Sprint 3 Retrospective Documentation

- ## 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

- ## Dates of Sprint:

Start Date: October 19, 2024
End Date: November 1, 2024

- ## Information about team and member contributions:

Member	Total Capacity	User story points assigned	User story points implemented
Tanishq Chopra	**5**	**5**	**5**
Simran Kaur	**5**	**7**	**8**
Simran Jot Kaur	**5**	**8**	**8**
Vinay Singh	**5**	**8**	**9.5**
Ishaan Rawal	**5**	**5**	**5**
Alisha Raj	**5**	**6**	**7**
Mark Sturtevant	**5**	**5**	**5**

- ## Sprint Goals:

Users should be able to check in, check out items and view related history. System should support editing and deletion of the item and provide more advanced search features. User experience should be enhanced to support better navigation. Fix all the bugs found till date.

- ## Sprint Achievements:

  [Bug Fix] Remove the redundant column from the users table.

  [Bug Fix] Combine the Status and Availability fields into a single, unified field.

  [Bug Fix] Resolve the issue with the search filter functionality.

  [UI] Ensure all pages are responsive and address any navigation-related issues.

  [API/UI] Enable users to edit, delete, or relocate individual items.

  [API/UI] Record any updates or edits made to an item as part of the item's history in the events table.

  [UI] Correct all CSS issues and optimize styling by creating a centralized CSS framework for the entire system.

  [API/UI] Develop a more advanced search feature to improve item retrieval.

  [API/UI] Allow users to check in and check out items, with access to each item's history.

  [API/UI] Establish clear authorization rules and procedures within the system to ensure secure access.

  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.

- ## Sprint backlog items and status

  a. **UI - Hide Buttons for Unprivileged Users (Flash for Unsupported Operations) [5]**
  - **Status**: In Progress

- **Description**: Hide specific buttons from users without privileges, or display feedback if they try to access restricted features.

b. API - Controller Security: Block Operations from Unprivileged Users [5]

- **Status**: In Progress
- **Description**: Restrict backend operations based on user privileges to enhance security.

c. Bug Fix - Fix Unknown Status Dropdown Search Filter [1]

- **Status**: Complete
- **Description**: Resolves issues with filtering items by "Unknown" status.

d. UI - Separate History and Notes Sections [2]

- **Status**: Complete
- **Description**: Differentiate history from notes for clarity and organization.

e. Bug Fix - Validation for Item Status Update [1]

- **Status**: Complete
- **Description**: Prevents redundant events from being created when an item’s status remains unchanged.

f. API/UI - Dropdown for Locations with "Other" Option [2]

- **Status**: In Progress
- **Description**: Replaces manual entry for locations with a dropdown to simplify and standardize selection.

g. **Bug Fix - Fix Checkout/Checkin Button Formatting on Item View Page [1]**
- **Status**: Complete
- **Description**: Adjusts button styling to align with design standards.

h. **UI - Change Item Editing Format (Popup or New Page) [4]**
- **Status**: In Progress
- **Description**: Replaces inline editing with a popup or a dedicated page to enhance usability.

i. **Bug Fix - Fix Create Item Button Disappearing on Certain Screens [1]**
- **Status**: Complete
- **Description**: Ensures the Create Item button consistently appears on all screen sizes.

j. **Bug Fix - Display "No Items" Message When Filtering Yields No Results [1]**
- **Status**: Complete
- **Description**: Shows a friendly message when search filters return no results.

k. **Bug Fix - Make Flash Messages More Consistent (Fading or Static) [2]**
- **Status**: In Progress
- **Description**: Standardizes flash message behavior across the app.

l. **UI - Warning Popup for Delete Item [1]**

- **Status**: Complete
- **Description**: Adds a confirmation popup to prevent accidental deletions.

m. UI - Auto-Filter for Dropdown on View Items Page [1]

- **Status**: Complete
- **Description**: Implements automatic filtering when dropdown options change for improved user experience.

n. API - Bulk Add/Export Items Script and UI [5]

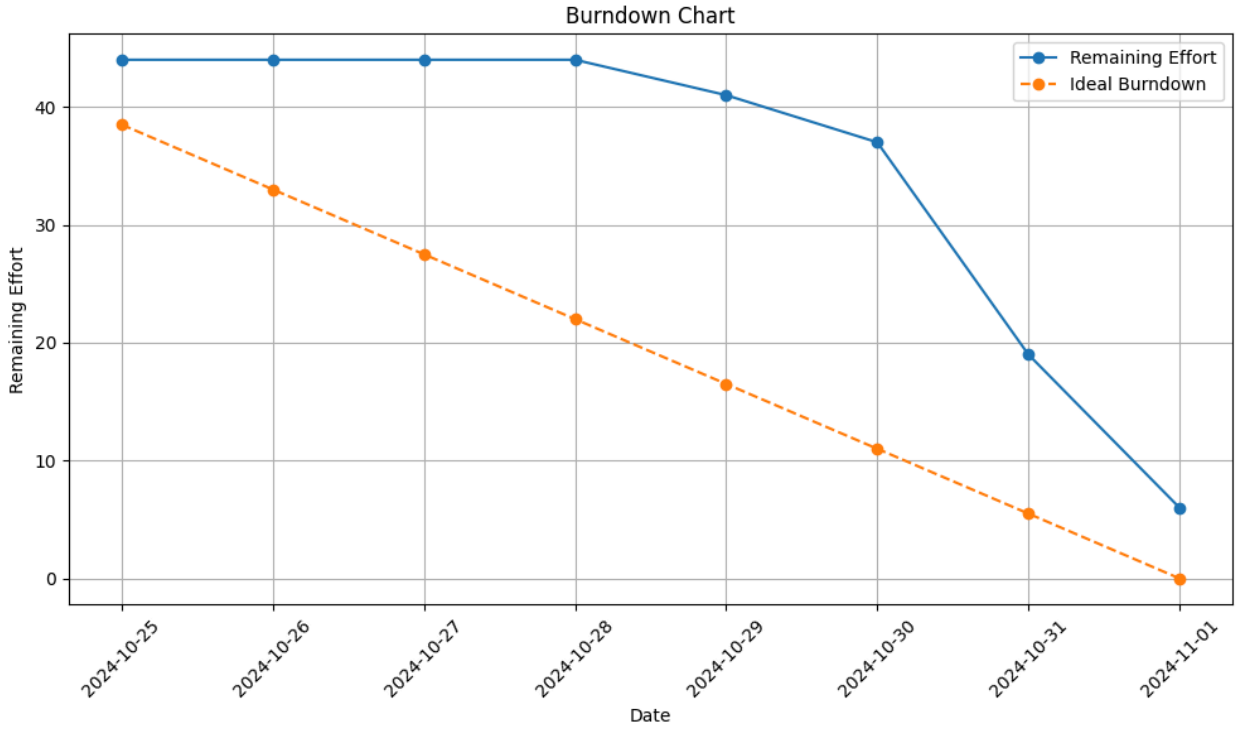
- **Status**: In Progress
- **Description**: Creates functionality for bulk addition and export of items.

Sprint Adjustments

- **+ Added**: **API/UI - Dropdown for Locations with "Other" Option**
    a. **Reason**: Feedback indicated manual location entry was prone to errors. A dropdown simplifies the process while allowing flexibility through an "Other" option.
- **+ Added**: **Bug Fix - Display "No Items" Message When Filtering Yields No Results**
    a. **Reason**: Users requested clearer indication when no results match filter criteria to improve UX.
- **- Removed**: **Bug Fix - Merge Status and Availability Fields**
    a. **Reason**: Postponed due to complexity and need for an extensive database refactor than initially anticipated.
- **- Removed**: **API/UI - Implement Advanced Search Functionality**
    a. **Reason**: Deferred to focus on securing the controller and UI improvements that were prioritized based on user feedback.

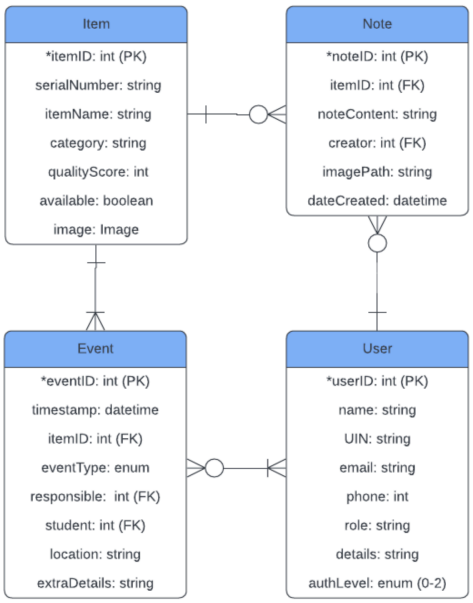
- * **Modified**: **UI - Improve Formatting of Events & Notes** to **Separate History and Notes Sections**
    a. **Change Reason**: Improved user experience by separating history from notes instead of reformatting, as users needed to view these sections independently.
- * **Modified**: **UI - Change Item Editing Format** to use a **Popup or Dedicated Page**
    a. **Change Reason**: Original inline edit was cluttered, so we opted for a more user-friendly approach with a dedicated editing view.

- **BurnDown Chart**



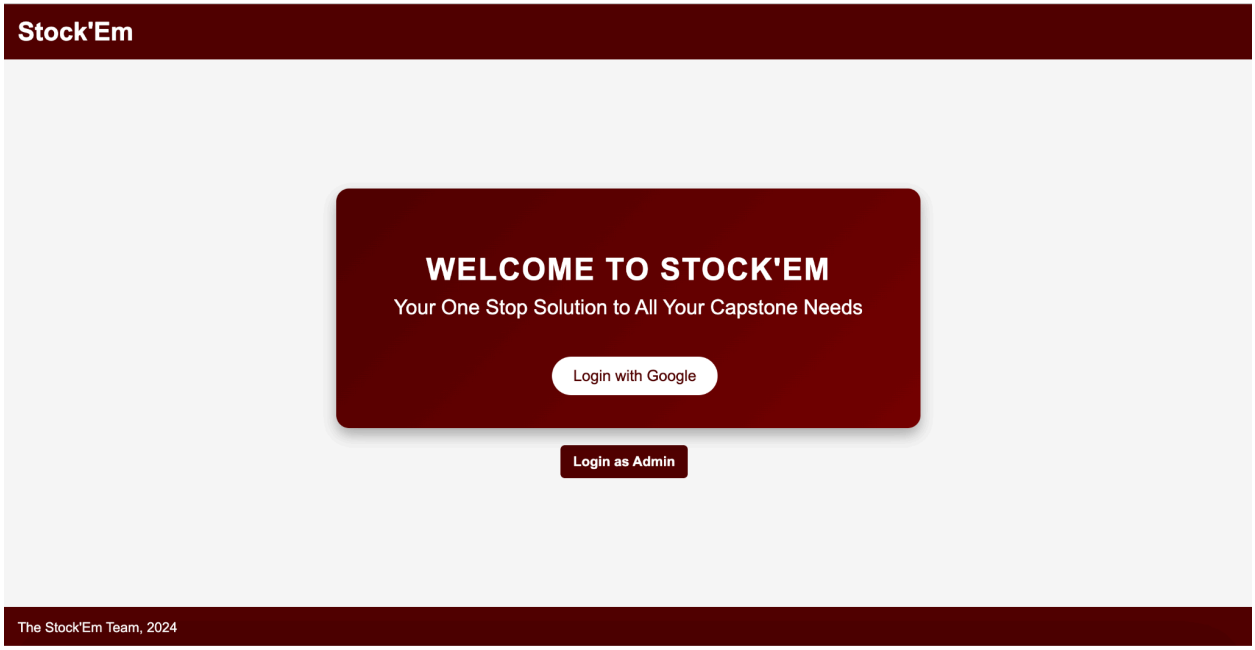
- **Design Diagrams:**

Database Design

