

Automated Testing with Selenium

About Selenium:

Selenium is a free automated testing framework used to validate web applications across different browsers and platforms. It provides a range of tools and libraries to support browser automation.

About Asana:

Asana is a project management software which allows teams to organize, collaborate, plan and execute tasks. Teams can use asana to keep track of all tasks, collaborate with other team members, exchange related information and more.

1)Test Scenario Identification:

- i. Login Page Authentication: Automated login into asana website using valid credentials.
- ii. Login Page Failure: Automated login into asana website using invalid credentials.
- iii. Creation of a new Project: Automated creation of a new project.
- iv. Deletion of a Project: Automated deletion of a project.
- v. Creation of a new goal: Automated creation of goals.
- vi. Viewing the Settings Page: Automated viewing of settings page.
- vii. Inviting a teammate: Automated invitation to teammates using Link.

All the automated test cases are done using Selenium.

2)Test Script Creation:

Software used: Visual Studio Code

Language used: Python

Libraries Used: Pytest, Webdriver, ChromeDriverManager, Service, By, keys, WebDriverWait, EC

3)Reporting:

report.html

Report generated on 28-Jun-2024 at 17:39:03 by pytest-html v4.1.1

Environment

Python	3.12.2
Platform	Windows-11-10.0.22631-SP0
Packages	<ul style="list-style-type: none">• pytest: 8.1.1• pluggy: 1.4.0
Plugins	<ul style="list-style-type: none">• anyio: 4.3.0• html: 4.1.1• metadata: 3.1.1


Summary

7 tests took 00:06:12.

(Un)check the boxes to filter the results.

☐ 0 Failed, ☒ 7 Passed, ☐ 0 Skipped, ☐ 0 Expected failures, ☐ 0 Unexpected passes, ☐ 0 Errors, ☐ 0 Reruns

[Show all details](#) / [Hide all details](#)

Result 	Test	Duration	Links
Passed	test_create_goals.py::test_create_goals	00:00:55	
Passed	test_create_project.py::test_create_project	00:01:11	
Passed	test_delete_project.py::test_delete_project	00:00:52	
Passed	test_invite_teammate.py::test_invite_teammate	00:01:15	
Passed	test_login.py::test_login_success	00:00:36	
Passed	test_login_failure.py::test_login_failure	00:00:35	
Passed	test_settings.py::test_settings	00:00:49	

Implemented the report using “**pytest**” which generates an HTML report of all the test cases. The above report indicates that all the functional included have passed the test cases successfully.

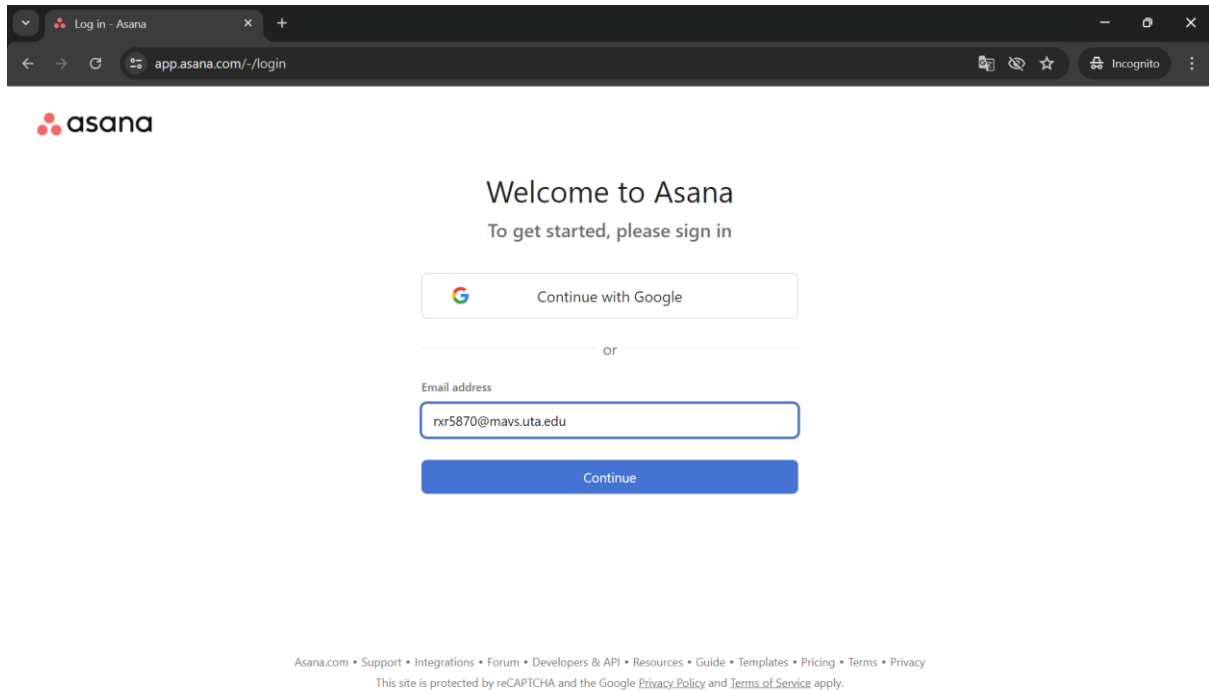
The elements tested are:

- 1) Login Success
- 2) Login Failure
- 3) Create Project
- 4) Delete Project
- 5) Create Goals
- 6) View Settings
- 7) Invite Teammate

4)Test Execution:

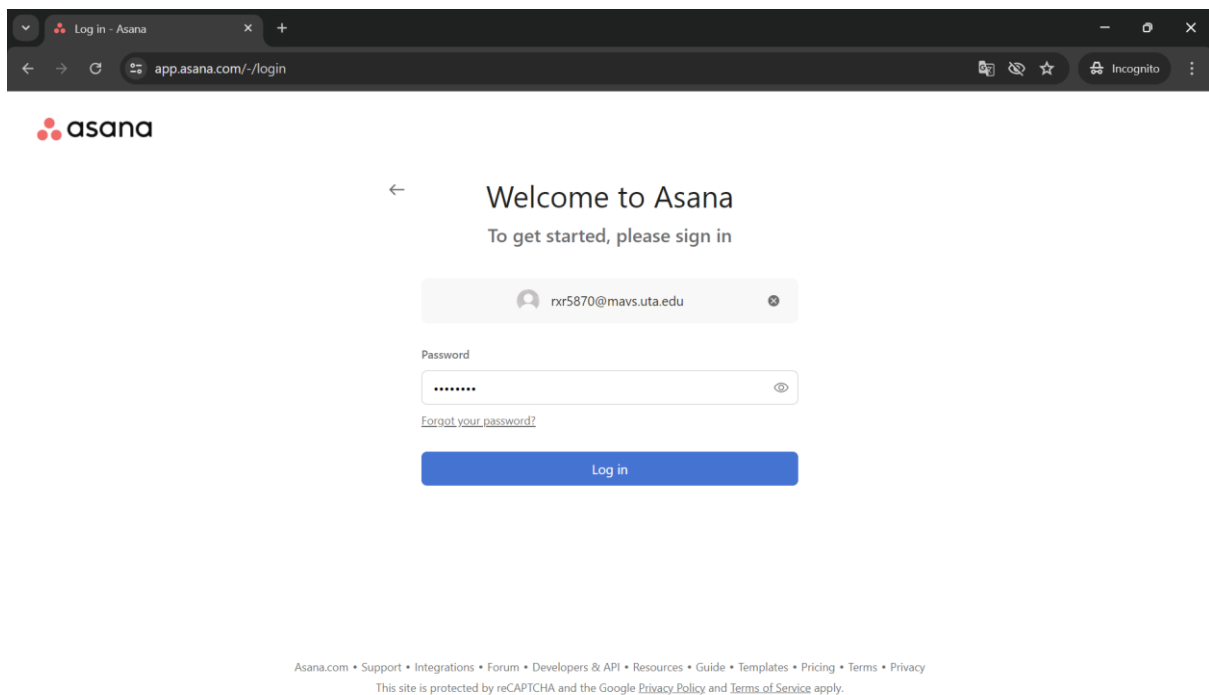
i. Login Page Authentication:

Enter email address:



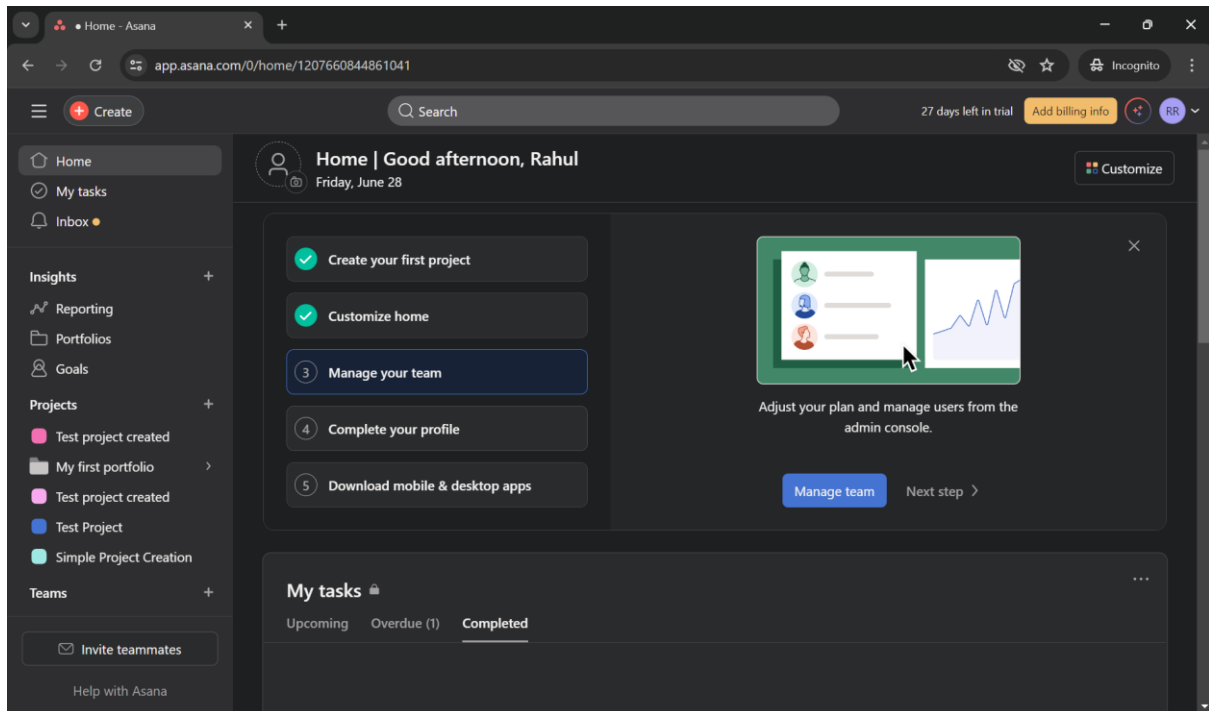
The screenshot shows the Asana login page in a web browser. The browser's address bar displays 'app.asana.com/-/login'. The page features the Asana logo at the top left. The main heading is 'Welcome to Asana' with the subtext 'To get started, please sign in'. Below this, there is a 'Continue with Google' button. A horizontal line with the word 'or' in the center separates the Google login option from the email login option. Under the 'Email address' label, a text input field contains the email 'rxr5870@mavs.uta.edu'. Below the input field is a blue 'Continue' button. At the bottom of the page, there is a footer with links: 'Asana.com • Support • Integrations • Forum • Developers & API • Resources • Guide • Templates • Pricing • Terms • Privacy'. A note below the footer states: 'This site is protected by reCAPTCHA and the Google Privacy Policy and Terms of Service apply.'

Enter Password:



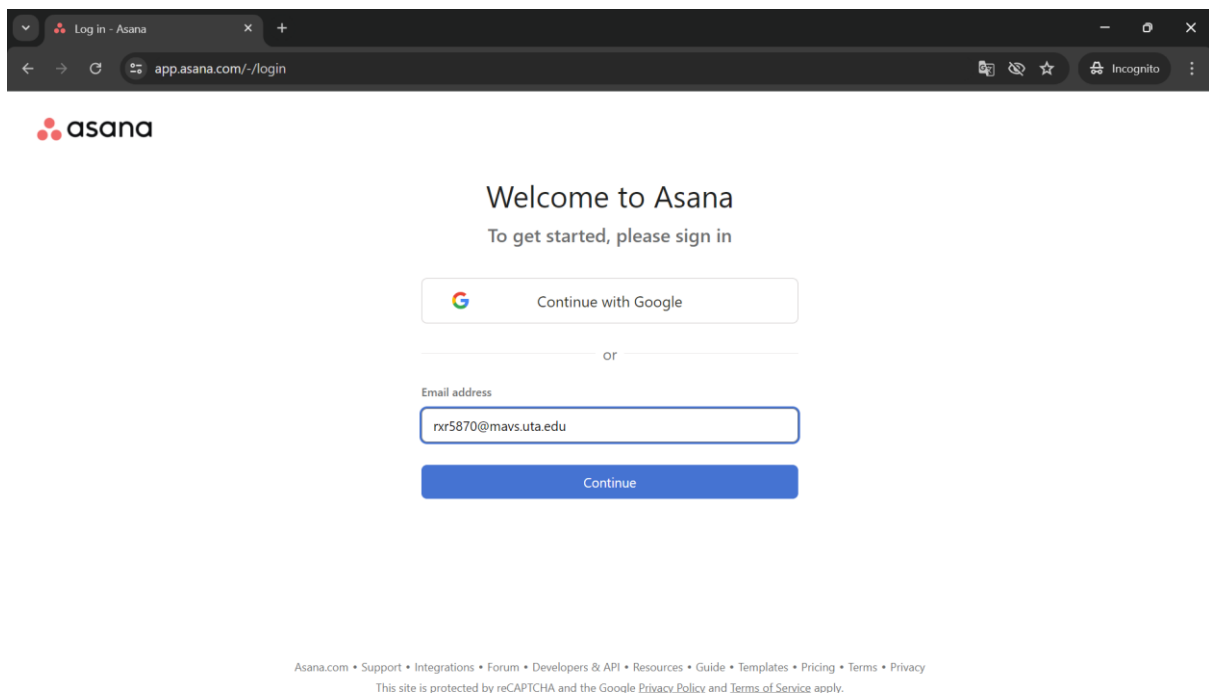
The screenshot shows the Asana login page in a web browser, with the browser's address bar displaying 'app.asana.com/-/login'. The page features the Asana logo at the top left. The main heading is 'Welcome to Asana' with the subtext 'To get started, please sign in'. Below this, there is a button showing a user profile icon and the email 'rxr5870@mavs.uta.edu'. Under the 'Password' label, a text input field contains masked characters '*****'. To the right of the password field is an eye icon for toggling visibility. Below the password field is a link that says 'Forgot your password?'. At the bottom of the login section is a blue 'Log in' button. The footer at the bottom of the page includes links: 'Asana.com • Support • Integrations • Forum • Developers & API • Resources • Guide • Templates • Pricing • Terms • Privacy'. A note below the footer states: 'This site is protected by reCAPTCHA and the Google Privacy Policy and Terms of Service apply.'

