L.O.S.T.
Test Plan Document

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Repository: https://github.com/cvikupitz/OSNAP

This document contains a number of test cases to run when using the L.O.S.T. web application. Each case will list a sequence of steps to take and a list of rules of acceptable input, along with the expected output of each test case in each scenario. The test cases covered in this document are:

1.) Create a New User

2.) Logging In

3.) Adding a Facility

4.) Adding an Asset

5.) Disposing an Asset

6.) Making a Transfer Request

7.) Viewing an Asset Report

8.) Viewing a Transfer Report

The reader shall test each test case by following the instructions on each step as stated. If the application gives the expected output, the test case is considered to pass, or fail if otherwise. Users may also intentionally enter erroneous input to see if the application responds as it is expected.

To run the application, start a new database and run it with postgres, then run the preflight script in the repository’s home directory and point your browser to http://127.0.0.1:8080/

1.) Create a New User

This first test case will cover creating a new user account into the L.O.S.T. database. Once you have started the application and opened your browser, you should see the login page (Figure 1.1). Click the 'Create New User' link at the bottom to go to the new user screen (Figure 1.2). Fill out the username and password and select which role the account will have (Logistics or Facilities Officer). Once filled out, click 'Submit' below to create the account. If you decide to cancel, you can click the 'Return to login page' link below to return to the login page.

Expected Input:

You must fill out the username, password, and confirm password text fields. You also must select a role from the roles drop-down menu (cannot have 'None' selected). If you attempt to create an account with an empty component, a pop-up flag appears next to the component that you need to fill out.

Usernames must be unique, as in, the username you enter cannot be equivalent to another already in the database (case-sensitive, so having 'smith' and 'Smith' should be fine). Usernames also must be between 1-16 characters. The text fields are programmed to accept no more than 16 characters. If any of these conditions are violated, a message appears at the top of the page explaining the error.

Both the password field and confirm password field must be equivalent (case-sensitive). Passwords also must be 1-16 characters as well. If any of these conditions are violated, a message appears at the top of the page explaining the error.

The user must select either 'Logistics Officer' or 'Facilities Officer' from the drop down menu. The application will not allow users to select 'Select a role' when creating a new account.

For this test run, enter 'guest' for the username, 'password' for the passwords, and select 'Logistics Officer' for the role. Create a second account named 'guest2' with the password 'password' and the role 'Facilities Officer'. Notice the username and role displayed on the dashboard at each login.

Expected Output:

If the user creates a new account and all the conditions are met, they will be taken to the dashboard screen, and also see their username displayed in the top right corner along with their role (see Figure 1.3).

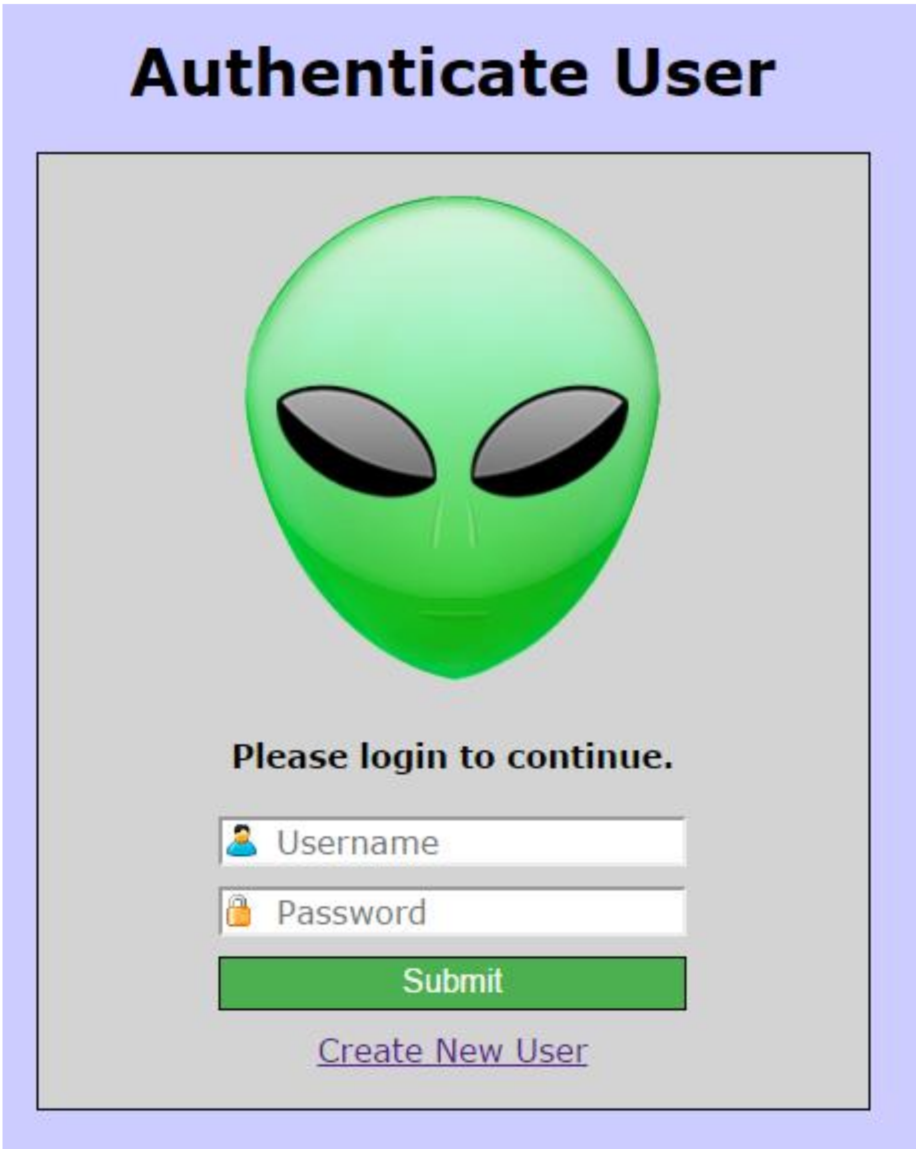

Figure 1.1 – The login screen. Here, users can log into the L.O.S.T. database.

