

Customising Redmine and Superset to Allow Automatic Login with Gmail through Keycloak

Task Description:

Here are the steps to integrate Redmine and Apache Superset with Keycloak for easy Gmail login:

1. Begin by setting up Keycloak. Create a realm and set up Google as an identity provider using OAuth credentials from the Google API Console.
2. Then, create separate clients within Keycloak for Redmine and Superset, making sure to specify the correct redirect URIs.
3. Install the necessary OAuth plugin in Redmine, set it up with Keycloak client details, and update Redmine's configuration file.
4. For Superset, install the required Python packages and update the superset_config.py file to include OIDC configuration for Keycloak.
5. Finally, restart both Redmine and Superset servers to apply the changes.

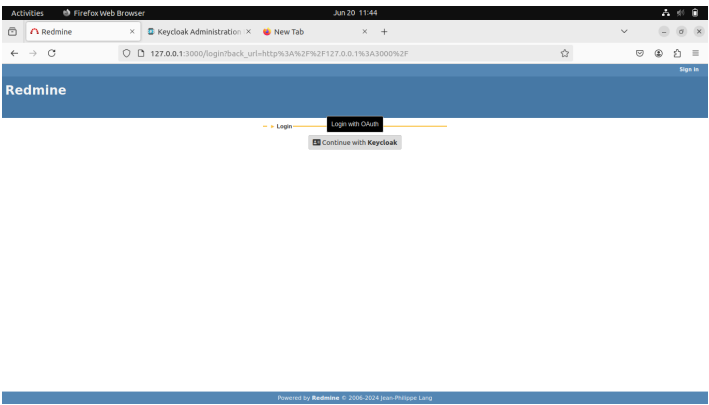
To verify the integration, access Redmine and Superset using Google credentials, and check that user information is correctly populated.

Table of Content

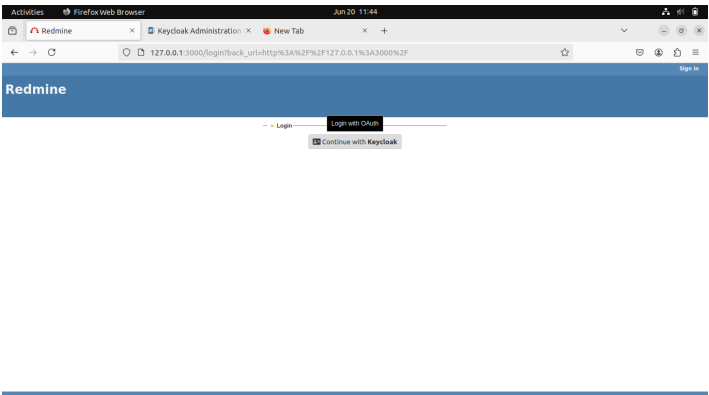
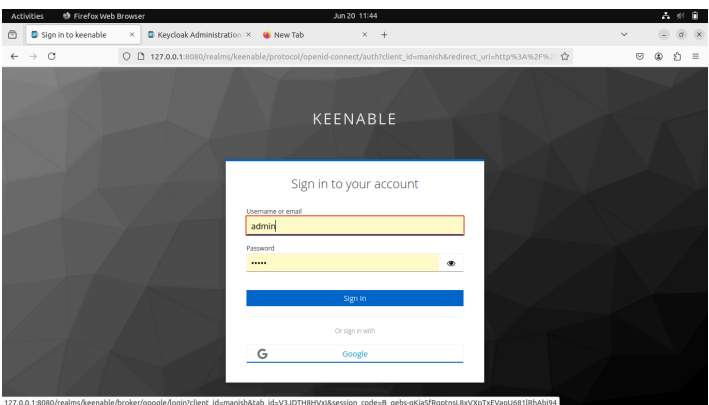
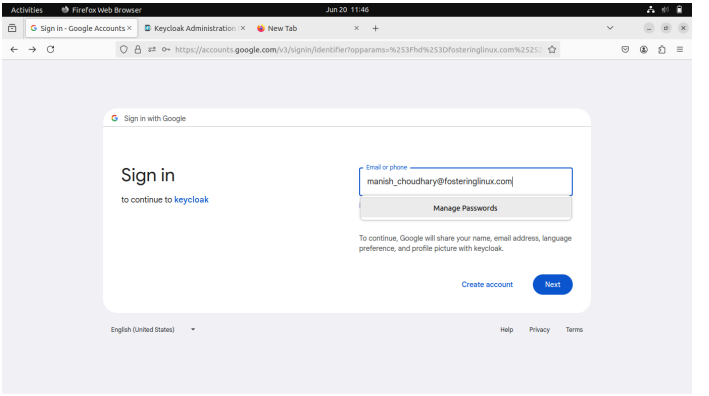
- [Scenario: Users Access Redmine Login Page](#)
- [Scenario: Users Authenticate with Keycloak and Google OAuth in Redmine](#)
- [Scenario: User roles assigned by admin in Redmine](#)
- [Scenario: User views assigned roles in Redmine](#)
- [Scenario: User accesses Supersert application](#)
- [Scenario: User authenticates with Keycloak and Google OAuth in Supersert](#)
- [Scenario: Users Handling Authentication Errors for Redmine Unknown Users](#)
- [Scenario: Users Handling Authentication Errors for Superset Unknown Users](#)
- [Scenario: User attempts to access a locked account](#)
- [Scenario: Test SSO Integration with Redmine and Superset](#)

