

CSCE 606 – Software Engineering
Project: Inventory System
Sprint # 3 – Retrospective

Customer: Dr. Robert Lightfoot

Links:

- Deployed app: <https://robert-inventory-f91e26f91bb2.herokuapp.com/>
- Github Project: <https://github.com/orgs/tamu-edu-students/projects/101>
- Github Repo: <https://github.com/tamu-edu-students/CSCE-606-Inventory-System>
- Shared folder:
<https://drive.google.com/drive/folders/1NsQfvHf9n272E8VKVghdkU4B7Elk4EYI>
- Discussion Channel: <https://app.slack.com/client/T08A4A8U89M/C08AJRT0UTC>










Spring #3 Dates:

- Started date: 02/28/2025
- Finished date: 03/10/2025

Team and Members contribution:

Name	Role	Contribution (%)	Points	Comments
Rafael Morales	SM/DEV	30	8	Contributed to the new UI for Dashboard, Nav tab , and dynamic search for Bins and Items. Update model for Location
Khush Patel	DEV	20	6	Contributed to the new pop up windows for User profile, Logs and Sales
Saba Mostofi	DEV	20	6	Contributed on the development of the new UI for bins and Items, including Search capabilities
Arun Akash	DEV	20	6	Contributed to the creation of a new route for Locations, including all Crud Operations and UI.
Sid Rayapur	PO/DEV	10	4	Contributed on fixing location model and session model.






Sprint #3 Goal:

- Search Bar on Dashboard 
- Search by Location on the Dashboard. 
- Mini window for Logout. 
- Webpage Tab 
- Improve UI for Items 
- Improve UI for Bins 
- Pop up window for logging movements 
- Pop up window for Sales Report 
- Location index page 

Sprint #3 Achievements:

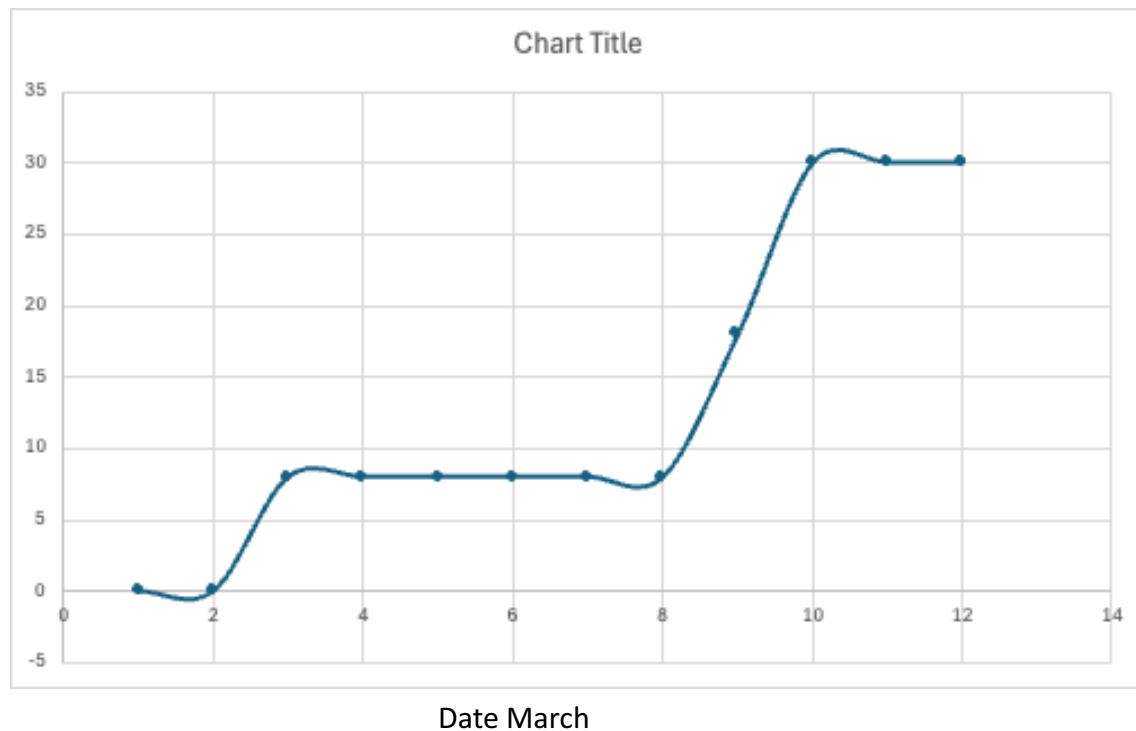
- Search bar on the dashboard was implemented, including dynamic search using JS on the Client side.
- 3 pop up windows were included, the functionality for each window is not implemented yet, but it will be part of the Sprint 4.
- Bins and Items UI were improved, capabilities for sorting and search were included.
- The App now includes a new webpage: /locations. with CRUD capabilities.
- Several bugs were fixed (example: Flash error messages displaying several times)
- Several migrations were implemented, including the new logic for the Location model.