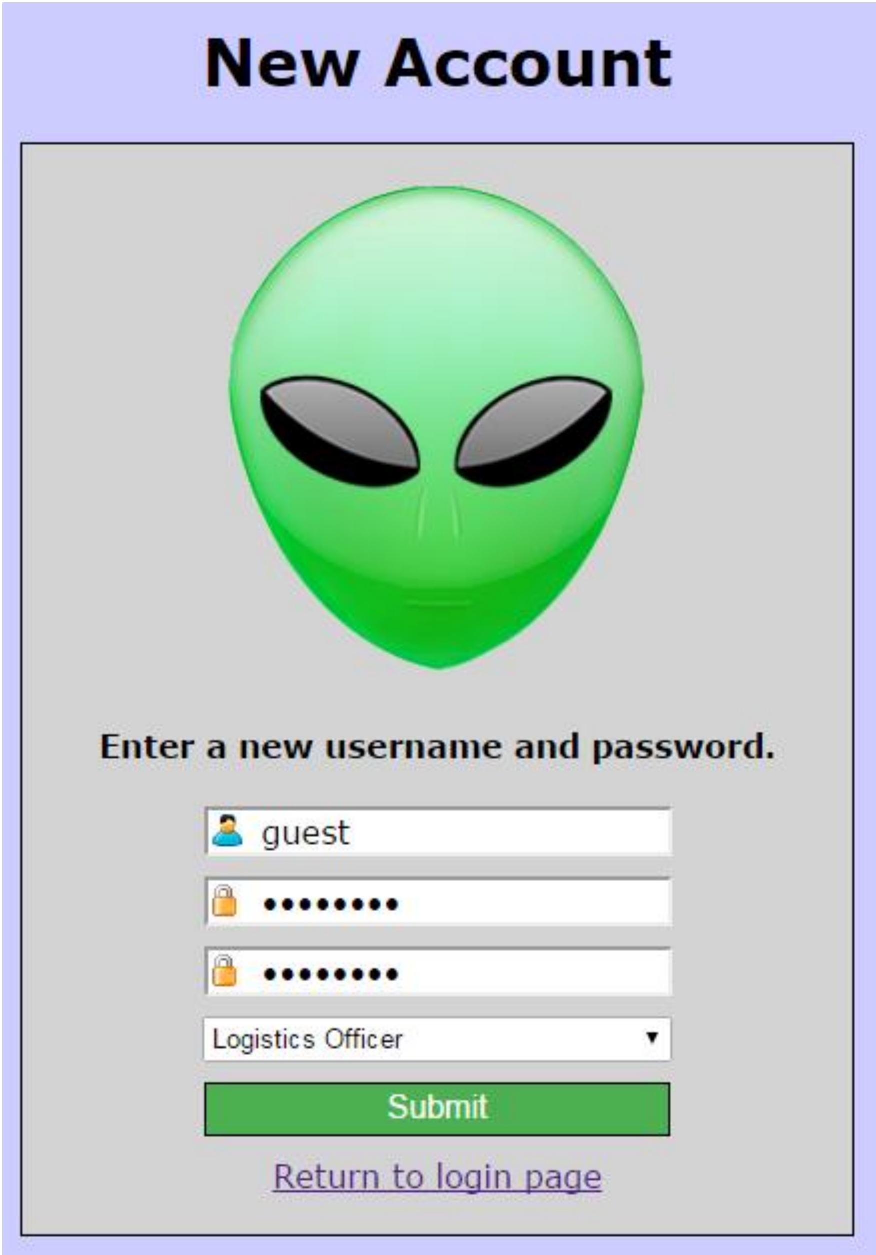

Figure 1.2 – The new account page. Here, users can create a new account by giving a username, password, and role.

Figure 1.3 – The L.O.S.T. dashboard. Notice the username and role displayed at the top-right corner.

2.) Logging In

Now with two user accounts created, this next test case is simple. Go back to the login screen by signing out if you're on the dashboard, or clicking the link if you're on the new account page. Once you are back on the login page, sign in with either of the two accounts. Log in by entering 'guest' or 'guest2' into the username entry box and entering 'password' into the password box, then click the submit button. You should be taken back to the dashboard if the sign in was successful, otherwise you will be redirected back to the login with a message at the top saying 'Unauthenticated User: Incorrect username/password' (see Figure 2.1).

Figure 2.1 – The sign in page after an unsuccessful sign-in. An error message will display on top.

3.) Adding a Facility

For this next test case, we'll be adding some facilities. Log in with either of the two accounts from case 1. Then from the dashboard, click the 'Add a Facility' link to go to the facilities page. You will see a page as shown in Figure 3.1. On the right side will be the table of facilities you've added, including the common name and facility code. On the left is where you will enter the facility information and submit it to the database. There are also some guidelines listed as to what is acceptable input for facilities.

A facility name must contain 1-32 characters and cannot be composed of whitespace only. In other words, at least one character must appear in the name. The code is also required and must be 1-6 characters and cannot contain any whitespace. The facility names and codes also must be unique (case-sensitive). Once the information is filled out, click the submit button to add the facility. The page will refresh and your new facility should display in the table.

We will add 3 facilities. Enter ‘Wallgreens’ and ‘WLGRNS’ in the facility name and facility code boxes respectively. Then add ‘Target’ and ‘TARGET’, and finally ‘Best Buy’ and ‘BSTBUY’. Your table should look like the one shown in Figure 3.2.

