

Sprint 4 Retrospective Documentation

1. Links:

Github: <https://github.com/LOGiC31/Stock-Em>

Heroku Deployment: <https://stockem-0caaa6588e50.herokuapp.com/welcome/index>

Ticket Management: <https://github.com/users/LOGiC31/projects/1>

Slack: <https://tamu.slack.com/archives/C07PGFSLJV8>

2. Dates of Sprint:

Start Date: November 1st, 2024

End Date: November 15th, 2024

3. Information about team and member contributions:

Member	Total Capacity	User story points assigned	User story points implemented	Percentage share of effort
Tanishq Chopra	5	5	5	12.5%
Simran Kaur	5	5	5	12.5%
Simran Jot Kaur	5	5	5	12.5%
Vinay Singh	5	6	6	15%
Ishaan Rawal	5	6	7	17.5%
Alisha Raj	5	7	7	17.5%
Mark Sturtevant	5	5	5	12.5%

4. Team member total contributions:

Member Name	Total points solved by individual	Total points solved by entire team	Percentage share of effort
Tanishq Chopra	25.5	189.5	13.45%
Simran Kaur	30	189.5	15.8%
Simran Jot Kaur	31.5	189.5	16.6%
Vinay Singh	29.5	189.5	15.5%
Ishaan Rawal	22	189.5	11.6%
Alisha Raj	26	189.5	13.7%
Mark Sturtevant	25	189.5	13.2%

5. Sprint Goals:

Now that all of the core functionality has been completed in previous sprints, our final sprint focuses on a wide variety of “quality-of-life” features designed to improve the user experience. Some of these tasks include UI overhauls to produce better-looking web pages, improved navigation, support within the UI for user authentication levels, and even utilities to allow for conveniently adding and removing large amounts of items at once.

6. Sprint Achievements:

1. **Authentication Enforcement:** Certain privileged operations (such as editing or checking out items) can now only be performed by users who have the relevant credentials to do so.
2. **UI Support for Authentication:** For privileged operations a user cannot perform, any buttons to do so are automatically hidden from the user to avoid any confusion.

3. **Improved Item Page Formatting:** The “View Item” page now has separate sections for notes and events, both of which also receive rendering improvements.
4. **Improved Edit Item Formatting:** Now, the edit item page creates a pop-up with custom formatting.
5. **Bulk Import/Export:** Along with creating items, users can also pass in CSVs to add many items at once. Users may also export the current items database into a CSV to boot.
6. **Random QOL Features:** Many small, user-facing features such as warning popups for delete operations, notifications when all items are filtered, and more.
7. **More Consistent Flash Messages:** Normalization across all web pages to make the formatting more consistent.

We successfully completed all planned stories on time and developed and deployed the application, ensuring that all documentation, code quality, testing, and coverage met the required standards.

7. Sprint Backlog and Status

For our current (and last sprint), we have completed all the planned stories. Just 2 bugs are left to resolve, which we plan to address before our presentation.

Sprint Backlog

1. **Bug Fix - Update Status Functionality for 'Not Available' Case [2]**
Status: In Progress
Description: Resolves an issue where the item status fails to update to 'Not Available' under specific conditions.
2. **Bug Fix - CSS Page Overflow in Items View [1]**
Status: In Progress
Description: Fixes overflow of the first column in the Items View page to ensure consistent layout and responsive design.

Sprint Status

1. **UI - Hide Buttons for Unprivileged Users (Flash for Unsupported Operations)**

Status: Complete

Description: Hides specific buttons for users without privileges or displays feedback if they attempt restricted actions.

2. **API - Controller Security: Block Operations from Unprivileged Users**

Status: Complete

Description: Secures backend operations by restricting actions based on user privileges.

3. **API/UI - Dropdown for Locations with "Other" Option**

Status: Complete

Description: Adds a location dropdown with an "Other" option to standardize and simplify input while maintaining flexibility.

4. **UI - Change Item Editing Format (Popup or New Page)**

Status: Complete

Description: Replaces inline editing with a dedicated page or popup to enhance usability and reduce clutter.