Sprint #3 Backlog:

Backlog Item	Status	Notes
Create session Model	 Completed	The implementation was completed.
Update Location Model	 Completed	The implementation was completed.
Search Bar on Dashboard	 Completed	Can dynamically search by Bins, Category, Items or Location
Improve UI for Bins	 Completed	Better user experiences, search and sorting by name capabilities.
Improve UI for Items	 Completed	Better user experiences, search and sorting by name capabilities.

Add Location Routes	✅ Completed	This route displays all locations belonging to the user, can search bins and items belonging to a specific location.
Pop up window for User profile, Session and Log	✅ Completed	Popup windows included, for next sprint we will add the logic.

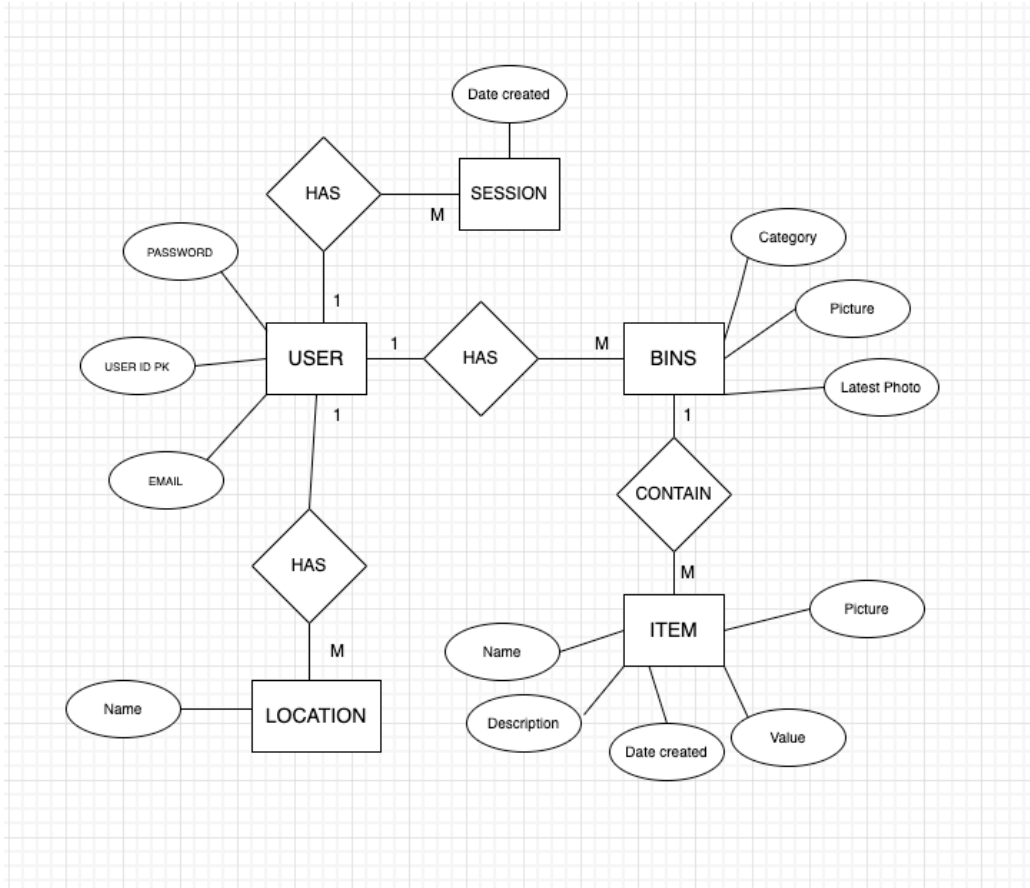
Burn down Chart:



Total point 30. The chart above was created using an Excel file. For Sprint #3. Total points completed: 30

Design Diagrams:

This is the current state of the Database:



Dashboard:

HOME BINS ITEMS LOG SALE

A

My Inventory

Search by Bin/Category...

Search

Search Items...

Search

Search by Location

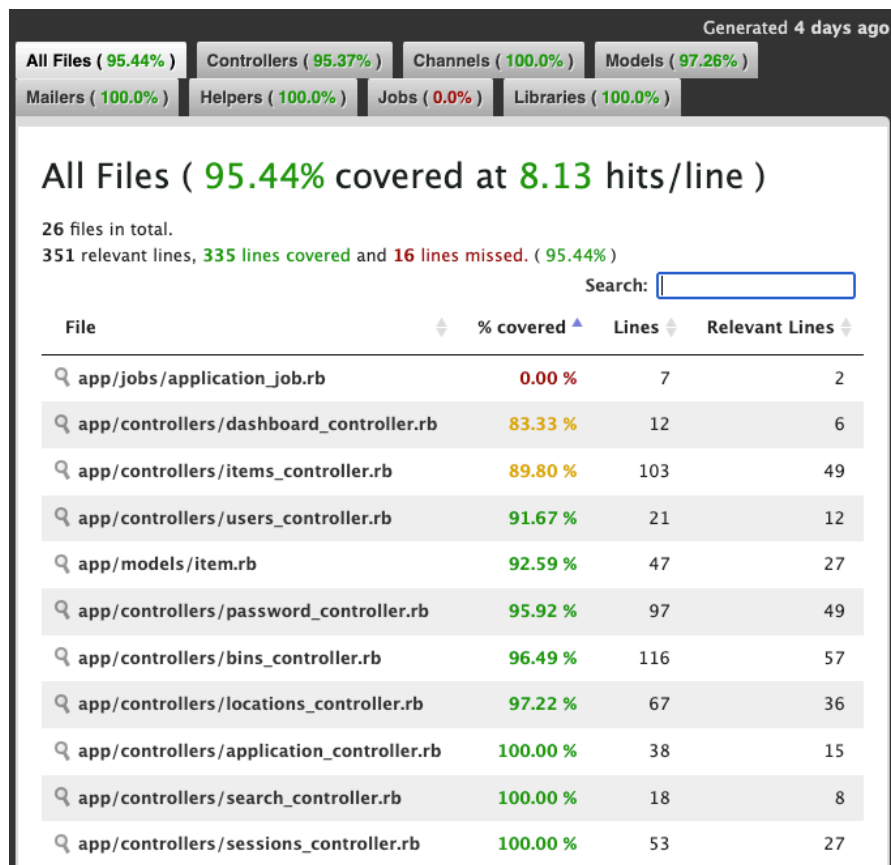
Documents of change:

Design Change	Comments
Dashboard	The dashboard was completely redesigned for a better user experience.
Bins and Items Webpage	Search and sort capabilities were added for a better user experience

Customer Meeting:

- date: 03/21/2025 Via Zoom.