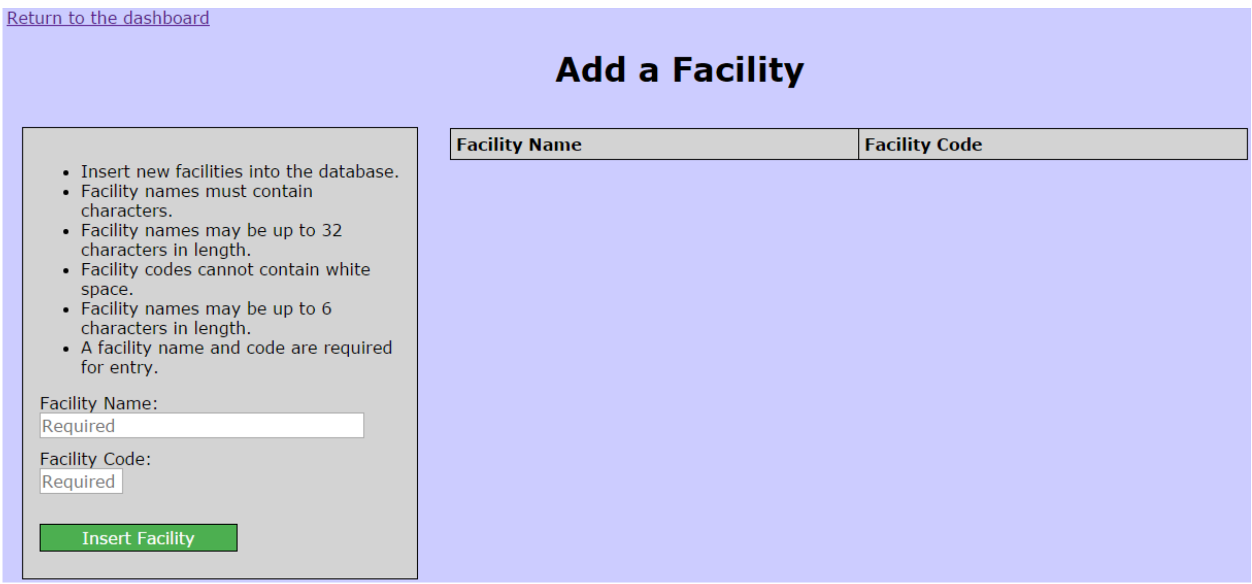

Figure 3.1 – The facilities page before you enter any facilities.

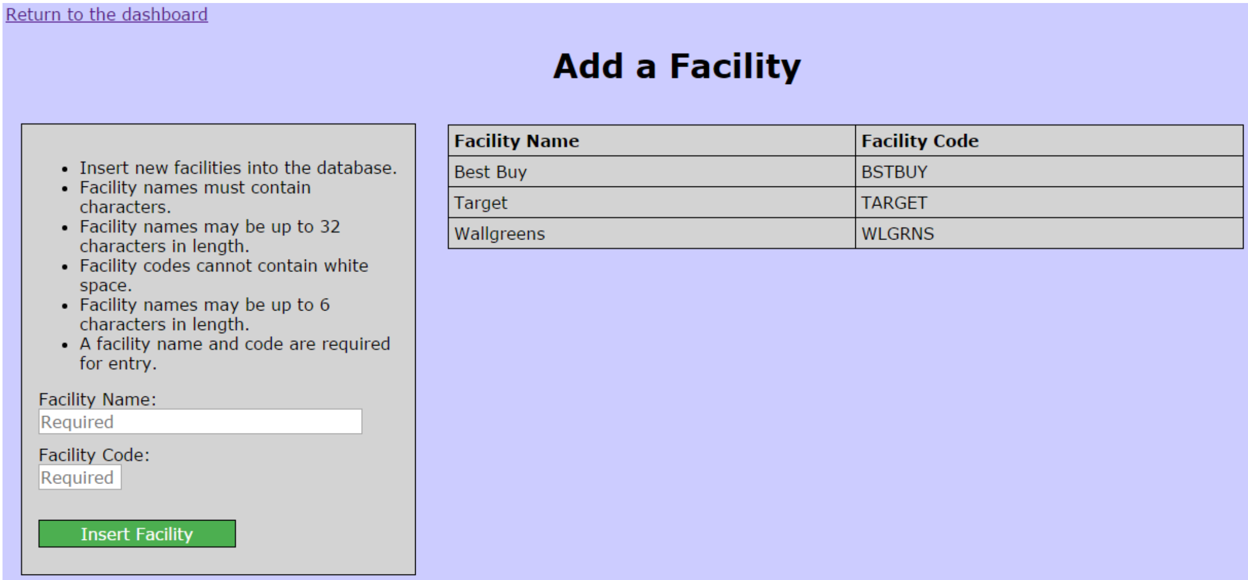

Figure 3.2 – The facilities table after you've entered the 3 facilities as instructed in test case 3.

4.) Adding an Asset

Next, we will add some assets into our database. Click the link at the top-left corner of the facilities screen to return to the dashboard. Then click the 'Add an Asset' link to go to the assets page. You will see a screen as shown in Figure 4.1.

The assets page is set up similarly to the facilities page. On the right side is the table of assets listing the asset tag and description, and on the left is where you enter the asset information and submit it to the database. Again, guidelines will be listed telling you what is acceptable for asset tags and descriptions.

An asset tag must contain 1-16 characters and cannot contain any whitespace, just like facility codes. You may enter a description for the asset that may be up to 80 characters in length. A facility must also be selected from the drop-down menu to signify which facility the asset belongs to. Finally, a date of arrival is also required and must be in the format MM/DD/YYYY (ie. 01/20/2003 is acceptable but 1/1/2002 is not).

Let's add three assets to the database, one for each facility we created. Insert 'GC1200', 'Greeting cards', 'Wallgreens', and '02/01/2000' as the asset tag, description, facility, and date respectively. Likewise, enter ‘PRP1200’, ‘Printer paper’, ‘Target’, and ‘04/10/2000’. Finally, enter ‘COMP1200’, ‘Laptop computer’, ‘Best Buy’, and ‘07/31/2000’. Your assets table should look like the one shown in Figure 4.2.