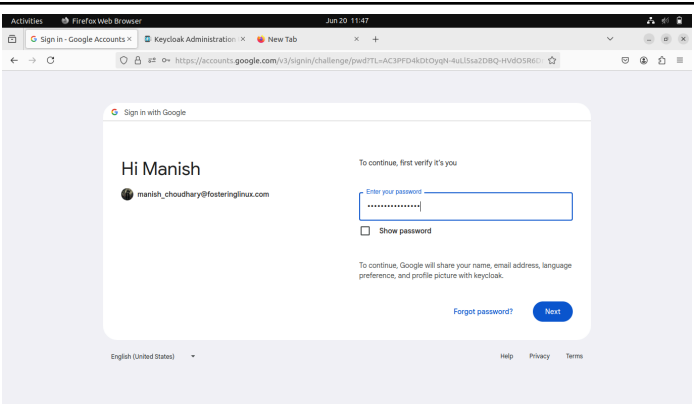
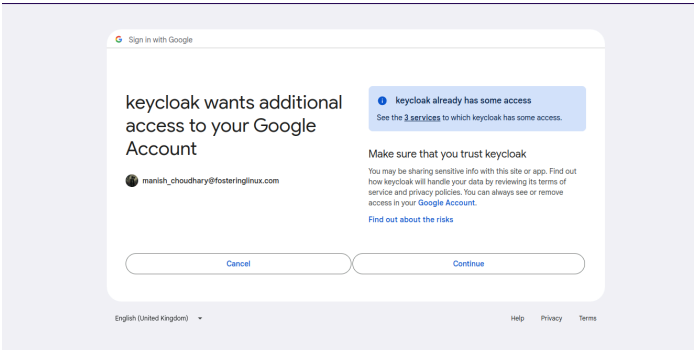
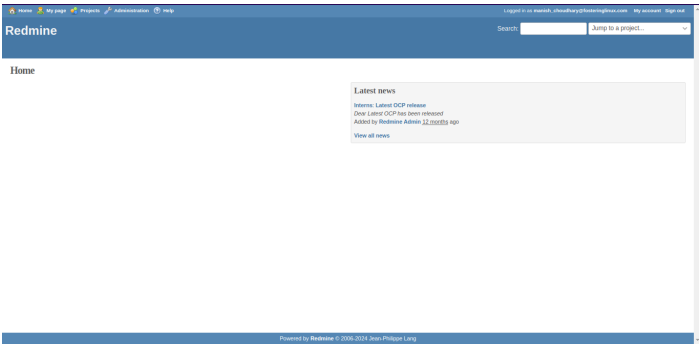
Test cases: 1

