the Lab Editor GUI	Lab Editor GUI nodes can connect to other nodes	Pass	Nodes in the Lab Editor GUI must be able to connect to each other via ports

Post-conditions

The tags user wanted to add to the module are added successfully.

References

Gallavin, Jason et al. " CS Labs – Web Software Requirements Specification." 1 Oct. 2019, https://github.com/ius-csg/CSLabs-Capstone-Documentation/tree/master/cslabs-web-2019-2020/DesignDocs. 27 Sept. 2021