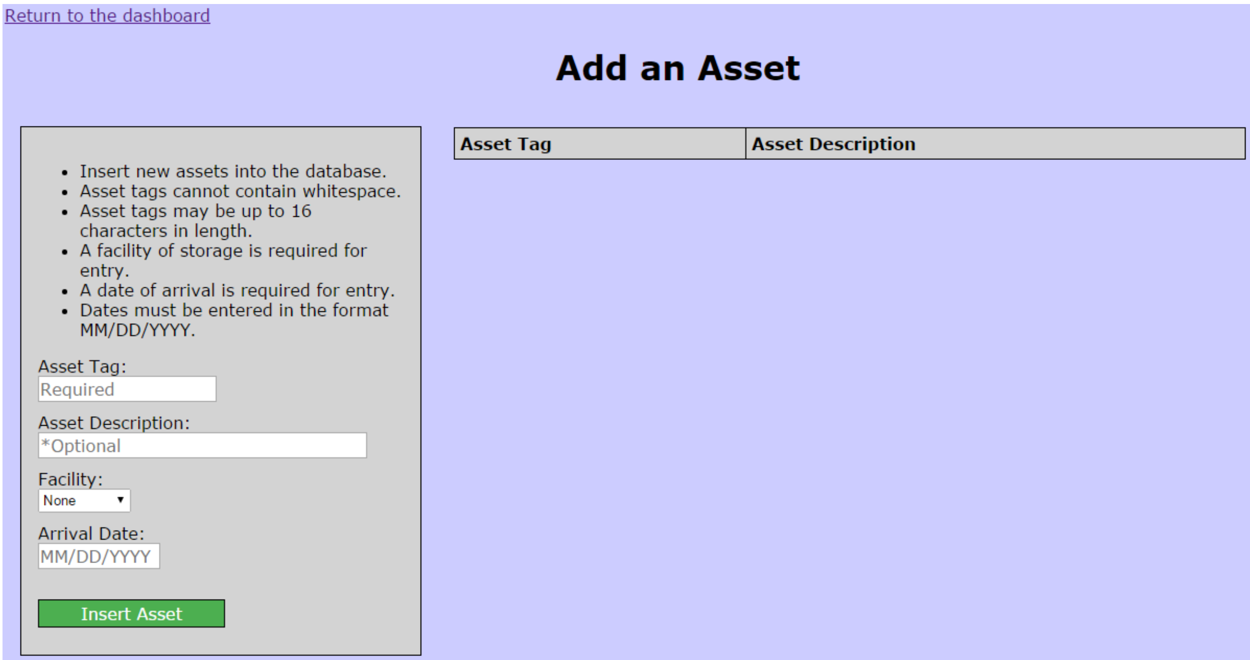

Figure 4.1 – The assets table before any assets are inserted.

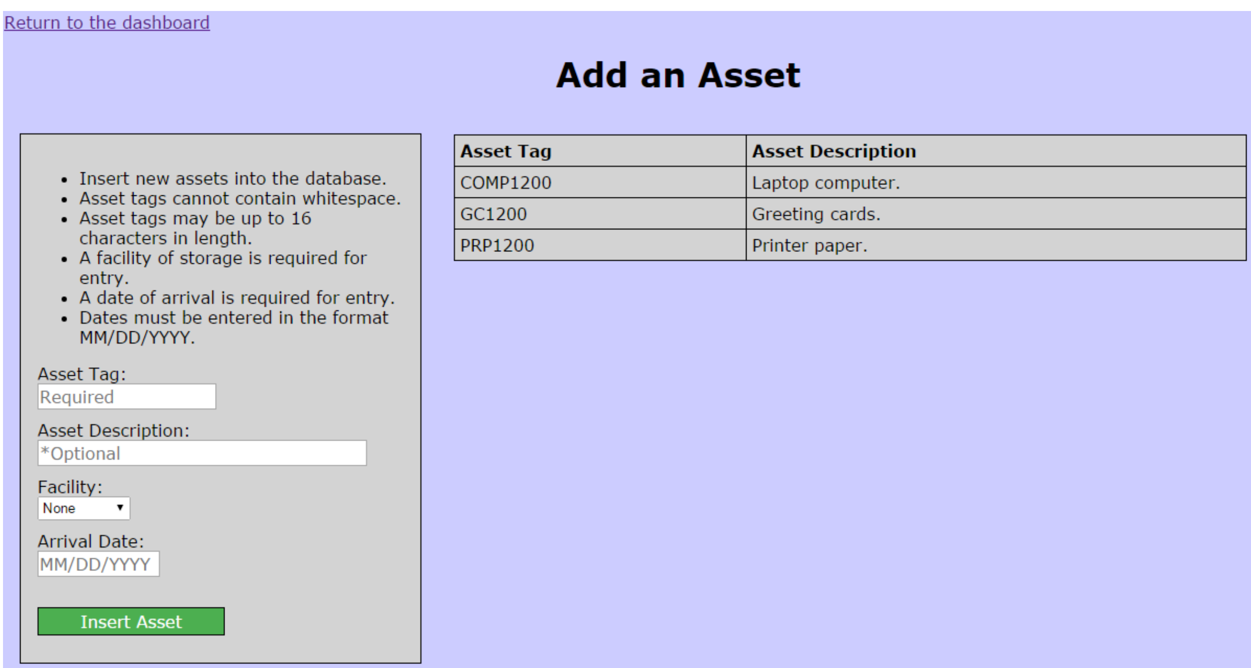

Figure 4.2 – The assets table after you've entered the 3 assets as instructed in test case 4.

5.) Disposing an Asset

Next, we will set dispose dates for our assets. Go back to the directory and click the 'Dispose an Asset' link. If you are logged in with guest2, a page will notify you saying that you are not able to access the page since you are a facilities officer (see Figure 5.1). If so, login with your guest account and click the link again. You will see a page as shown in Figure 5.2.

You must enter the asset tag and the date of disposal. The asset tag must match an existing tag (case-sensitive) and the dates must be entered in the format MM/DD/YYYY, as explained in test case 4. A list of guidelines are shown on the left side of the screen.

If an asset tag entered is not found, or the asset has already been disposed, or if the date entered is in an invalid format, a message will appear stating the cause of error. Otherwise, if everything is entered correctly, then the page will simply refresh, which means that the asset was disposed successfully.

For our test case, set a disposal date for 'GC1200' as '08/30/2000'. Likewise, set the disposal date for 'PRP1200' as '10/12/2000' and 'COMP1200' as '12/31/2000'. You may check the database (the asset_at table) to see the changes.