5. **Bug Fix - Make Flash Messages More Consistent (Fading or Static)**

Status: Complete

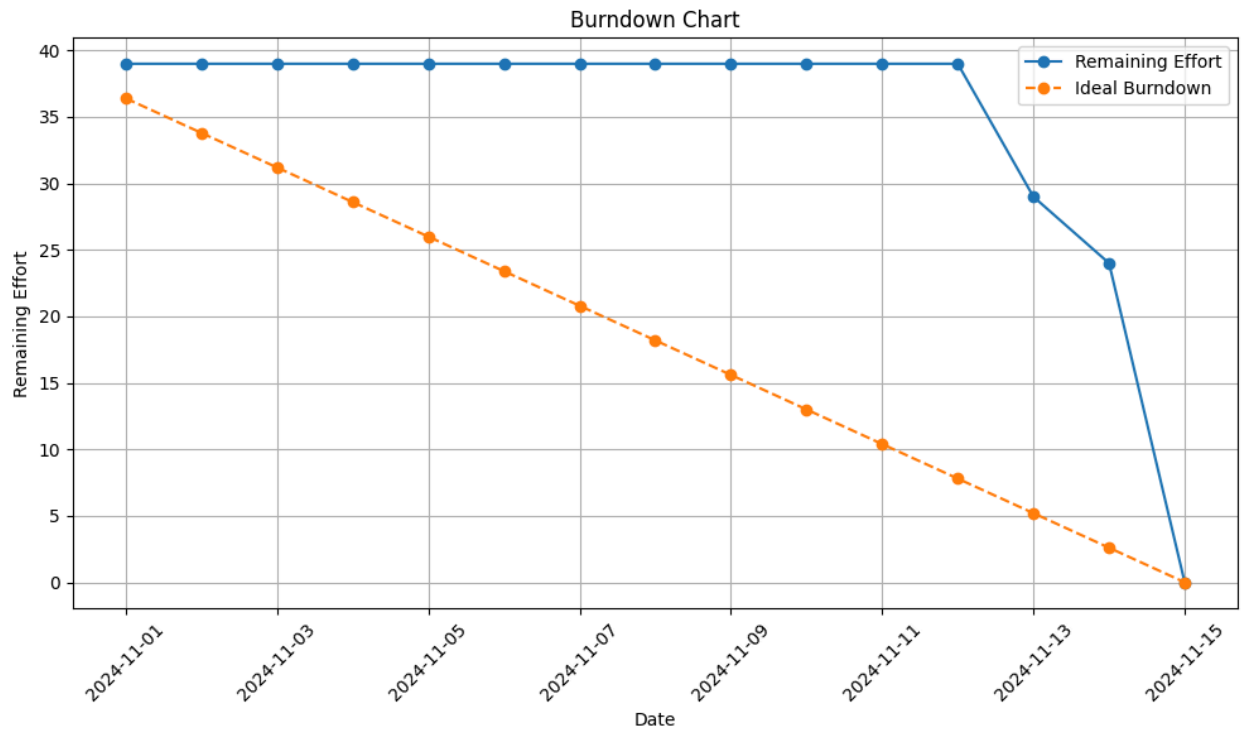
Description: Standardizes the behavior of flash messages across the application for a cohesive user experience.

6. **API - Bulk Add/Export Items Script and UI**

Status: Complete

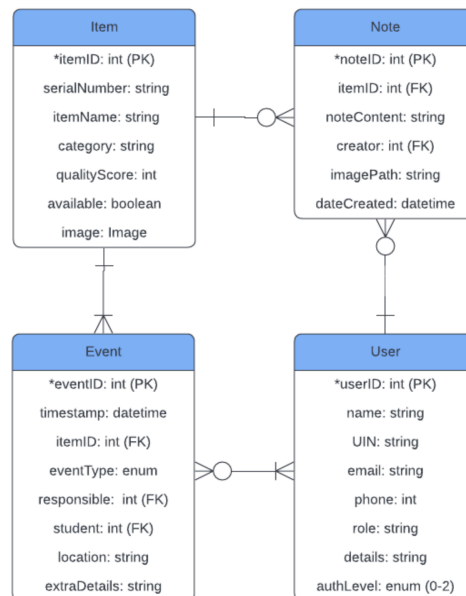
Description: Implements functionality for bulk addition and export of items through both script and user interface.