Scenario: Users Access Redmine Login Page

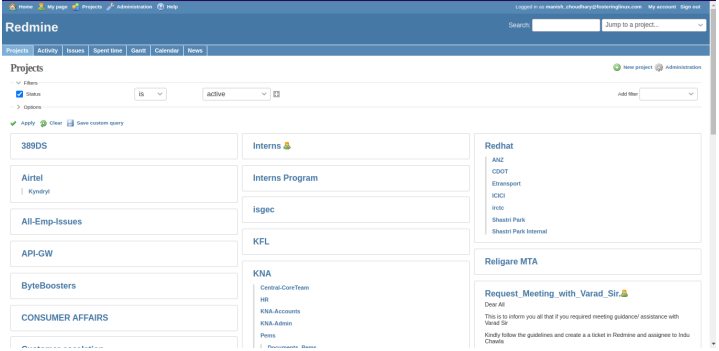
Given: The user wants to access Redmine	
When: The user navigates to the URL "127.0.0.1:3000"	
Then: The user should see the Redmine login page or dashboard	
Result: Passed	

Test cases: 2

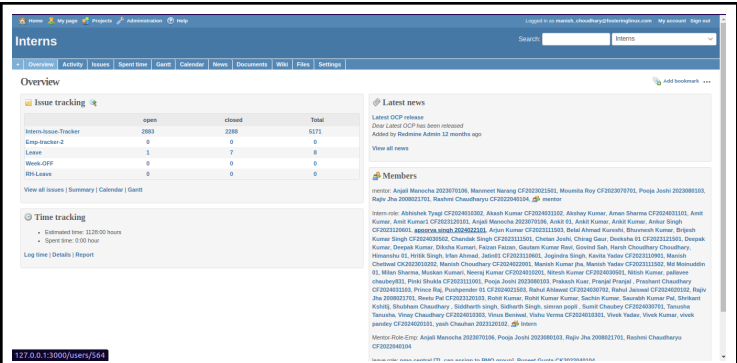
Scenario: Users Authenticate with Keycloak and Google OAuth in Redmine	
Given: The user navigates to the Redmine login page	Output: 
When: The user selects "Continue with Keycloak"	
And: The user selects the Google authentication option in Keycloak	
And: The user logs in with the email "manish_choudhary@fosteringlinux.com"	
Then: The user is redirected to the Keycloak login page	

	
	
And: The user is redirected to the Google login page	
And: The user successfully logs in to Redmine	
Result: Passed	

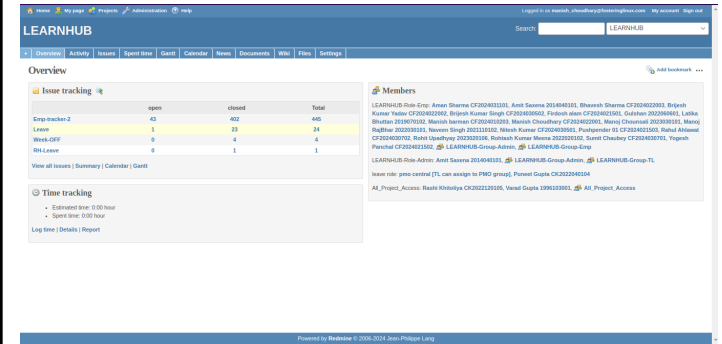
Test cases: 3

Scenario: User roles assigned by admin in Redmine	
Given: A user account exists in the system	Output: 
And: The user is logged into their account	
And: The user has been informed that an admin will assign roles	
When: The admin assigns roles to the user	

Then: The roles should be visible to the user in their account profile



Result: Passed



Test cases: 4

Scenario: User views assigned roles in Redmine

Given: A user account exists in the system

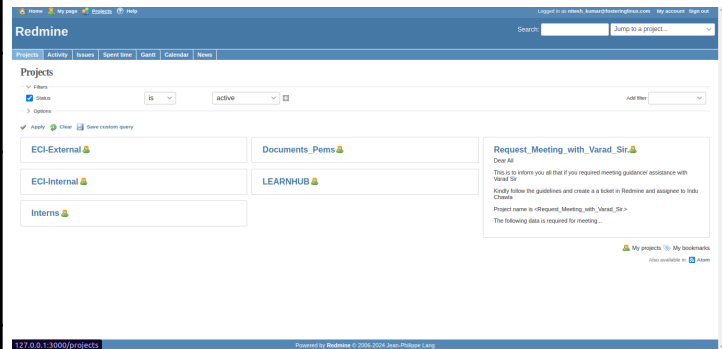
And: The user is logged into their account