Evaluation of Code and Test Quality



Cucumber Scenarios and Results:

- New Dashboard and search capabilities

```
Feature: Search Bars on Dashboard
  As a user of the website,
  I want to have two separate search bars,
  So that I can quickly find my bins/categories and items.

Background:
  Given I am a logged-in user on the dashboard
  And I have a valid location
  And I have bins with names "Storage Bin" and "Office Supplies"
  And I have items with names "drill" and "screwdriver" on bin "Storage Bin"
  And I have items with names "staple" and "eraser" on bin "Office Supplies"

### ✅ SEARCH BAR FOR BINS/CATEGORIES ##
@javascript
Scenario: Searching for a bin by name # features/sprint3/search_bar.
  When I enter "Storage Bin" in the bins search bar # features/step_definitions/se
  And I click the bins search button # features/step_definitions/se
  Then I should see bins matching "Storage Bin" # features/step_definitions/se
2025-03-21 09:15:19 WARN Selenium [:clear_session_storage] [DEPRECATION] clear_
2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_lo

@javascript
Scenario: Searching for a category # features/sprint3/search_bar.
  When I enter "tech" in the bins search bar # features/step_definitions/se
  And I click the bins search button # features/step_definitions/se
  Then I should see categories matching "tech" # features/step_definitions/se
2025-03-21 09:15:19 WARN Selenium [:clear_session_storage] [DEPRECATION] clear_
2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_lo
```

```

@javascript
Scenario: No results found for bins/categories # features/sprint3/sear
  When I enter "NonExistentBin" in the bins search bar # features/step_definit
  And I click the bins search button # features/step_definit
  Then I should see a message "You have no bins yet" # features/step_definit
2025-03-21 09:15:19 WARN Selenium [:clear_session_storage] [DEPRECATION] clear_s
2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_loc

@javascript
Scenario: Searching for an item by name # features/sprint3/search_bar.f
  When I enter "drill" in the items search bar # features/step_definitions/sea
  And I click the items search button # features/step_definitions/sea
  Then I should see items matching "drill" # features/step_definitions/sea
2025-03-21 09:15:19 WARN Selenium [:clear_session_storage] [DEPRECATION] clear_s
2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_loc

@javascript
Scenario: No results found for items # features/sprint3/se
  When I enter "NonExistentItem" in the items search bar # features/step_defin
  And I click the items search button # features/step_defin
  Then I should see a message "No items yet" # features/step_defin
2025-03-21 09:15:19 WARN Selenium [:clear_session_storage] [DEPRECATION] clear_s
2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_loc

9 scenarios (9 passed)
63 steps (63 passed)
0m26.170s

```

- Popup window for profile:

```

Feature: Profile Dropdown
  As a logged in user
  I want to access my profile information via a dropdown
  So that I can view my details and logout

  Background: # features/sprint3/
    Given I am a logged in user with email "test@example.com" # features/step_de
    And I have logged in 2 times before # features/step_de

  Scenario: Opening the profile dropdown # features/spr
    When I click on the profile icon # features/ste
    Then I should see my email "test@example.com" in the dropdown # features/ste
    And I should see my last login time # features/ste
    And I should see a logout button # features/ste

  Scenario: Closing the profile dropdown by clicking outside # features/sprint3/
    When I click on the profile icon # features/step_def
    And I click outside the dropdown # features/step_def
    Then the dropdown should be closed # features/step_def

@javascript
Scenario: Logging out through the dropdown # features/sprint3/profile_dr
Capybara starting Puma...
* Version 6.6.0, codename: Return to Forever
* Min threads: 0, max threads: 4
* Listening on http://127.0.0.1:64314
  When I click on the profile icon # features/step_definitions/p
  And I click the logout button # features/step_definitions/p
  And I confirm the logout # features/step_definitions/p
  Then I should be redirected to the log-in page # features/step_definitions/s
  And I should see "Signed out successfully" # features/step_definitions/s
2025-03-21 09:15:18 INFO Selenium [:logger_info] Details on how to use and modif
https://selenium.dev/documentation/webdriver/troubleshooting/logging