Figure 5.1 – This page appears when a facilities officer attempts to access the asset dispose or transfer request pages.

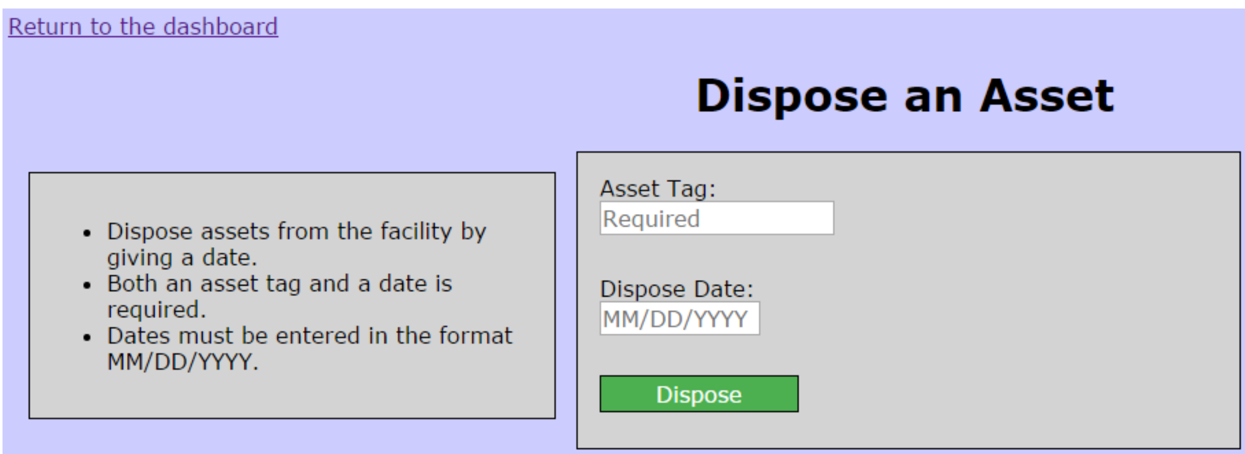

Figure 5.2 – The asset dispose screen. Enter the asset tag and date of disposure.

6.) Making a Transfer Request

Next, we will test on making a transfer request and completing that request. Return to the dashboard and click on 'Make a Transfer Request'. If you are logged in with the guest2 account, the error page shown in Figure 5.1 will appear telling you that Facilities officers are not allowed to make transfer requests. Log out and login with the guest account.

Once you’ve clicked the link, you should see a screen like the one shown in Figure 6.1. To fill out a transfer request, you must enter the facility where the asset will be transported from, the facility the asset will be transported to, and the tag of the asset being transferred. A list of guidelines are displayed on the left side of the screen telling you what input is acceptable. Any unacceptable input will cause an error message to display at the top informing the user the cause of error.

For this test case, we will make two requests. For the first request, we will transfer COMP1200 from Best Buy to Target. Fill out this information on the request form and click the submit button. If filled out correctly, you will be taken to the page shown in Figure 6.2. Click the link to go back to the dashboard, then return to the request page. Fill out a second request transferring PRP1200 from Target to Wallgreens.

Now logout and log back in with the guest2 account. When you login, you should now see two links on the left side of the screen under ‘Pending Transfers’, as shown in Figure 6.3. The strings are randomly generated, so the links on your screen will likely be different. Click the first one to go to the transfer page as shown in Figure 6.4. In the center, you should see the information displayed about the transfer (COMP1200 transferred from Best Buy to Target). Click the approve request button. You will be taken to the screen similar to the one in Figure 6.2, but with the message saying you approved the request, and you should now only see one link on your dashboard. Click the other transfer request link and decline this request.

Now log back in with the guest account. You should now only see one link on the left side of your screen. This is the request that your guest2 account approved. The other one you declined should have been removed from the database. Click the link to go to the page shown in Figure 6.5. Here, you will enter the loading and unloading times. In the center will display the transfer information, and on the left is where you will enter the loading and unloading times. A list of guidelines are also listed informing you of what is acceptable input.

Dates must be in the format MM/DD/YYYY, same as before. Times must be entered in the format HH:MM:SS in military time (i.e. 3:45 P.M. is entered as 15:45:00 and 3:45 A.M. is entered as 03:45:00). Any invalid input will cause a message to display at the top informing you of any erroneous input.

Now fill out the loading date for COMP1200 as ‘01/01/2001’ and the loading time as ‘08:00:00’. For the unloading date, set it to ‘01/10/2001’ and set the unloading time for ‘10:30:00’. Click the update button to update the request. You should be taken to the message screen informing you your request updated successfully. Once you return to the dashboard, the link should no longer be there.

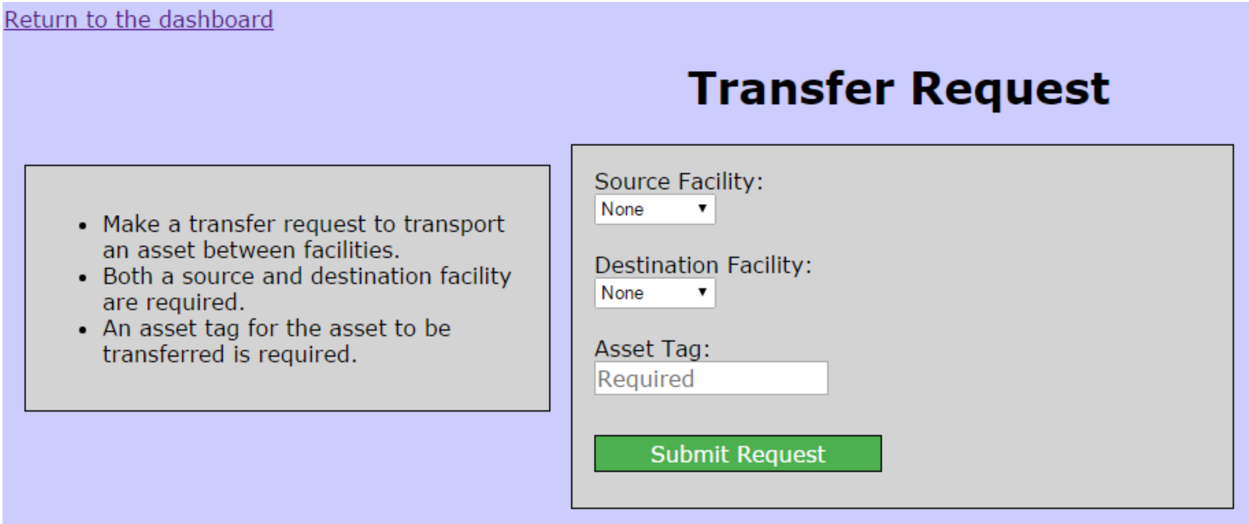

Figure 6.1 – The transfer request screen, here is where Logistics officers can make transfer requests.