When: The user navigates to their account profile

Then: The user should be able to view all roles assigned to them

Result: Passed

Output:



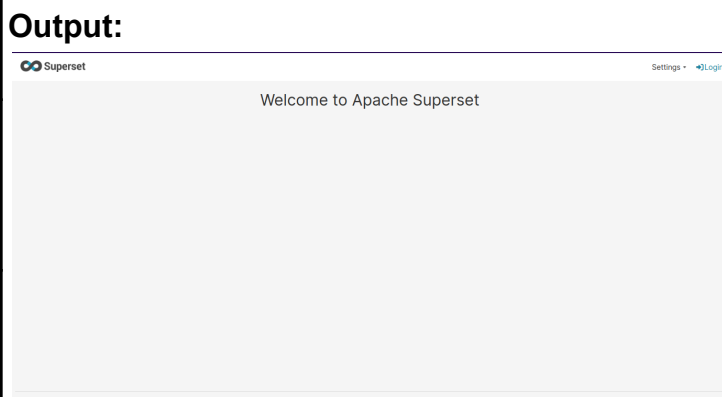
Test cases: 5

Scenario: User accesses Supersert application

Given: The user wants to access Supersert

When: The user navigates to the URL "127.0.0.1:8088"

Then: The user should see the Superset login page



Result: Passed

Test cases: 6

Scenario: User authenticates with Keycloak and Google OAuth in Superset

Given: The user navigates to the Superset login page

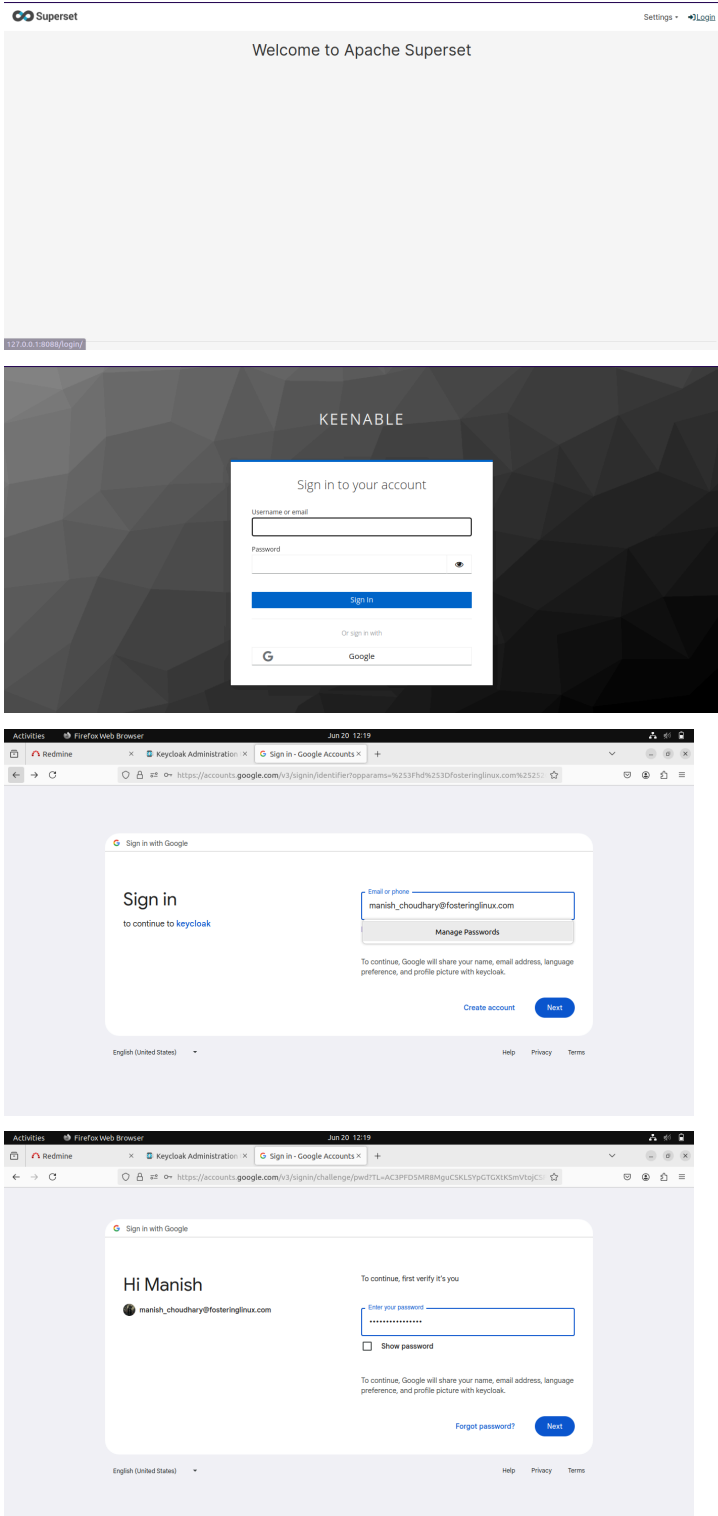
When: The user selects "Login"