8. BurnDown Chart



9. Design Diagrams:

Database Design



(Added an admin login design)

The Stock'Em Team, 2024

The Stock'Em Team, 2024

Admin View Page

Users

ID	Username	Email	Role	Auth Level	Actions
1		philip@example.com	Admins	2	<button>Edit</button>
2		paul@example.com	Admins	2	<button>Edit</button>
3		randomTA@example.com	Assistants	1	<button>Edit</button>
4	Vinay Singh	vinaysingh@tamu.edu	Admins	2	<button>Edit</button>
5	Simran Kaur	simrankaur@tamu.edu	Students	0	<button>Edit</button>
6	Alisha Raj	alisharaj2607@tamu.edu	Students	0	<button>Edit</button>
7	Ishaan Rawal	ishaanrawal@tamu.edu	Students	0	<button>Edit</button>

Home Page

Howdy, Alisha!

Email:

alisharaj2607@tamu.edu

First name:

Alisha

Last name:

Raj

View ItemsUser ProfileLogout

User Profile Page

Stock'Em

Hello, Alisha

USER PROFILE

Name:

Alisha Raj

UIN:

1234

Email:

alisharaj2607@tamu.edu

Contact No:

Role:

Status:

The Stock'Em Team, 2024

View Items Page - for admin/assistants

(updated with import and export items)

Stock'Em

Hello, Alisha

Search...

✓ All Categories

Sensors and Modules

Development Boards and Kits

Mobile Devices

Computer Accessories

Categories

☐ Only show available items

Ultrasonic sensor

Sensors and Modules

Not Available

Status: Lost

mouse

Computer Accessories

Not Available

Status: Damaged

PCB Kit 289

Development Boards and Kits

Available

Create New Item

Import Items

Export Items

The Stock'Em Team, 2024

View Items Page - for students


Stock'Em

Hello, Alisha

All Categories

All Statuses

☐ Only show available items




Ultrasonic sensor

Sensors and Modules

Not Available

Status: Lost




mouse

Computer Accessories

Not Available

Status: Damaged



PCB Kit 289

Development Boards and Kits

Available

The Stock'Em Team, 2024

Item Information Page - for admins

Stock'Em

Hello, Alisha

Item Details

Item ID: 1

Serial Number: FKWK534

Item Name: iphone8

Category: Mobile Devices

Quality Score: 89

Status: Not Available

Details: IPHONE 8 128GB

Checkout

Edit

Back

Delete

Ishaan Rawal (2024-11-02):

Status Updated to Damaged

Ishaan Rawal (2024-11-02):

Status Updated to Damaged

Ishaan Rawal (2024-11-02):

Status Updated to Damaged

Ishaan Rawal (2024-11-02):

Status Updated to Damaged

Ishaan Rawal (2024-11-02):

Status Updated to Damaged

Notes

Create Note

Update:

Select Status:


Not Available

Update Status

The Stock'Em Team, 2024

Item Information Page - for students

Stock'Em

Hello, Alisha 

IPHONE8

Item Details

Item ID: 1

Serial Number: FKWK534

Item Name: iphone8

Category: Mobile Devices

Quality Score: 89

Status: Not Available

Details: IPHONE 8 128GB

Back

Item History

Simran Kaur (2024-11-22):
Status Updated to Not Available

Simran Kaur (2024-11-22):
Status Updated to Damaged

Alisha Raj (2024-11-22):
Status Updated to Not Available


Simran Kaur (2024-11-22):
Status Updated to Not Available

Notes

The Stock'Em Team, 2024

Checkout item page

Stock'Em

Hello, Alisha 

Checkout Item

Responsible Professor *

Student / Teams Checked Out To

Class & Section, or Approximate Location *

Additional Comments

Publish

The Stock'Em Team, 2024

Create new Item Page

Stock'Em

Hello, Alisha

Create New Item

Item Name *

Category *

Quality Score *

Currently Available *

Serial Number *

Details

Create Item

Edit Item pop-up

Stock'Em

Hello, Alisha

Item Details

Item ID: 1

Serial Number: FKWK534

Item Name: iphone8

Category: Mobile Devices

Quality Score: 89

Status: Not Available

Details: IPHONE 8 128GB

Checkout

Edit

Back

Update:

Select Status: Not Available

Edit Item Details

Item Name:

iphone8

Category:

Mobile Devices

Quality Score:

89

Status:

Not Available

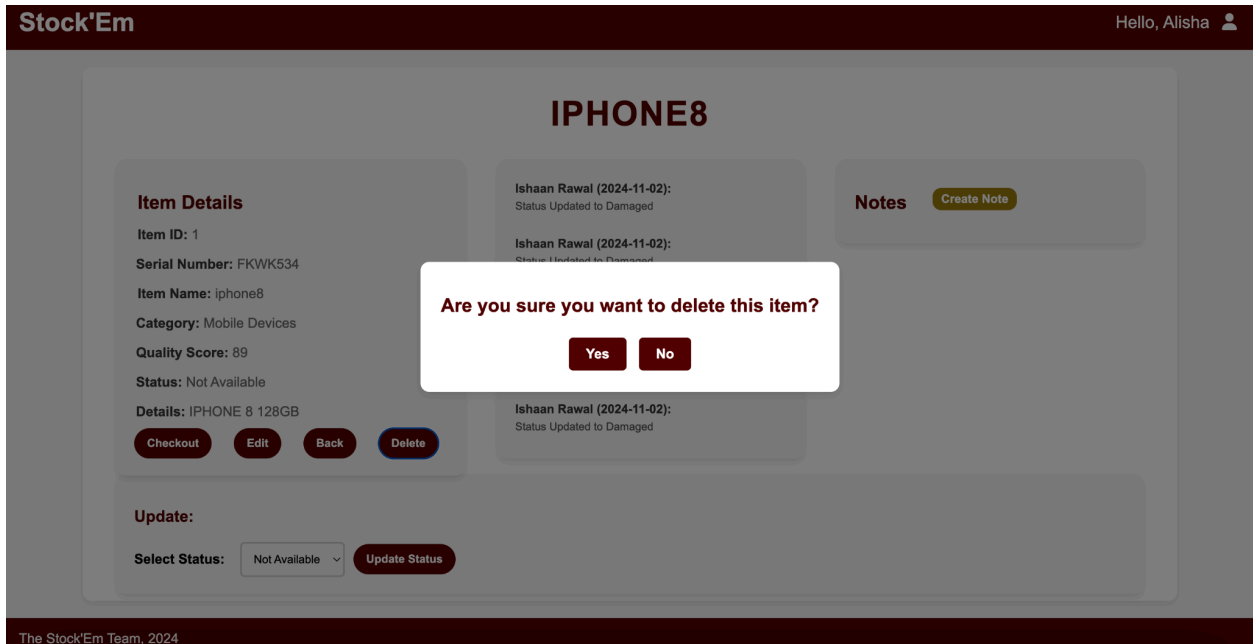
Details:

IPHONE 8 128GB

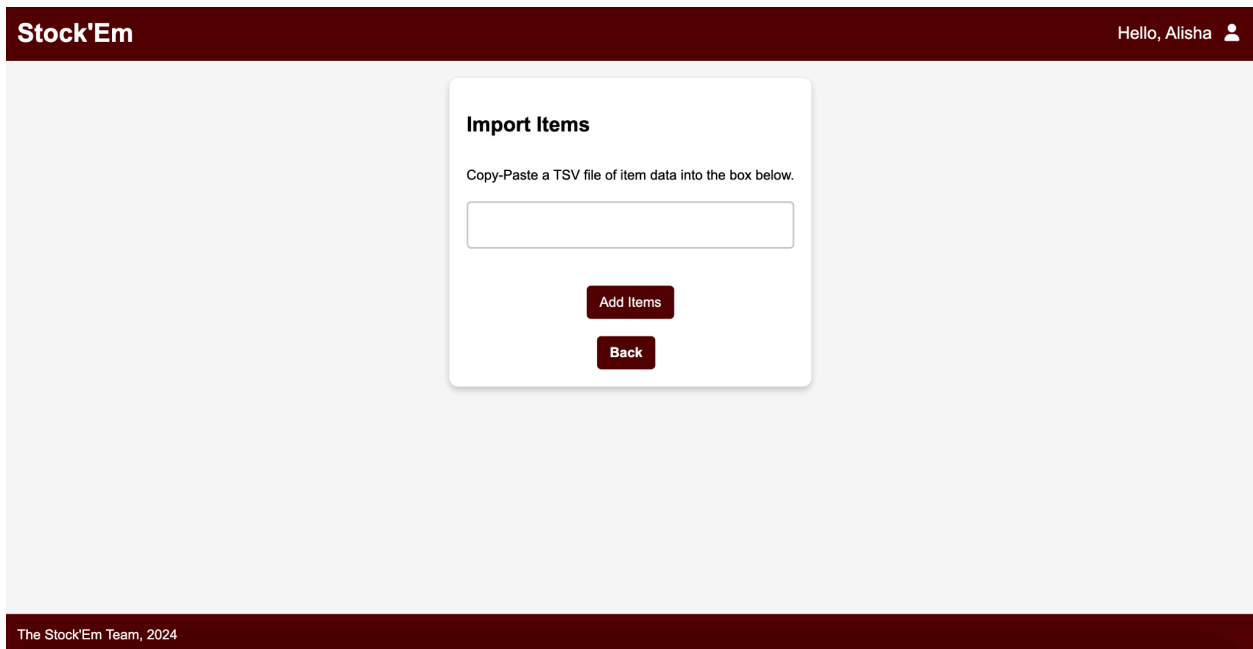
Save

Cancel

Delete Item popup



Import items page



Export items page

Export Items

Copy the content below into a TSV file that can then be imported into other spreadsheets.

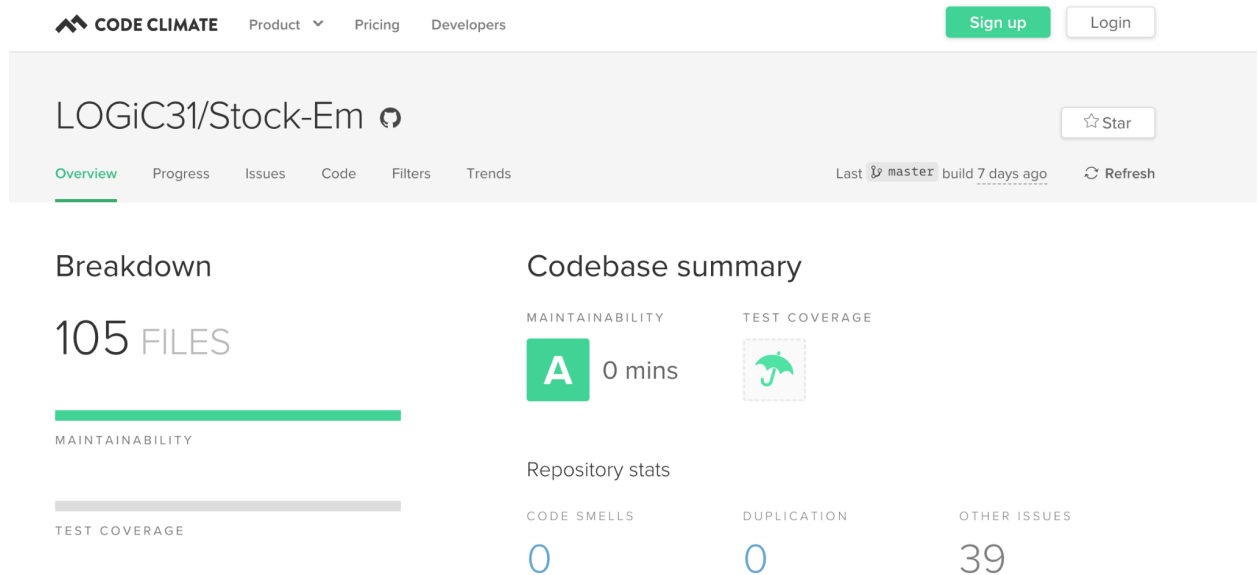
item_name	serial_number	category	quality_score
currently_available	details	status	notes
events			
ultrasonic_sensor	79	Sensors and Modules	90

[Back](#)

10. Documentation of changes: In this retrospective planning session, several user stories were successfully implemented to enhance user experience and functionality. With all of our QoL features being added and fully functional, we can expect the user to have a much better experience navigating the site (as backed up by our customer). For example, many pages have much improved and more consistent formatting, authentication levels are finally enforced on the website, and mass import/export scripts have been implemented. Overall, all team members worked on their parts promptly and communicated well, leading to a very strong finish for the project. With the exception of one last change to be made in the next few days, we are very happy with the final state of both the team and the product.