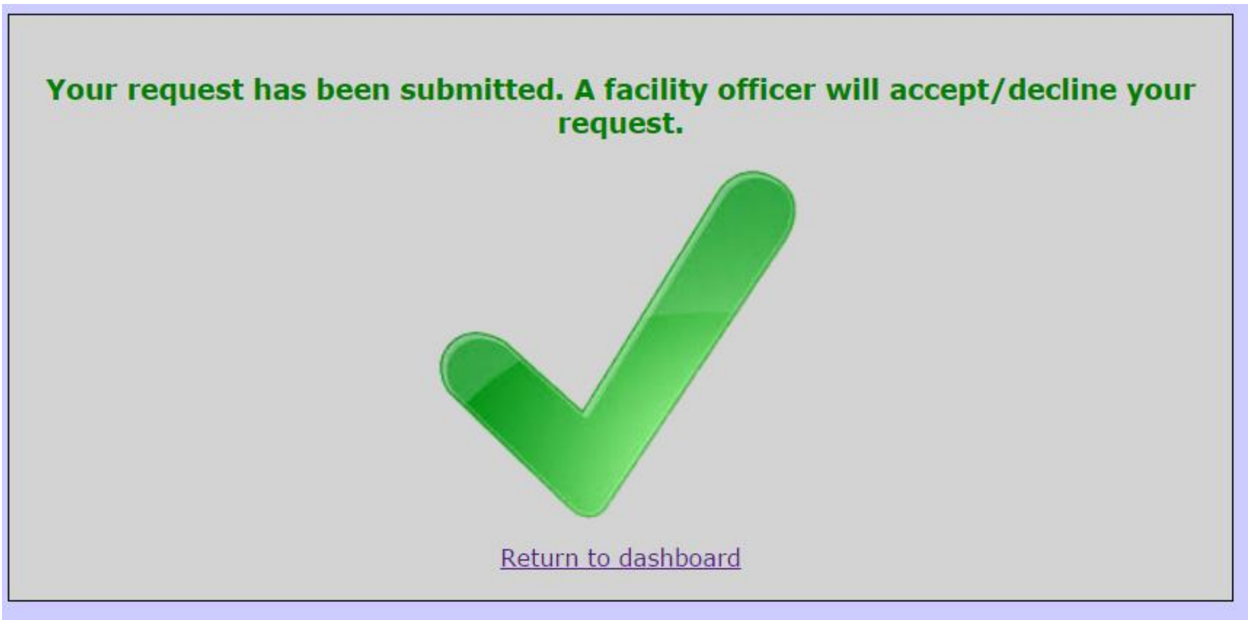

Figure 6.2 – This screen appears when the request you’ve made was submitted successfully.

Figure 6.3 – The dashboard of the facilities officer after requests were made. Notice the links on the left side of the screen.

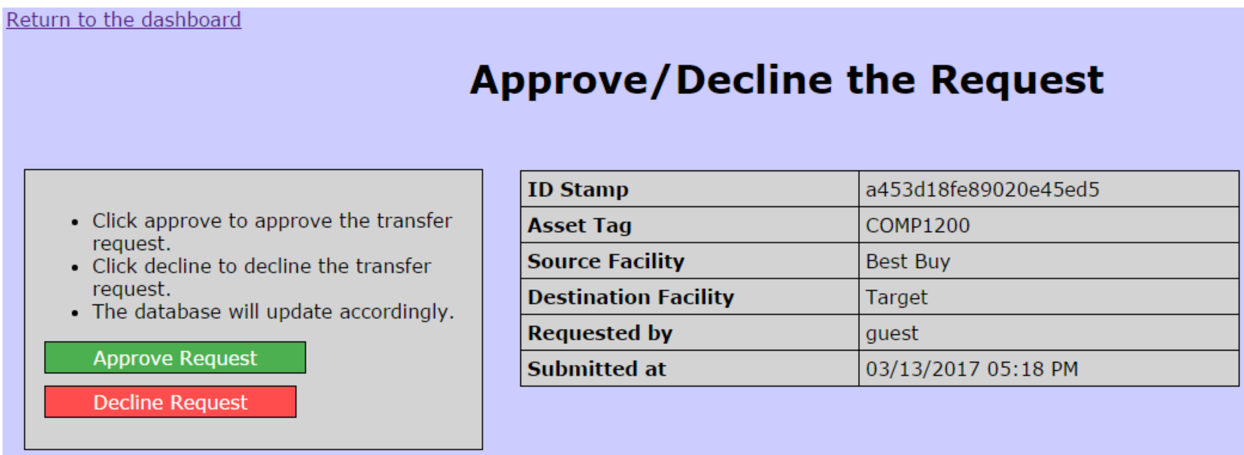

Figure 6.4 – Here is where facilities officers can approve or decline transfer requests.

