This is the guide for how to properly test this implementation of LOST application.
This test plan will test for functionality in the following areas:
- Creating the initial users
- Login to the system
- Add two facilities
- Add two assets
- Complete the asset transit process
- Dispose of an asset
- Run each of the reports

Test Cases:

Prerequisites For All Tests:
- Step 3 from Assignment1 is complete at
  https://classes.cs.uoregon.edu//17W/cis322/assignments/week1.php
- User has internet connection and a web browser open

1 Create Initial Users
Requirements:
- username must be limited to 16 characters
- password must be limited to 32 characters
- role must be inputted as exactly either 'Facilities Officer' or 'Logistics Officer'

Steps:
- navigate to 127.0.0.1:8080/create_user
- insert username into username field
- insert password into password field
- select submit

Excpected Results:
- user is redirected to dashboard
- the text 'Hello <username>!!!' is displayed

Exceptions:
- if username,password, or role don't meet requirements
Expected Result:
- program redirects to a page displaying the error

Test Case 2 Login to the System
Prerequisites:
- test case 1 complete and passes

Requirements:
- username and password must match that of a created user

Steps:
- navigate to 127.0.0.1:8080/login
- insert username
- insert password
- select login

Expected Result:
- user is redirected to dashboard
- - the text 'Hello <username>!!!' is displayed

Exceptions:
- username or password don't meet requirements
Expected Result:
- program redirects to a page displaying the error

Test Case 3 Add Two Facilities
Prerequisites:
- all test cases up to 2 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard
- all steps must be performed twice

Requirements:
- name must be 32 characters
- facility code must be 6 characters

Steps:
- select add facility from menu
- insert facility name
- insert facility code
- select add

Expected Result:
- facility is added to the database
- user is redirected to dashboard
- message is displayed 'Facility Added Successfully'

Exceptions:
- if facility name or facility code don't meet requirements
Expected Result:
- program redirects to a page displaying the error

Test Case 4 Add Two Assets
Prerequisites:

- all test cases up to 3 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard
- all steps must be performed twice

Requirements:
- asset tag must be 16 characters

Steps:
- select add asset from menu
- insert asset tag
- select facility code asset is at from dropdown menu
- select add

Expected Result:
- asset is added to the database
- asset's location is added to database
- user is redirected to dashboard
- message is displayed 'Asset Added Successfully'

Exceptions:
- if asset tag doesn't meet requirements
Expected Result:
- program redirects to a page displaying the error

Test Case 5 Complete the Asset Transit Process

5.1 Request Asset Transfer
Prerequisites:
- all test cases up to 4 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard

Requirements:
- transfer summary must be 16 characters
- user's role is Logistics Officer

Steps:
- select transfer request from menu
- insert summary of the request
- select the asset to transfer from the dropdown menu
- select desination facility from dropdown menu
- select submit

Expected Result:
- transfer request is added to the database

- user is redirected to dashboard
- message is displayed 'Transfer Request Added Successfully'

Exceptions:
- if summary doesn't meet requirements
- if asset is already located at the selected destination facility
- if user's role isn't Logistics Officer
Expected Result:
- program redirects to a page displaying the error

5.2 Approve Asset Transfer Request
Prerequisites:
- all test cases up to 5.1 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard

Requirements:
- at least one transfer request is in the system
- user's role is Logistics Officer

Steps:
- select approve transfer request from menu
- select asset transfer request to approve
- select approve

Expected Result:
- transfer request is approved in the database
- user is redirected to dashboard
- message is displayed 'Transfer Request Successfully Approved'

Exceptions:
- if user's role isn't Logistics Officer
Expected Result:
- program redirects to a page displaying the error

Test Case 6 Dispose of an Asset
Prerequisites:
- all test cases up to 4 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard

Requirements:
- at least one asset is in the database

Steps:
- select dispose asset from menu

- select asset to dispose of from dropdown menu
- select submit

Expected Result:
- assets data is updated in database
- user is redirected to dashboard
- message is displayed 'Asset Disposed of Successfully'

Exceptions:
- if there is no asset in the database
Expected Result:
- program redirects to a page displaying the error

Test Case 7 Run Each of the Reports
7.1 Run Asset Report
Prerequisites:
- all test cases up to 4 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard

Requirements:
- at least one asset is in the database

Steps:
- select asset report from menu
- insert date in date field
- select facility from dropdown menu
- select submit

Expected Result:
- user is redirected to asset report page
- system displays all assets at that facility on given date

Exceptions:
- if there is no asset in the database
- if date doesn't meet requirements
Expected Result:
- program redirects to a page displaying the error

7.2 Run Transfer Report (optional)
Prerequisites:
- all test cases up to 5 complete and pass
- user is logged in and at 127.0.0.1:8080/dashboard

Requirements:

- at least transfer request is in the database

Steps:
- select transfer report from menu
- insert date in date field
- select submit

Expected Result:
- user is redirected to transfer report page
- system displays all transfer reports for the given date

Exceptions:
- if there is transfer request in the database
- if date doesn't meet requirements
Expected Result:
- program redirects to a page displaying the error