11. Evaluations of code and test quality

Code Quality by codeclimate:



Link: <https://codeclimate.com/github/LOGiC31/Stock-Em>

Simplecov code coverage:



12. Customer Meeting:

Topic: Capstone Inventory Management Sync-Up

Time: Oct 2, 2024, 01:30 PM Central Time (US and Canada)

Every week on Wed, until Dec 11, 2024, 11 occurrence(s)

Summary: After seeing the final sprint MVP, Paul was very pleased with the results and noted that we achieved everything

that he desired for the application. The only caveat was one small request to change a specific exported file format; a quick change that will be merged in the next few days. Overall, Paul seems to view the project as a success and is looking forward to using this for organizing the inventory in Capstone.

13.BDD and TDD charts:

Cucumber Tests: We implemented tests for all of the User Story categories in this sprint, including:

1. Authentication Enforcement

- As an **admin or assistant**,
I want to ensure that only authorized users can perform privileged operations (e.g., editing or checking out items),
So that sensitive actions remain secure and unauthorized access is prevented.

2. UI Support for Authentication

- As a user, I want buttons for privileged actions I cannot perform to be hidden,
So that I am not confused or misled by unavailable features.

3. Improved Item Page Formatting

- As a user, I want the “View Item” page to have separate sections for notes and events with better rendering,
So that I can easily distinguish between different types of information about an item.

4. Improved Edit Item Formatting

- As a user, I want the edit item functionality to appear in a pop-up with custom formatting,

So that I have a more intuitive and less cluttered experience when making changes to an item.

5. Bulk Import/Export

- As an admin or assistant, I want to upload a CSV to bulk add multiple items to the system,
So that I can efficiently manage inventory updates.
- As an admin or assistant, I want to export the current item database to a CSV,
So that I can analyze or back up the inventory data as needed.

6. Random Quality of Life (QOL) Features

- As a user, I want a warning popup to appear before I delete an item,
So that I don't accidentally remove important data.
- As a user, I want to see a friendly notification when filtering results in no matching items,
So that I understand why no results are displayed.

7. More Consistent Flash Messages

- As a user, I want flash messages to have consistent styling across all pages,
So that I have a seamless and predictable experience when interacting with the application.




8. Deployment and Standards Compliance

- As a project stakeholder, I want the application to be developed and deployed with all stories completed, including robust documentation, code quality, testing, and coverage. So that the project is delivered on time and meets all required standards.







Our results are given below and can be viewed in more detail at:
<https://reports.cucumber.io/reports/9327cf6e-a7f4-4244-9971-2d74fa4d5779>

Cucumber Reports Log out

[stockemCucumberReports](#) / 9327cf6e-a7f4-4244-9971-2d74fa4d5779

62 PASSED		
100% passed 62 executed	2 minutes ago Last Run	16.93 seconds Duration
 darwin23	 ruby 3.3.4	 cucumber-ruby 9.2.0

Delete Report

- >  features/admin.feature
- >  features/create_item.feature
- >  features/events.feature
- >  features/item_export.feature
- >  features/item_management.feature
- >  features/item_navigation.feature

```

62 scenarios (62 passed)
541 steps (541 passed)
0m16.915s

View your Cucumber Report at:
https://reports.cucumber.io/reports/9327cf6e-a7f4-4244-9971-2d74fa4d5779

This report was published in collection "stockemCucumberReports"

Coverage report generated for Cucumber Features to /Users/alisharaj/Desktop/Stock-Em/coverage.
Line Coverage: 90.8% (306 / 337)
  
```

Rspec Tests: Similar to the cucumber tests above, we added Rspec tests for each controller, model, and channel created during this sprint. The Rspec files and results are given below:

```

.....

Finished in 0.37285 seconds (files took 1.28 seconds to load)
88 examples, 0 failures

Coverage report generated for Cucumber Features, RSpec to /Users/alisharaj/Desktop/Stock-Em/coverage.
Line Coverage: 96.76% (328 / 339)
  
```