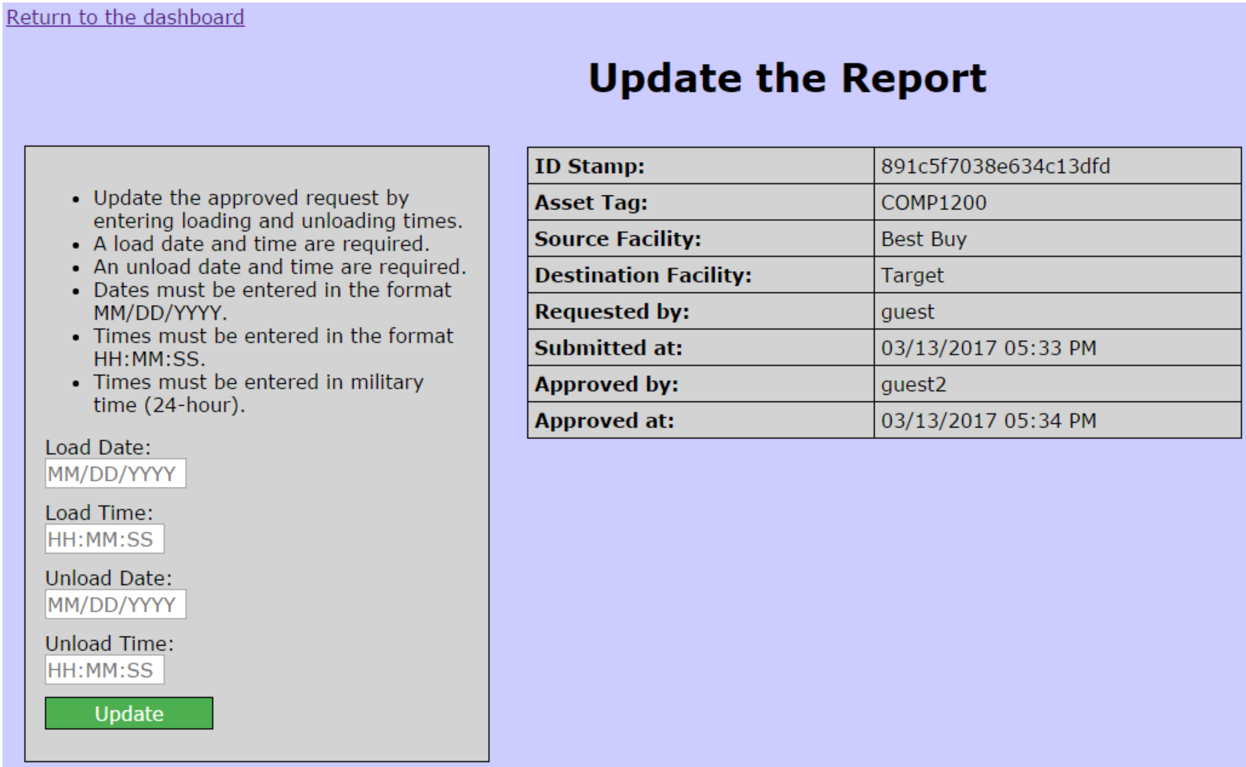

Figure 6.5 – This is where logistics officers can set the loading and unloading dates and times for approved requests.

7.) Viewing an Asset Report

Next, we will test viewing asset reports. From the dashboard, click the ‘View Asset Report’ link and you will be taken to the asset report screen (see Figure 7.1). On the left is where you will set filters of what assets will appear in the report. Select the facility you wish to view and a date in the format MM/DD/YYYY. All assets that have an arrival date matching to the one you input and that facility should appear in the report. Select ‘All’ in the facilities menu to view all the assets at all the facilities.

Leave the facility at ‘All’ and input the dates matching to the ones you entered for each of the assets (‘02/01/2000’ for GC1200, ‘04/10/2000’ for PRP1200, and ‘07/31/2000’ for COMP1200). You should see each of the respective assets appear in the table when you click the generate button. Now select different facilities form the drop-down menu and you should see the assets not appear for the facility they don’t belong to.

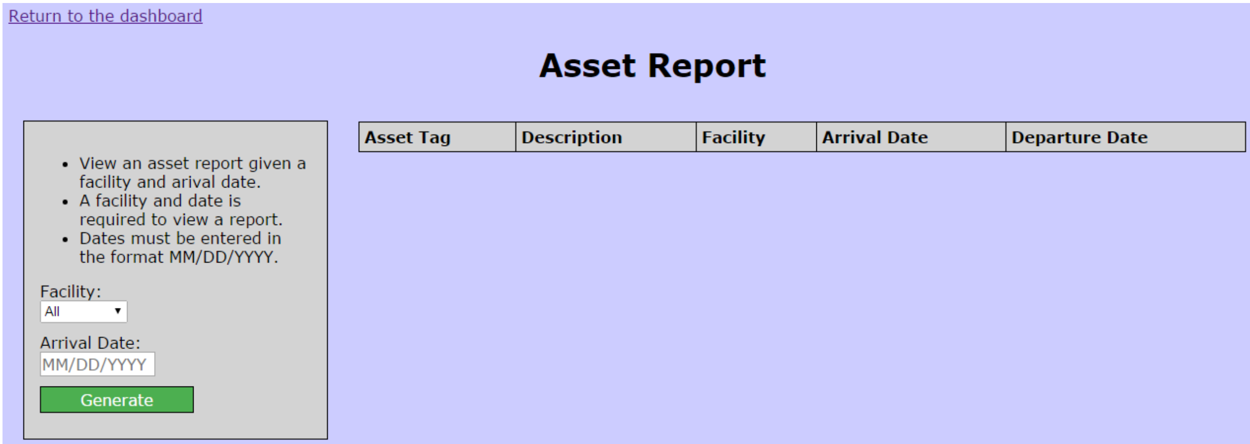

Figure 7.1 – The asset report screen. Here, users can view a list of assets filtered by giving a facility and an arrival date.

8.) Viewing a Transfer Report

Finally, we will test the transfer report screen. Click the 'View Transfer Report' link from the dashboard to go to the report screen (see Figure 8.1). The screen is similar to the asset report screen. On the left you will enter filtering information and click the generate button, and the report will display in the center. A list of guidelines are also displayed to inform you of what is acceptable input.

For a transfer report, you are not required to fill out a floor or ceiling date and times. However, you may not fill out a date but no time, or vice versa. Dates and times must be entered in the format MM/DD/YYYY and HH:MM:SS respectively, same as before. Any invalid entries will cause a message to display at the top of the screen informing you of the cause of error.

Click the generate button with no dates or times inserted. You should see the completed transfer request made in test case 6 (see Figure 8.2). The unload date and time is '01/10/2001 10:30:00'. Enter a floor and ceiling date with that date and time in that range (i.e. '01/01/2001 00:00:00 and 12/31/2001 23:59:59'). The request should still appear in the report. However, if you enter a floor date that occurs after that date and time (i.e. '10/15/2001 10:00:00'), the request should not appear. Likewise, entering a ceiling date that occurs before the date (i.e. '01/09/2001 09:00:00') should also filter the request out of the report.

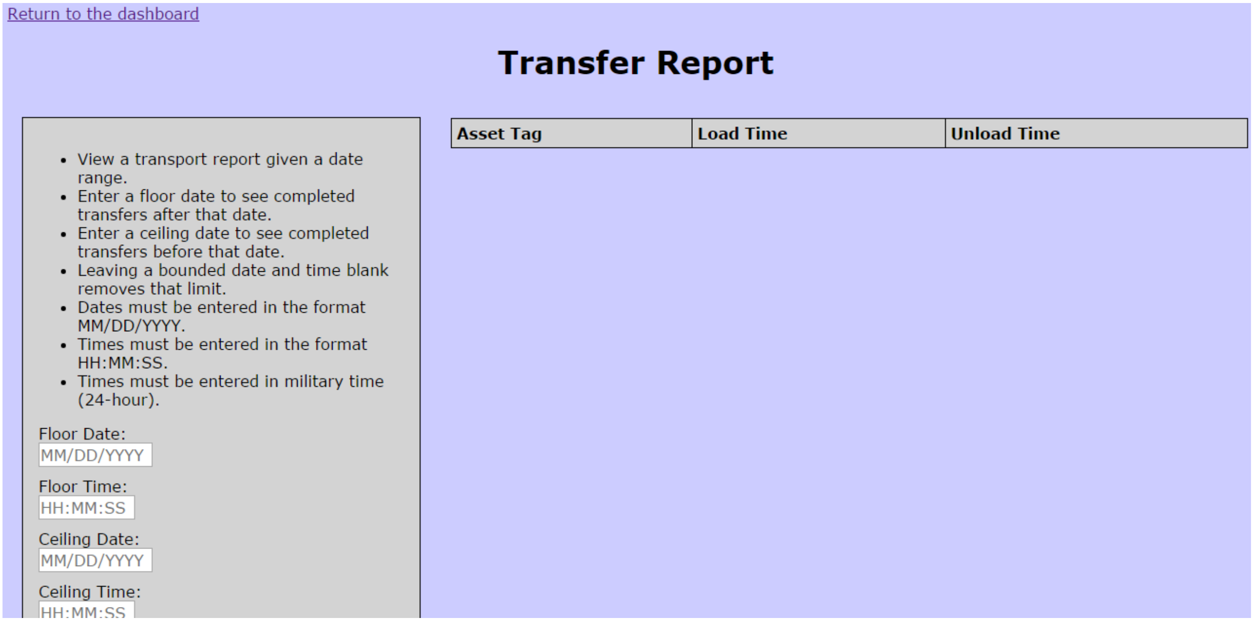

Figure 8.1 – The transfer report screen, where users can view a list of completed transfer requests in a date range.

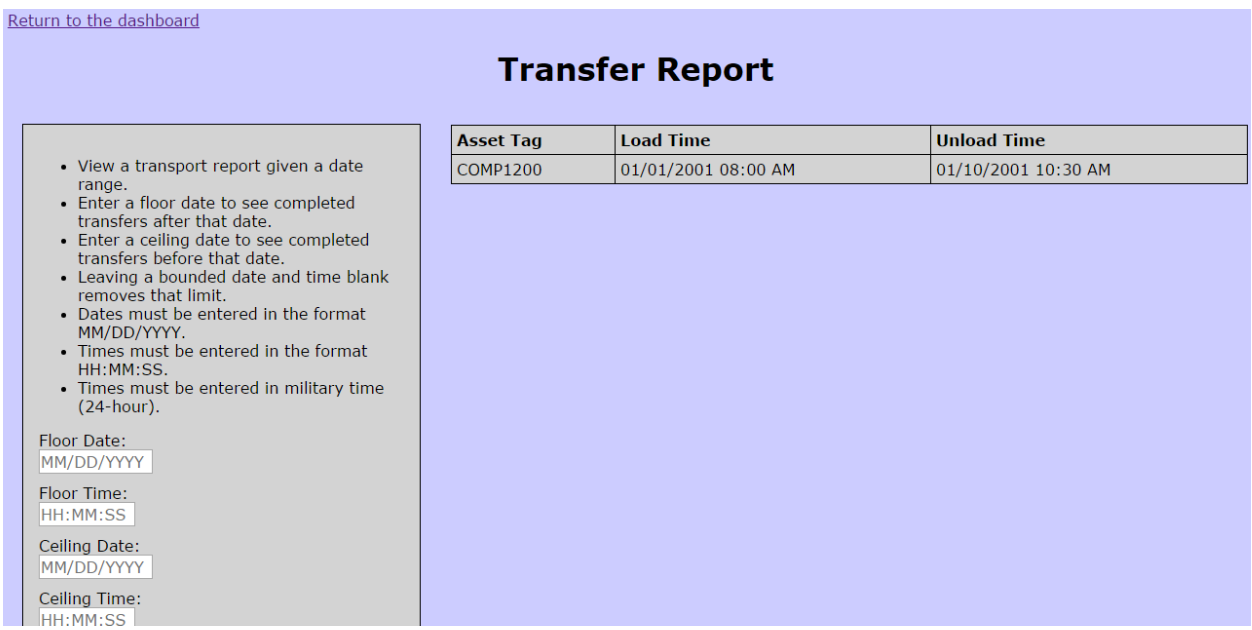

Figure 8.2 – The resulting report if the unload date of the transfer falls in the inputted date and time range.