```

- Updating Bin Location

```

Feature: Update Bin Location
  As a user
  I want each bin to reference a location
  So that items are properly categorized

  Scenario: Assign a location to a bin # features/sprint3/proper_
    Given I am a logged-in user # features/step_definitions/
    And a location "Warehouse A" exists # features/step_definitions/
    When I visit the new bin page # features/step_definitions/
    And I fill in the bin "Location" with "Warehouse A" # features/step_definitions/
    Then the bin should be associated with "Warehouse A" # features/step_definitions/

Feature: Search Bars on Dashboard
  As a user of the website,
  I want to have two separate search bars,
  So that I can quickly find my bins/categories and items.

  Background: # fea
    Given I am a logged-in user on the dashboard # fea
    And I have a valid location # fea
    And I have bins with names "Storage Bin" and "Office Supplies" # fea
    And I have items with names "drill" and "screwdriver" on bin "Storage Bin" # fea
    And I have items with names "staple" and "eraser" on bin "Office Supplies" # fea

  ### ✅ SEARCH BAR FOR BINS/CATEGORIES ##
  @javascript
  Scenario: Searching for a bin by name # features/sprint3/search_bar
    When I enter "Storage Bin" in the bins search bar # features/step_definitions/se
    And I click the bins search button # features/step_definitions/se
    Then I should see bins matching "Storage Bin" # features/step_definitions/se
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  2025-03-21 09:15:19 WARN Selenium [:clear_local_storage] [DEPRECATION] clear_local_s

```

Some RSpec Examples:

- Location controller:

```

(db608) rafael@MacBook-Pro CSCE-606-Inventory-System % bundle exec rspec spec/controllers/locations_controller.rb
.✅ Test Passed: GET /index Location Controller
.✅ Test Passed: Search params
.✅ Test Passed: POST Create Location Controller
.✅ Test Passed: Invalid Attributes
.✅ Test Passed: PATCH Update Location Controller
.✅ Test Passed: Invalid Attributes
.✅ Test Passed: DELETE Location Controller
.✅ Test Passed: handle error during deletion

```


- Location Model

```
Line Coverage: 11.07% (30 / 400)
(db608) rafael@MacBook-Pro CSCE-606-Inventory-System % bundle exec rspec spec/models/location_spec.rb
✓ Test Passed: is valid with a name and a user
✓ Test Passed: is invalid without a name
✓ Test Passed: is invalid without a user
.

Finished in 0.03848 seconds (files took 1.09 seconds to load)
3 examples, 0 failures
```

- Search Request / Controller

```
Line Coverage: 21.50% (107 / 497)
(db608) rafael@MacBook-Pro CSCE-606-Inventory-System % bundle exec rspec spec/requests/search_spec.rb
✓ Test Passed: Searching for bins by name
.
```

- Window popup for profile

```
Line Coverage: 21.50% (107 / 497)
(db608) rafael@MacBook-Pro CSCE-606-Inventory-System % bundle exec rspec spec/system/profile_dropdown_spec.rb
✓ Test Passed: showing user on nav-tab
✓ Test Passed: View Showing Logout button
✓ Test Passed: showing user on nav-tab
✓ Test Passed: Close when click outside
✓ Test Passed: showing user on nav-tab
✓ Test Passed: log out when user click logout
✓ Test Passed: redirect to user login
.
```

- New Location Webpage

```
(db608) rafael@MacBook-Pro CSCE-606-Inventory-System % bundle exec rspec spec/features/locations_spec.rb
✓ Test Passed: Render location table
Capybara starting Puma...
* Version 6.6.0, codename: Return to Forever
* Min threads: 0, max threads: 4
* Listening on http://127.0.0.1:64472
✓ Test Passed: Search input fetch right results
✓ Test Passed: Add new location
✓ Test Passed: Update Location
✓ Test Passed: Delete Location
.

Finished in 2.42 seconds (files took 1.07 seconds to load)
5 examples, 0 failures
```

Note:

Cucumber and RSpec scenarios for the new UI For Bins and Items, were already implemented in the previous sprints. We made sure that those scenarios were still passing the test without any issue.