And: Selects the Google authentication option in Keycloak

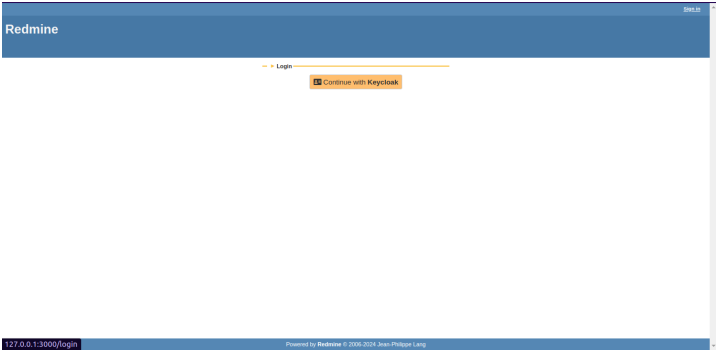
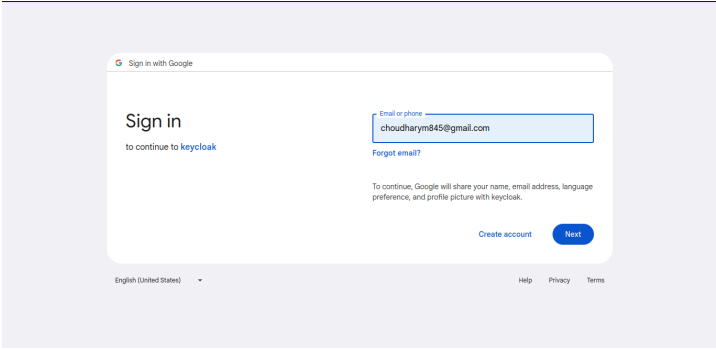
Then: The user successfully logs in to Superset

Result: Passed

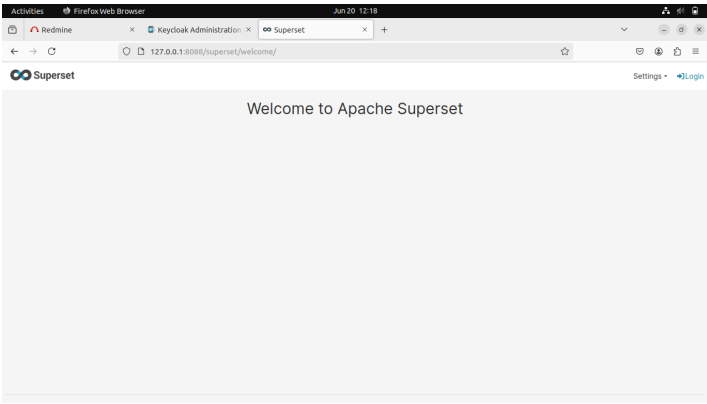
Output:

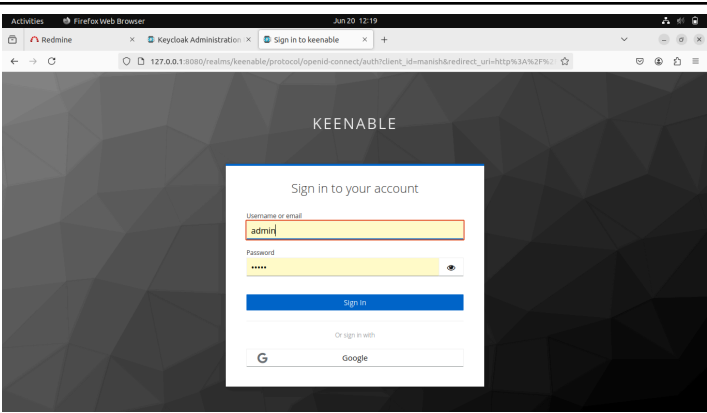
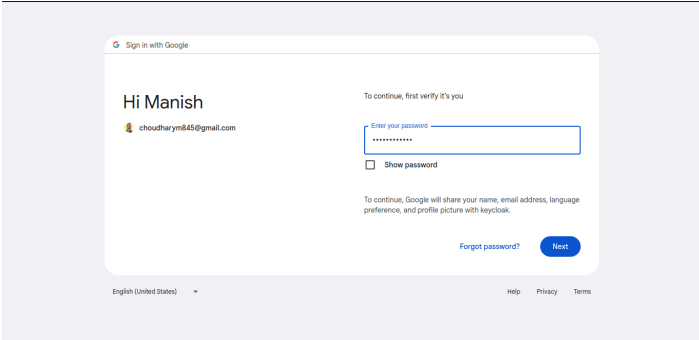
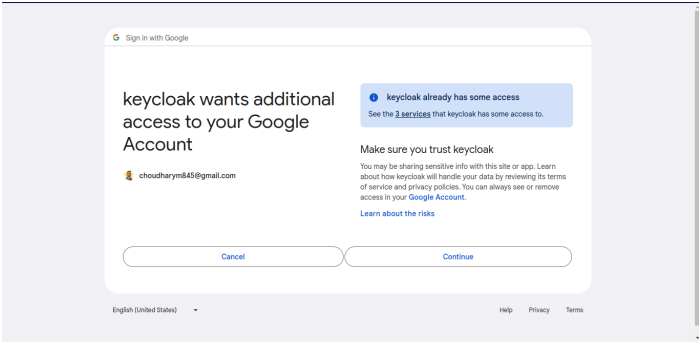
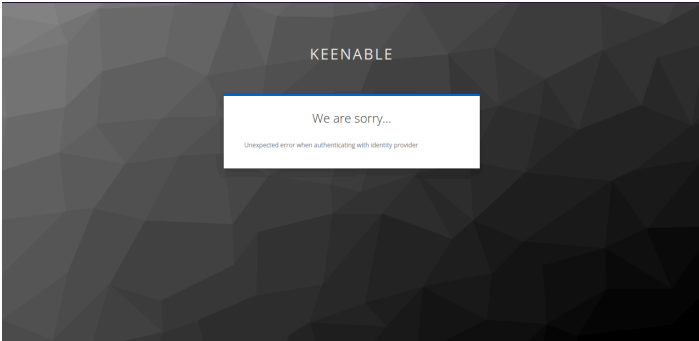


Test cases 7

Scenario: Handling Authentication Errors for Unknown Users in Redmine	
Given: The user navigates to the Redmine login page	Output:  
When: The user selects "Continue with Keycloak"	
And: The user selects the Google authentication option in Keycloak	
And: The user logs in with the email "choudharym845@gmail.com"	
Then: The user is redirected to the Keycloak login page	
And: The user is redirected to the Google login page	
And: The user sees an error indicating that the user does not exist in Redmine	
Result: Passed	