Logged In Successfully:

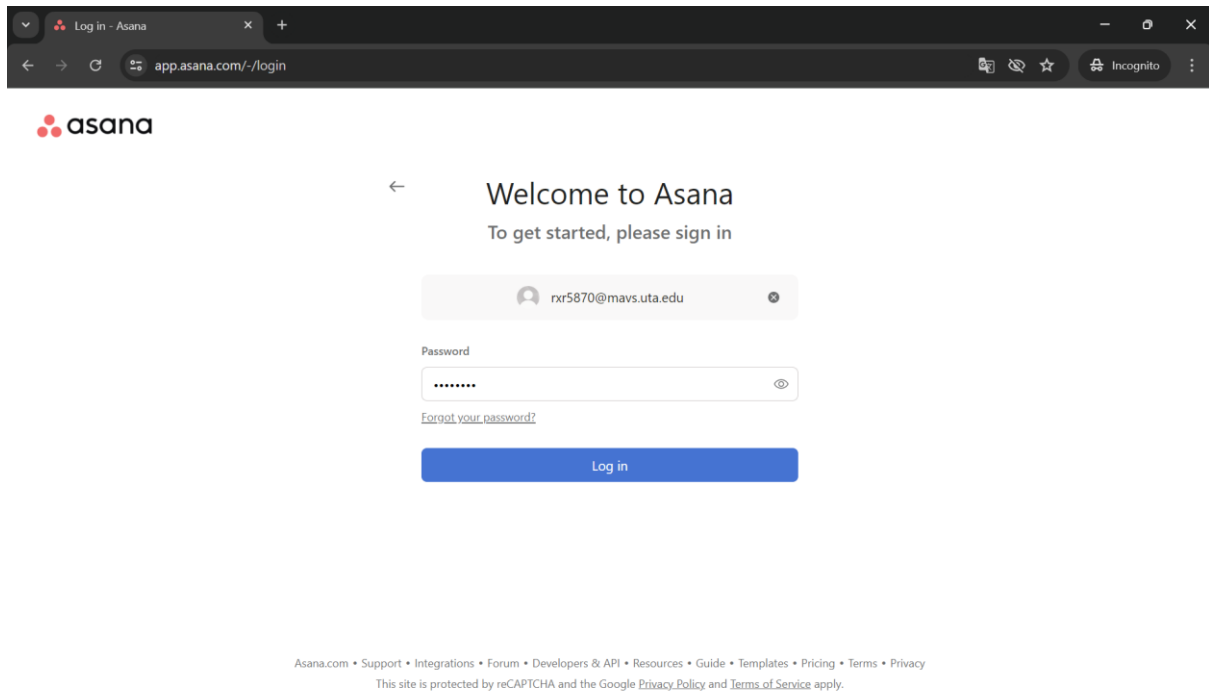


ii. Login Page Failure:

Enter Email address:

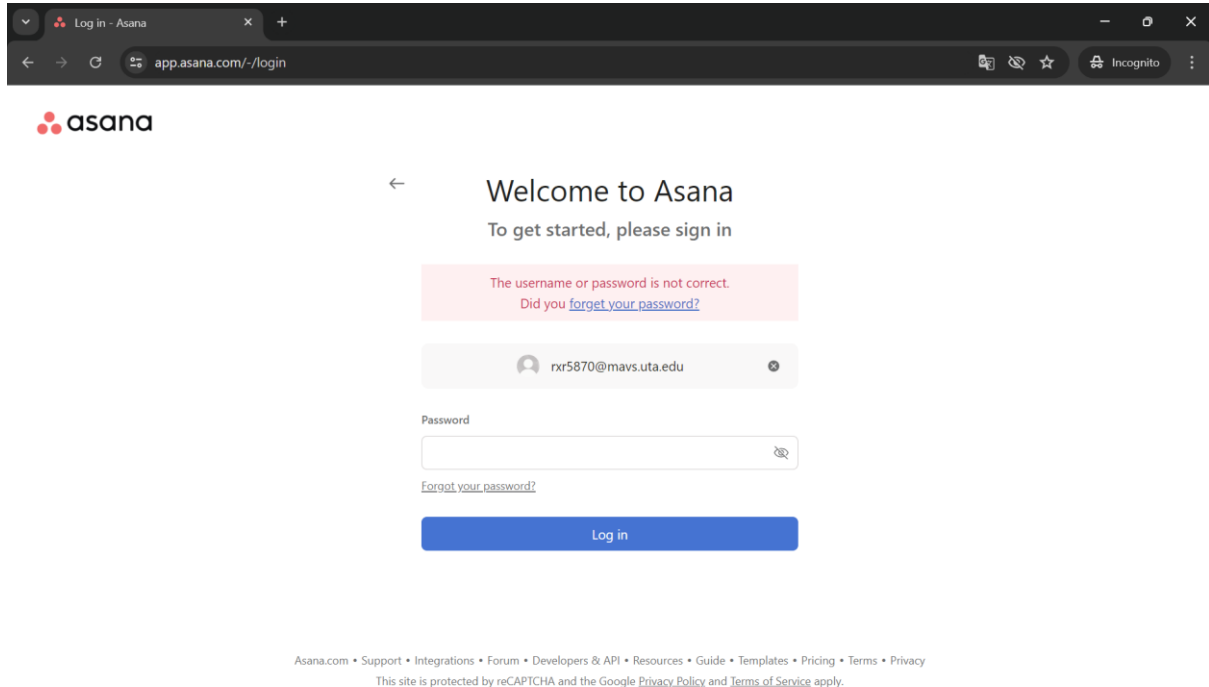


Entering a wrong password:



The screenshot shows a web browser window with the URL `app.asana.com/-/login`. The page features the Asana logo at the top left. Below it, a back arrow is followed by the heading "Welcome to Asana" and the subtext "To get started, please sign in". A light gray input field contains the email address `rxr5870@mavs.uta.edu`. Below this, a "Password" label is followed by a password input field with masked characters (dots). A link for "Forgot your password?" is positioned below the password field. A blue "Log in" button is centered below the form. At the bottom of the page, a footer contains links for "Asana.com", "Support", "Integrations", "Forum", "Developers & API", "Resources", "Guide", "Templates", "Pricing", "Terms", and "Privacy", along with a statement about reCAPTCHA protection.

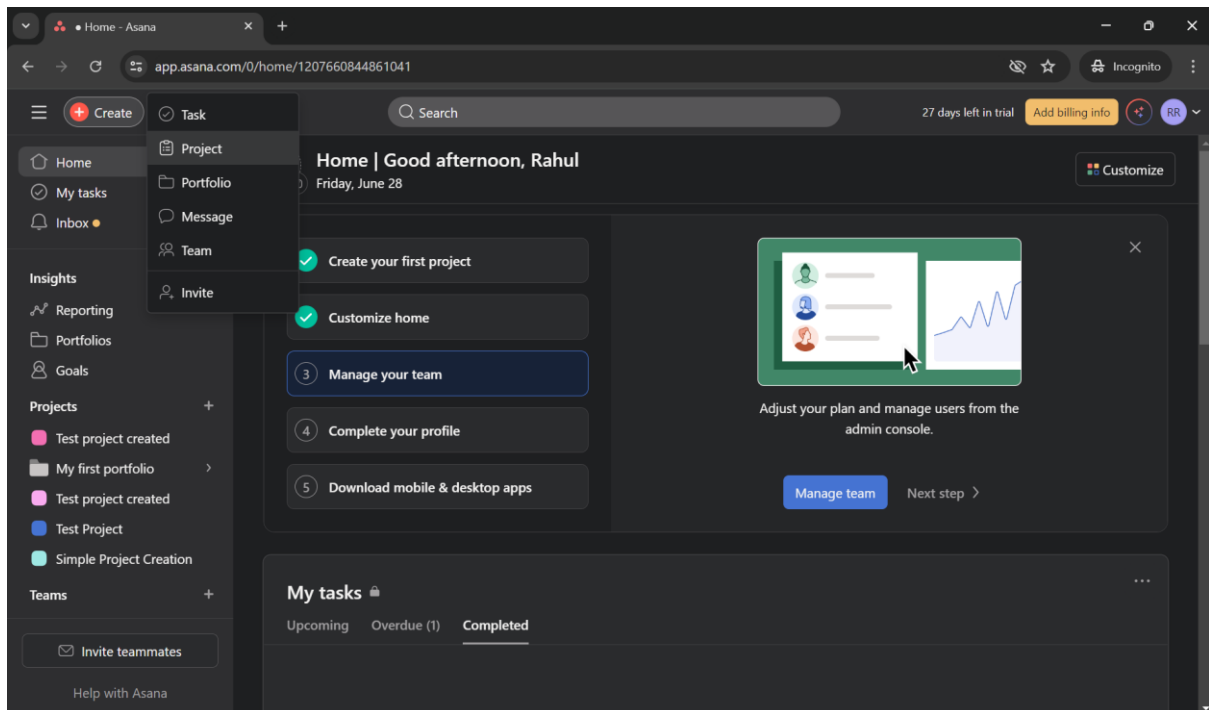
Login Failed:



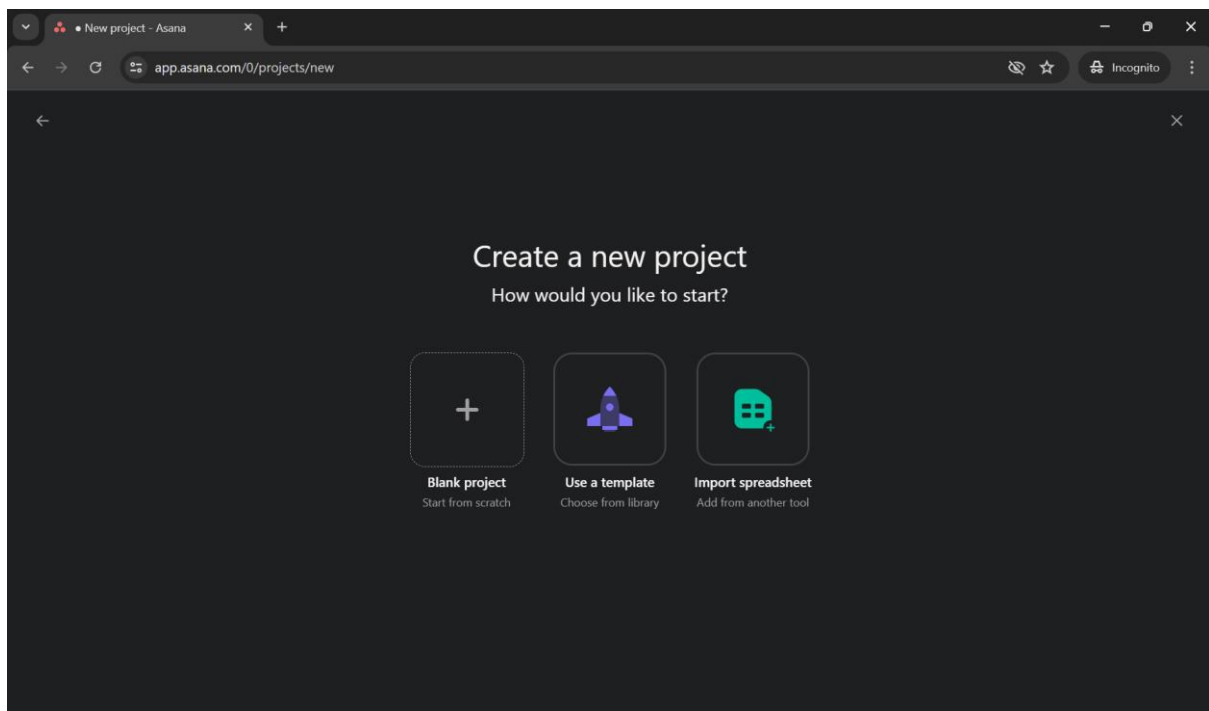
This screenshot shows the same Asana login page as above, but with a red error message displayed: "The username or password is not correct. Did you forget your password?". The email address `rxr5870@mavs.uta.edu` remains in the input field, and the "Log in" button is still visible. The footer at the bottom of the page is identical to the previous screenshot.

iii. Creation of a new Project:

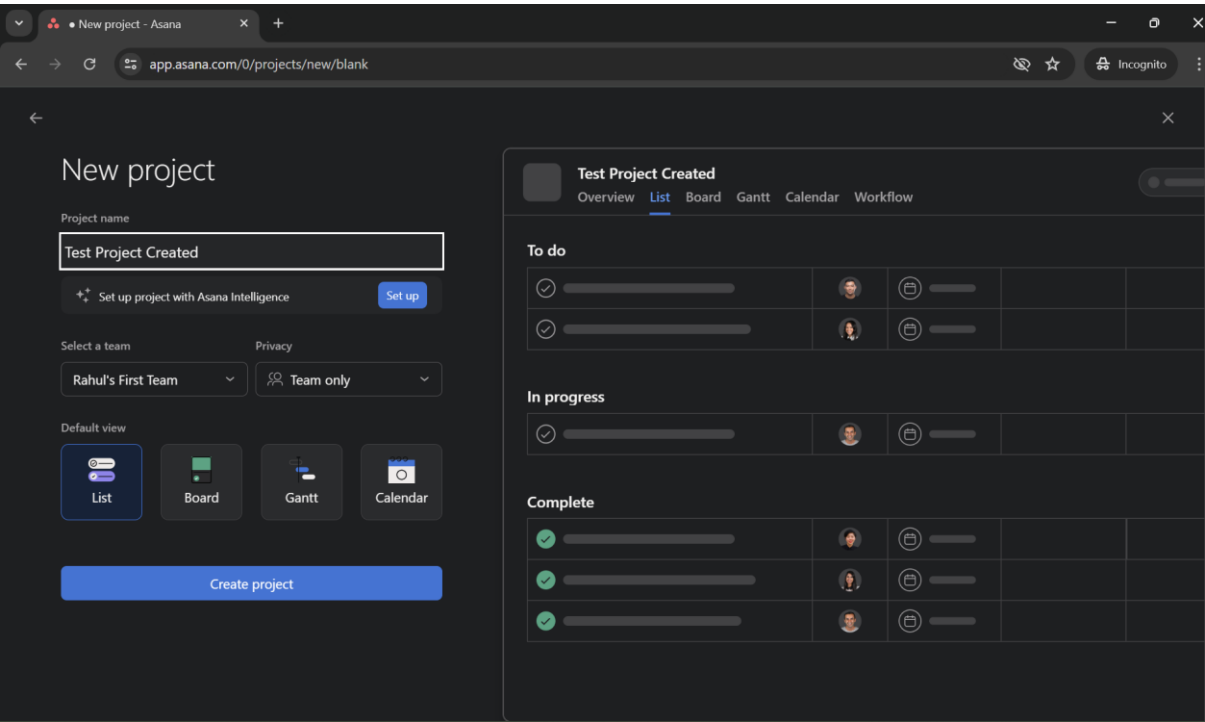
Selecting Project Option under Create:



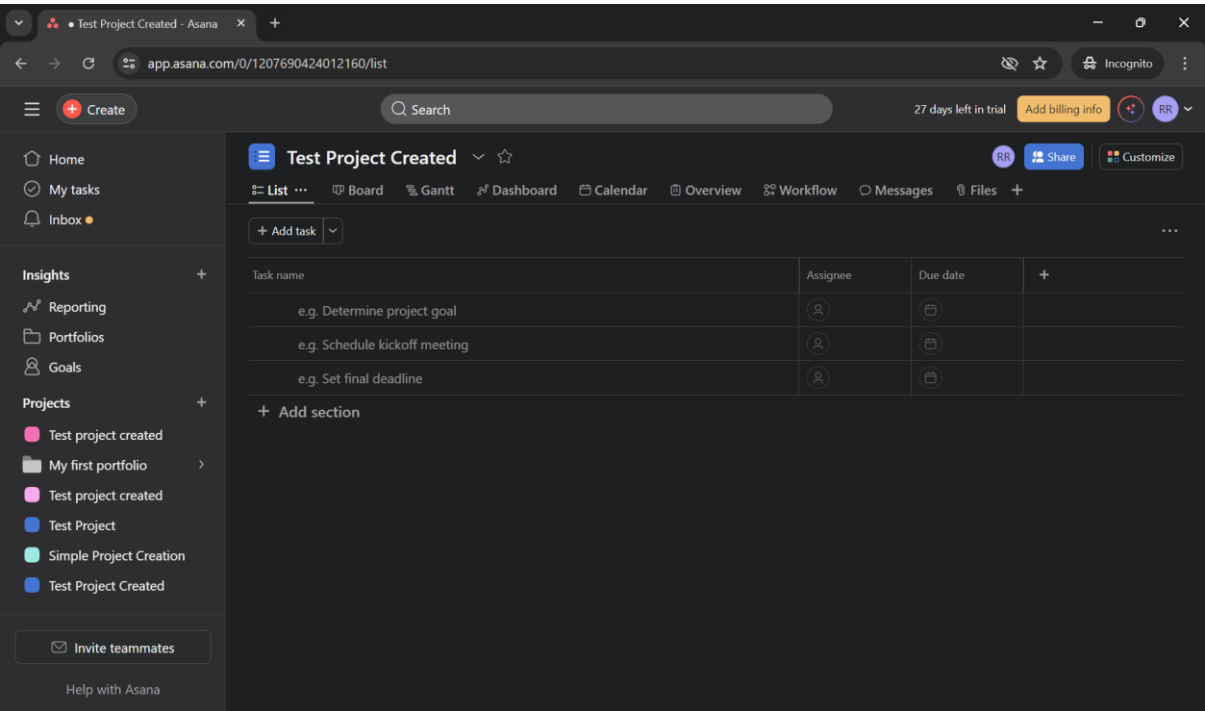
Choosing Blank Project:



Entering “Test Project Created” in the Title:

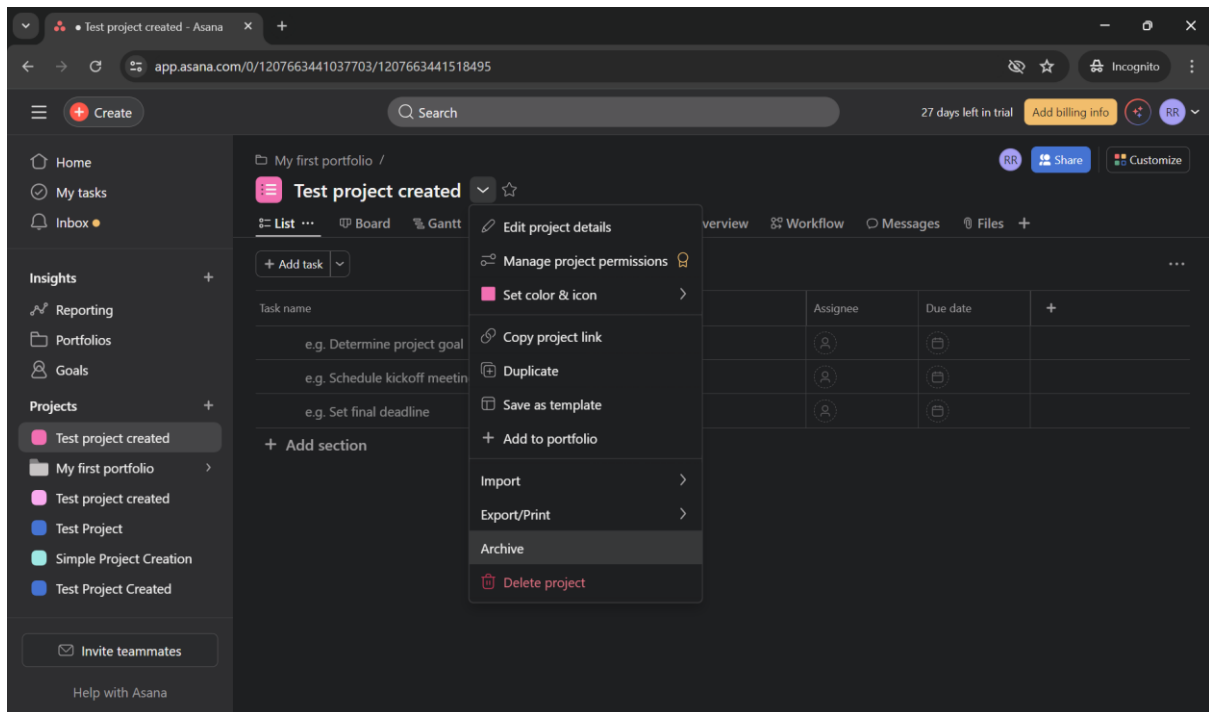


New Project Created:

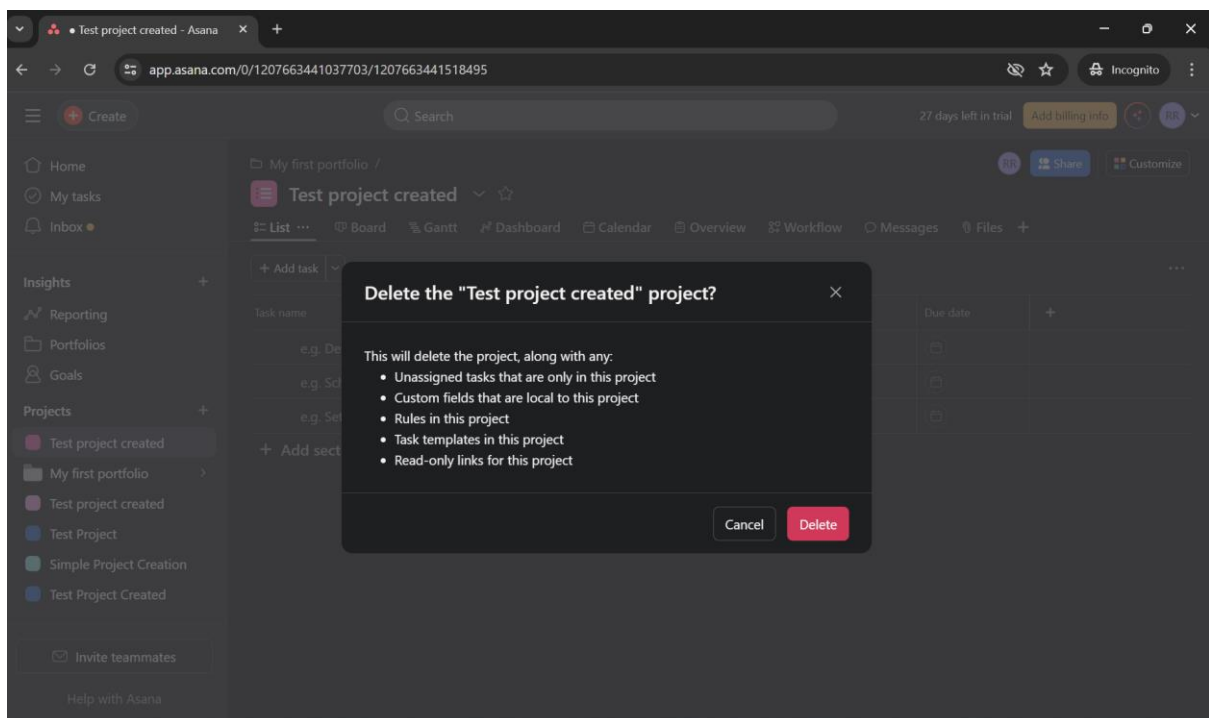


iv. Deletion of a Project:

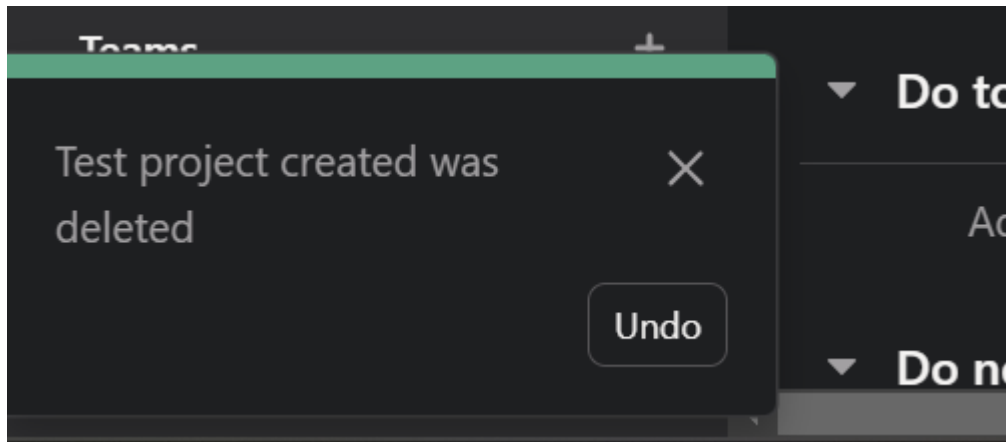
Select the project:



Delete the Project:

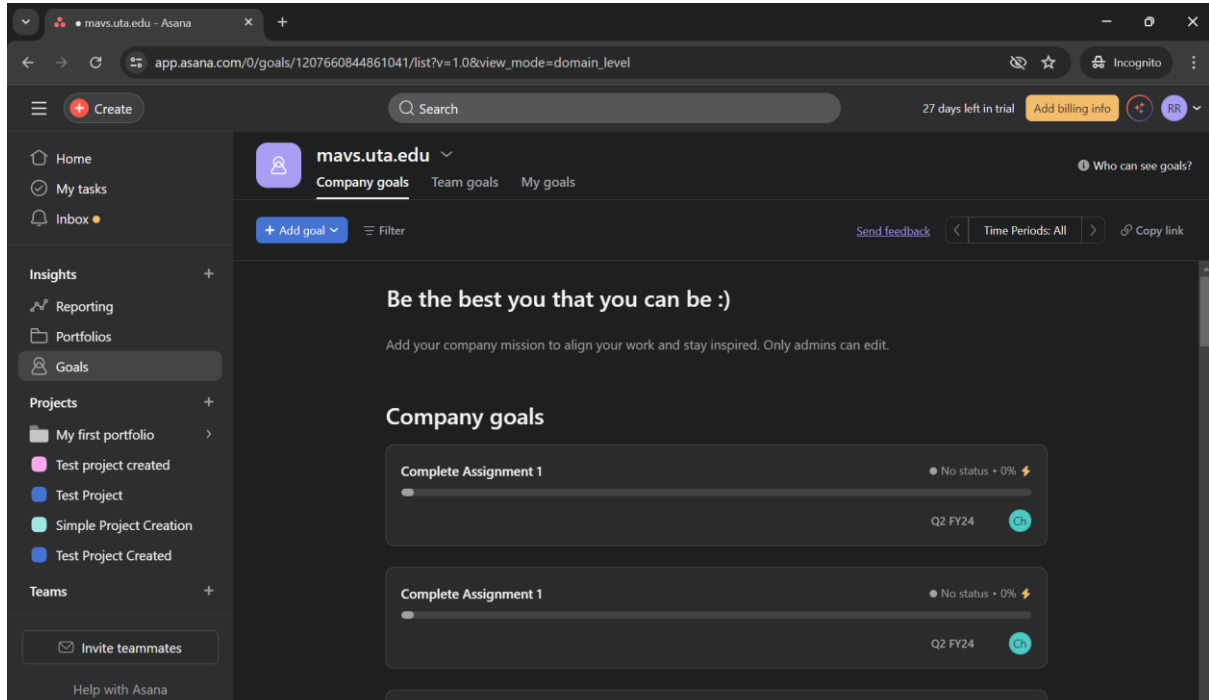


Project Deleted Successfully:

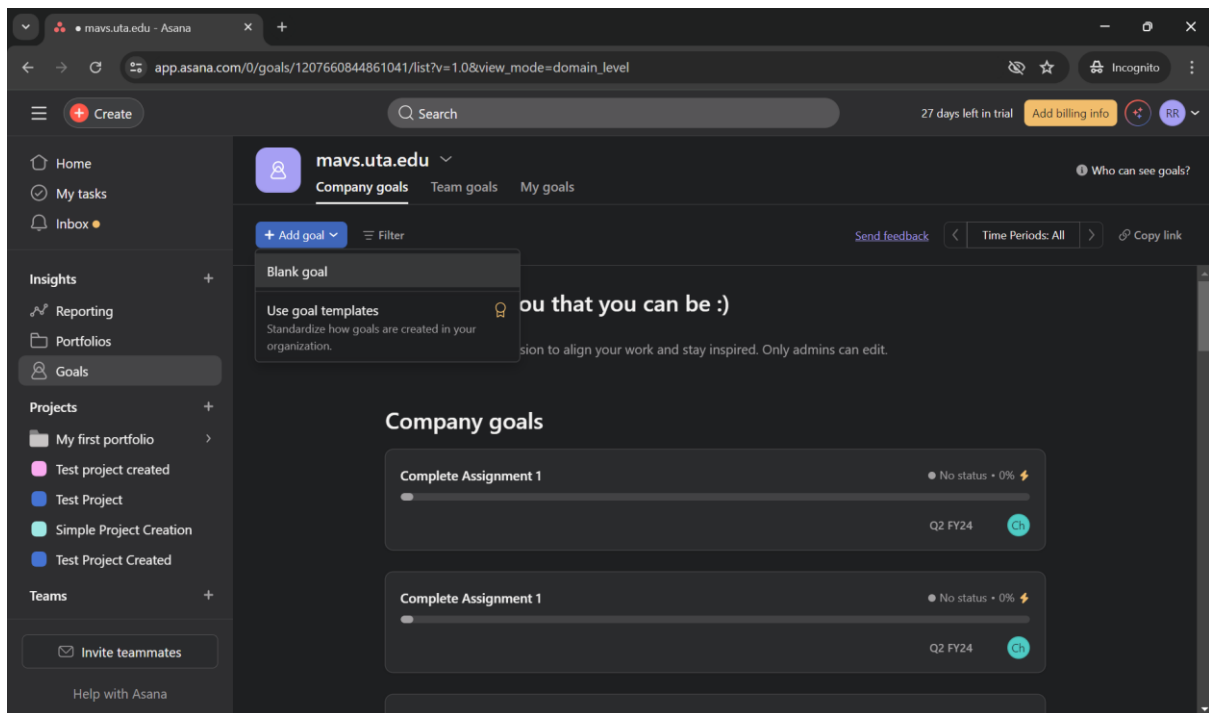


v. Creation of a new goal:

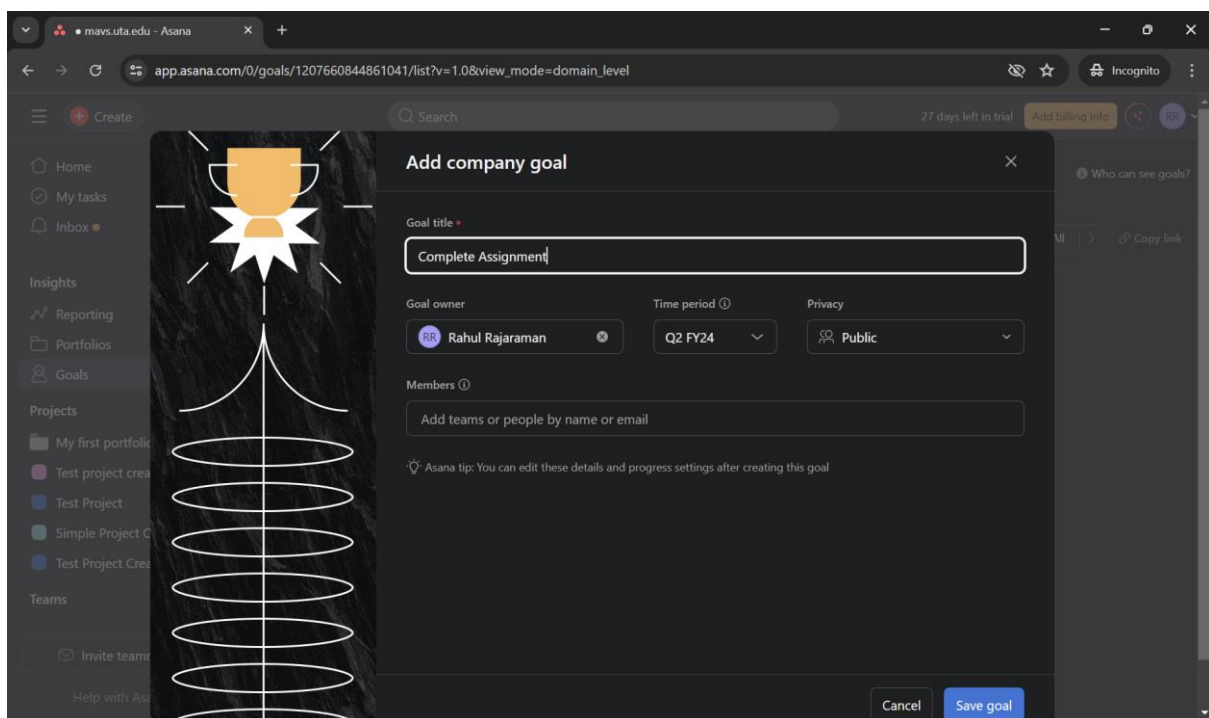
Opening Goals:

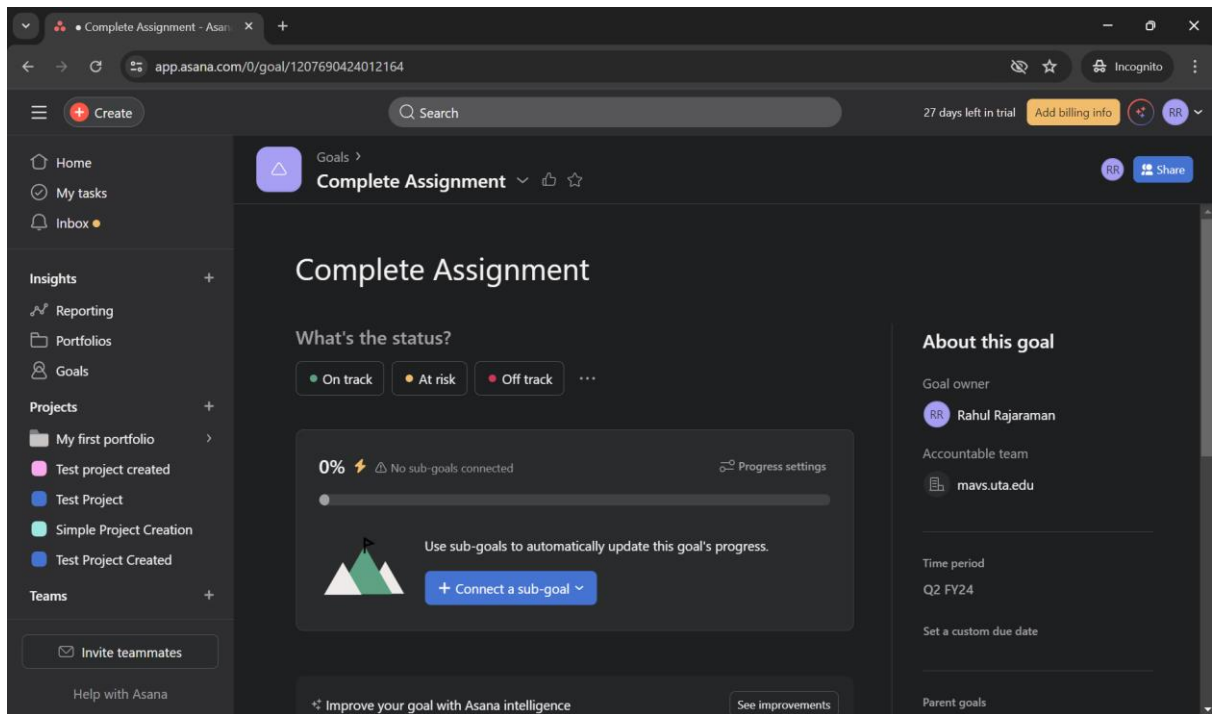


Creating a blank goal:



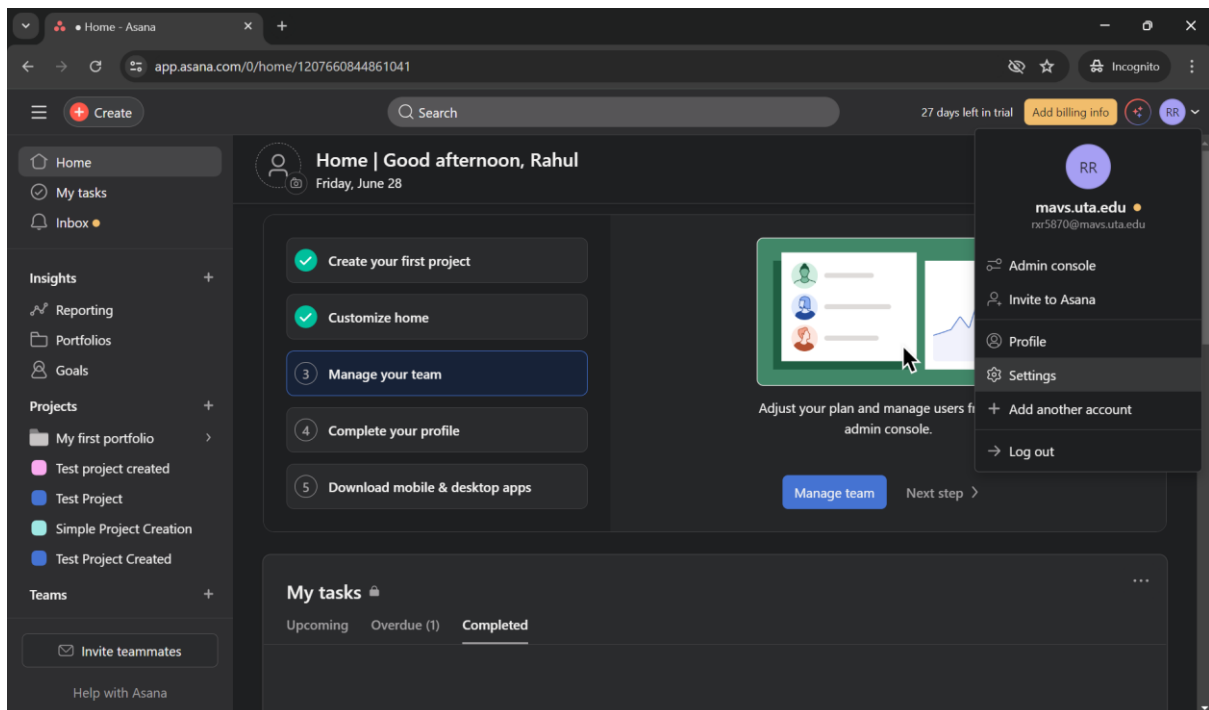
Giving goal title and creating the goal:



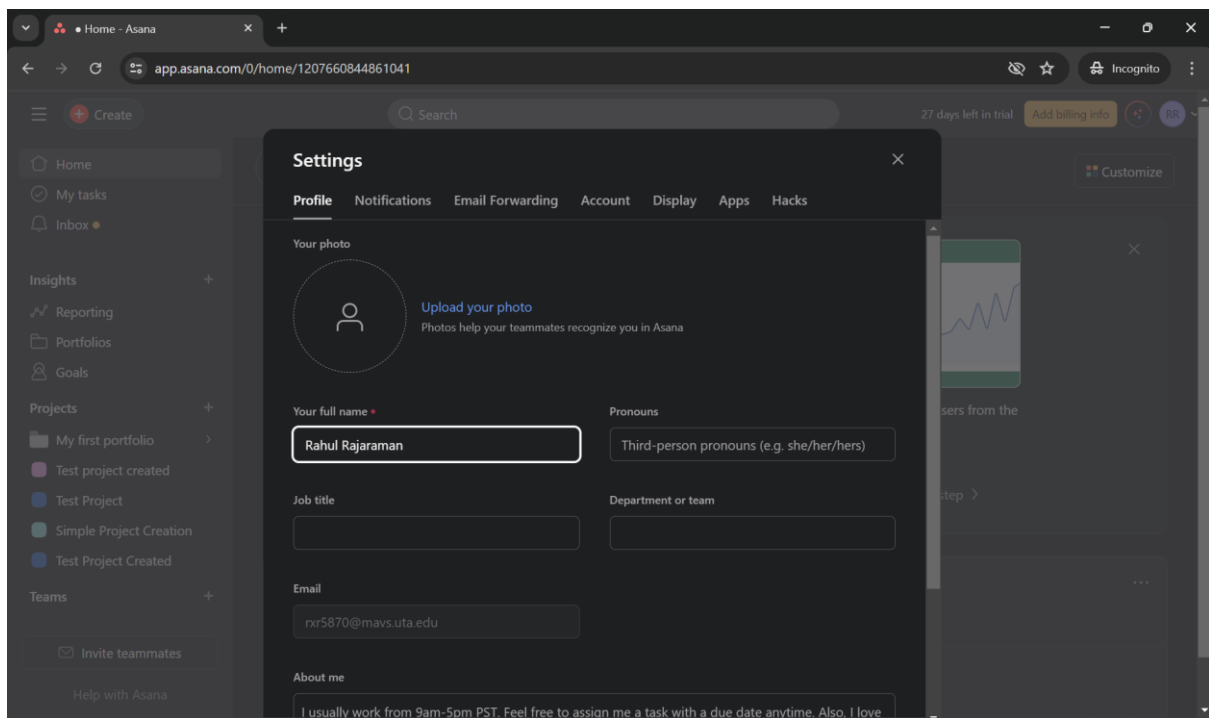


vi. Viewing the Settings Page:

Click the profile icon and go to Settings:

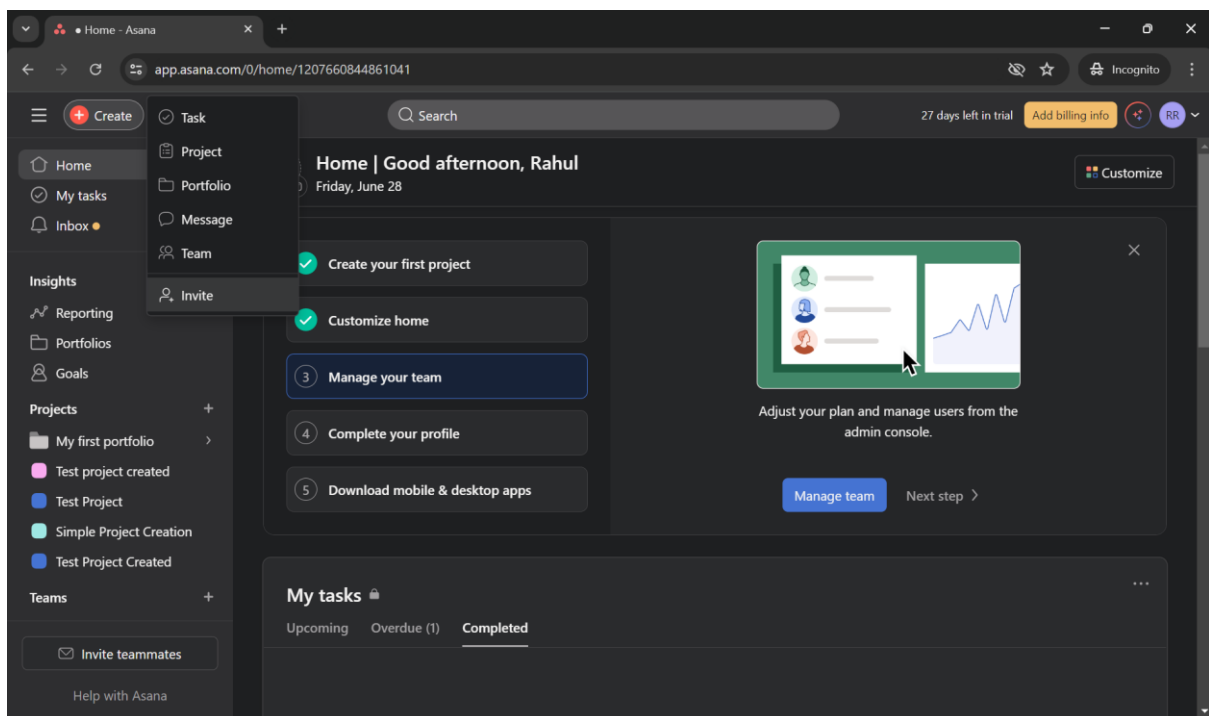


Settings Page is Displayed:

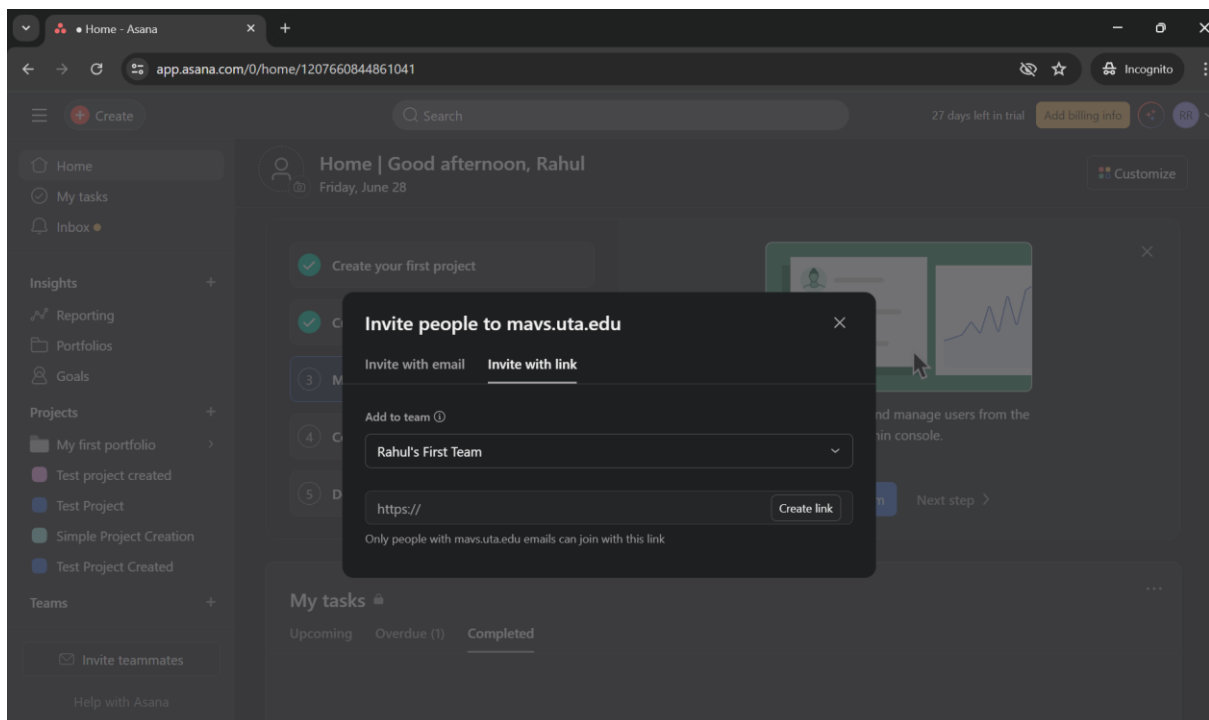


vii. Inviting a teammate:

Click Invite under Create:



Go to invite with link tab and click Create Link:



Click Copy link to copy it and click Deactivate link:

