

The Scrum Tool is unit tested for abilities specific to each Scrum role and abilities specific to the Admin of the tool. The group follows an agile development framework, which calls for unit testing to be performed in real time as the code for each task is being written.

Scrum Master

- 1) Test log in as a user with the role: Scrum Master
 - a) Verify the authentication module rejects incorrect username/password information and requests new information when a login fails.
 - b) Verify that after a successful login, a landing page that displays the Team Name of the user (the name is correctly pulled from the backend database) is generated.
- 2) Test Interactive calendar
 - a) Test that clicking on a day results in a graphical representation of employee availability for that day
 - i) Graphic is displayed on a new page or as a pop up window (to be determined).
 - ii) Verify that employee names display correctly on horizontal header
 - iii) Verify that vertical columns represent 1-hour blocks of time
 - iv) Test that hours an employee marked as their hours "off" are represented as colored blocks of time, while available hours are in white.
- 3) Test clicking on "My Account" → "Profile"
 - a) Upon clicking, navigates user to page with options to:
 - i) Reset password
- 4) Test "Logout" menu item
 - a) Verify that clicking "Logout" closes the user's session and brings them back to the login page
- 5) Test landing page of user without a team: if not yet part of a team, the user will see a default landing page upon logging in
 - a) Welcome message
 - b) No distinct team information is displayed.

Product Owner

- 1) Test login as a user with the role: product owner
 - a) Verify the authentication module rejects incorrect username/password information and requests new information when a login fails.
 - b) Verify that after a successful login, a landing page that displays the Team Name of the user (the name is correctly pulled from the backend database) is generated.
- 2) Test Interactive calendar
 - a) Test that clicking on a day results in a graphical representation of employee availability for that day
 - i) Graphic is displayed on a new page or as a pop up window (to be determined).
 - ii) Verify that employee names display correctly on horizontal header

- iii) Verify that vertical columns represent 1-hour blocks of time
 - iv) Test that hours an employee marked as their hours "off" are represented as colored blocks of time, while available hours are in white.
- 3) Test clicking on "My Account" → "Profile"
 - a) Upon clicking, navigates user to page with options to:
 - i) Reset password
- 4) Test "Logout" menu item
 - a) Verify that clicking "Logout" closes the user's session and brings them back to the login page.
- 5) Test landing page of user without a team: if not yet part of a team, the user will see a default landing page upon logging in
 - a) Welcome message
 - b) No distinct team information is displayed.

Team Member

- 1) Test log in as a user with the role: Scrum Master
 - a) Verify the authentication module rejects incorrect username/password information and requests new information when a login fails.
 - b) Verify that after a successful login, a landing page that displays the Team Name of the user (the name is correctly pulled from the backend database) is generated.
- 2) Test "Availability" menu item
 - a) Verify that clicking on this page produces a new page with which the user can enter their hours off for each workday.
- 3) Test clicking on "My Account" → "Profile"
 - a) Upon clicking, navigates user to page with options to:
 - i) Reset password
- 4) Test "Logout" menu item
 - a) Verify that clicking "Logout" closes the user's session and brings them back to the login page
- 5) Test landing page of user without a team: if not yet part of a team, the user will see a default landing page upon logging in
 - a) Welcome message
 - b) No distinct team information is displayed.

Admin

- 1) Test log in as a user with the role: Admin
 - a) Verify the authentication module rejects incorrect username/password information and requests new information when a login fails.
 - b) Verify that after a successful login, a landing page that displays a current list of teams in the database is displayed.
 - i) Verify that each team can be edited (team name, team ID, team members, and their roles)
 - ii) Verify that a team can be successfully removed from the database.

- iii) Verify that a new team with new team information (team name, team ID, team members, and their roles) can be successfully added to the database.
- 2) Test clicking on “My Account” → “Profile”
 - a) Upon clicking, navigates user to page with options to:
 - i) Reset password
- 3) Test “Logout” menu item
 - a) Verify that clicking “Logout” closes the user’s session and brings them back to the login page.