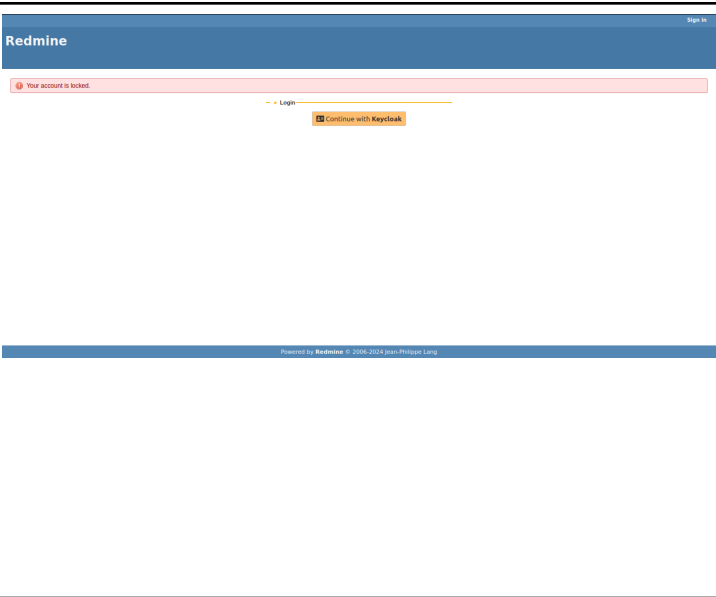
Test cases 8

Scenario: Users Handling Authentication Errors for Superset Unknown Users	
Given: User navigates to the Superset login page	Output: 
When: User selects "Continue with Keycloak"	
Then: User is redirected to the Keycloak login page	

	
When: User selects the Google authentication option in Keycloak	
Then: User is redirected to the Google login page	
When: User logs in with the email "choudharym845@gmail.com"	
Then: User sees an error indicating that the user does not exist in superset	
Result: Passed	

Test cases: 9

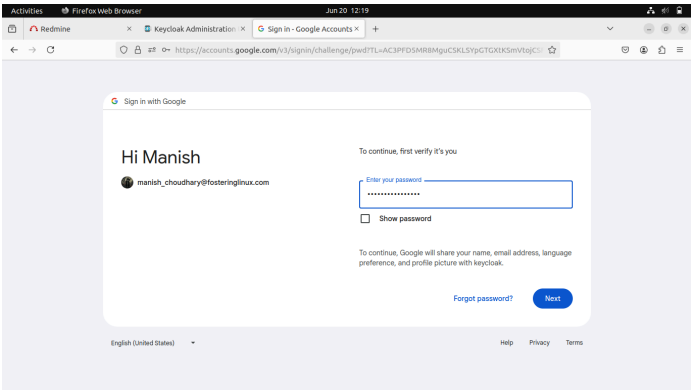
Scenario: User attempts to access a locked account	
Given: The user has an account in the system	Output:

And: The user's account is locked	
When: The user attempts to log in to their account	
Then: The user should not be able to access any system functionalities.	
Result: Passed	

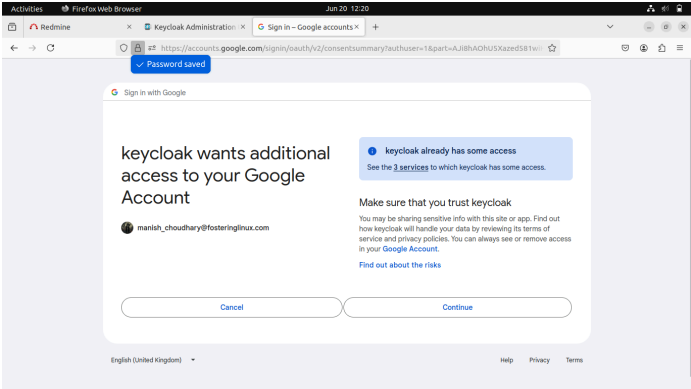
Test cases: 10

Scenario: Test SSO Integration with Redmine and Superset	
Given: Both Redmine and Superset are configured to use Keycloak for SSO	<div>Output:  </div>
When: I log in to Redmine with Keycloak and Google authentication	
And: User log in to Superset with Keycloak and Google authentication	
And: User try to log in to Redmine with an email not registered in Redmine	
And: User try to log in to Superset with the email "manish_choudhary@fosteringlinu x.com"	
Then: User logged in successfully if the user exists in Redmine	

And: User logged in successfully if the user exists in Superset



And: User logged in successfully



Result: Passed