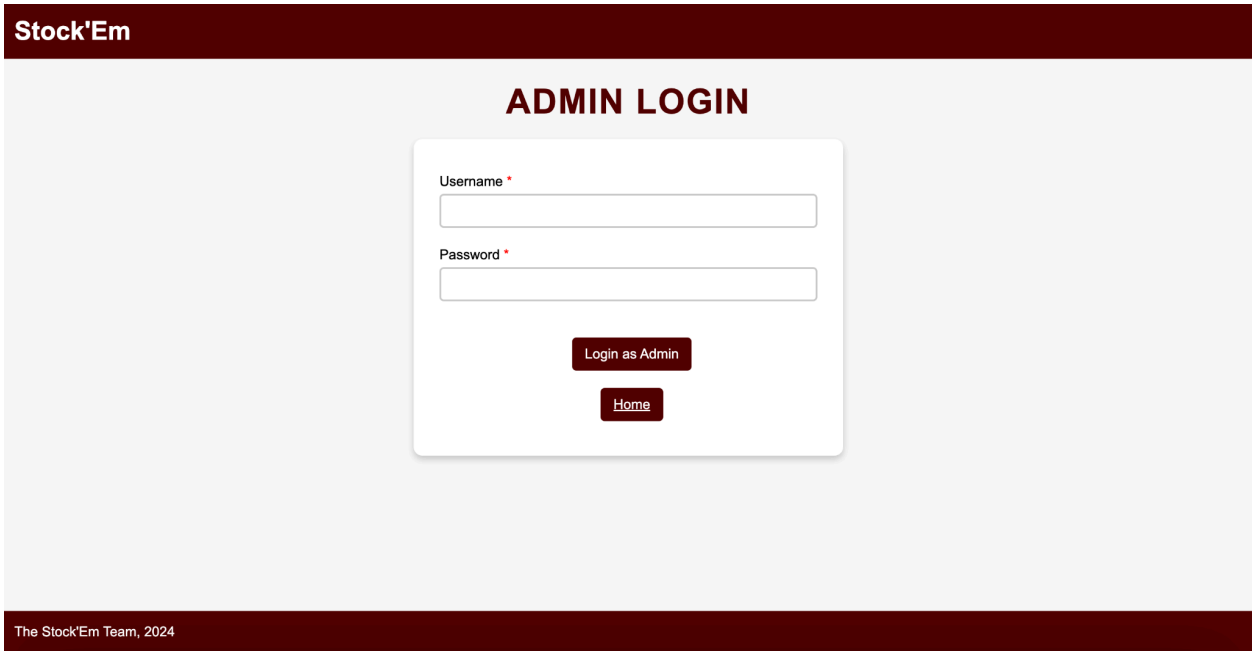


Login Page

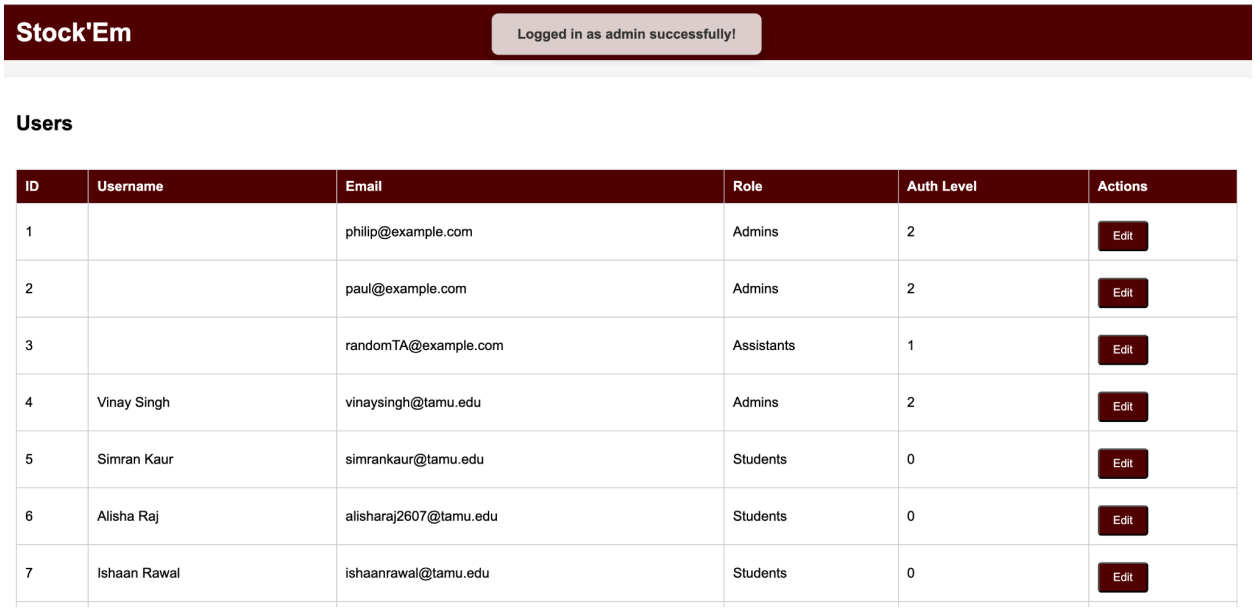
(Added an admin login design)



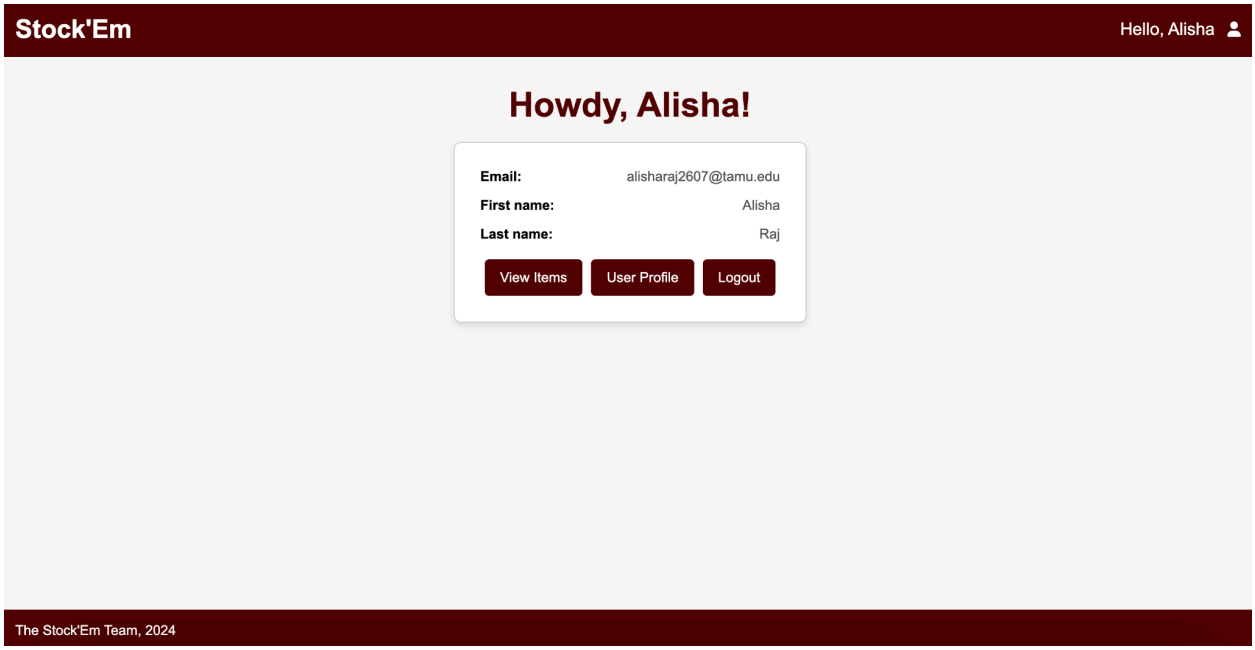
Admin Login Page



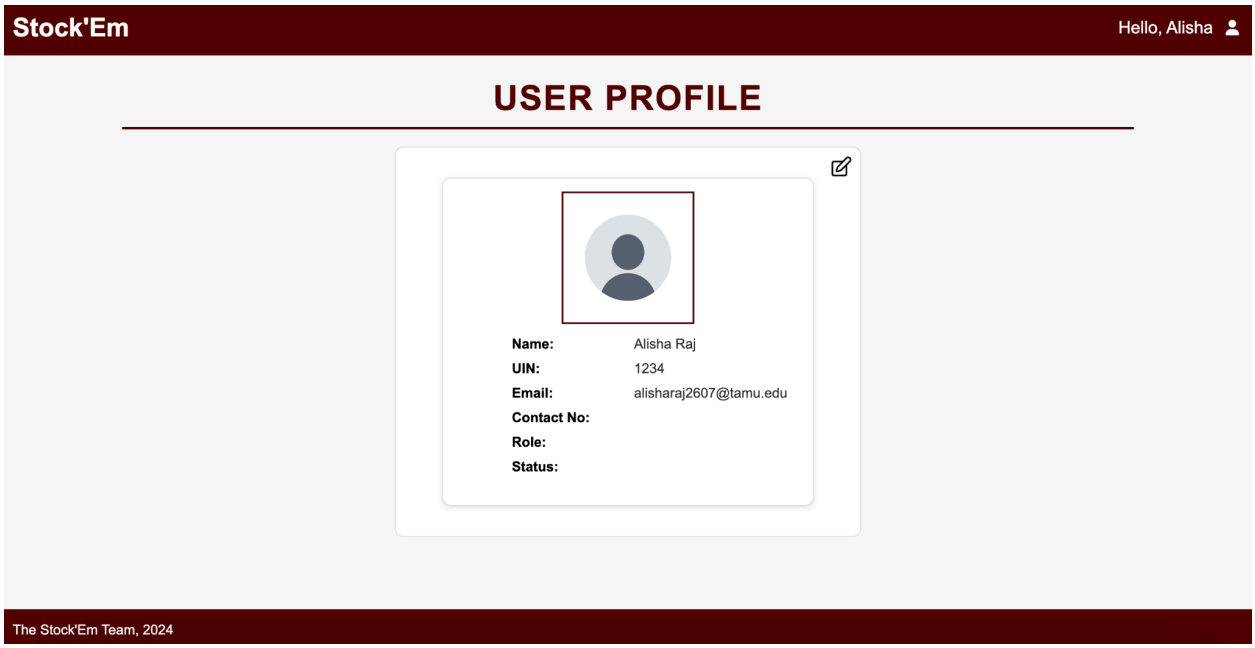
Admin View Page



Home Page

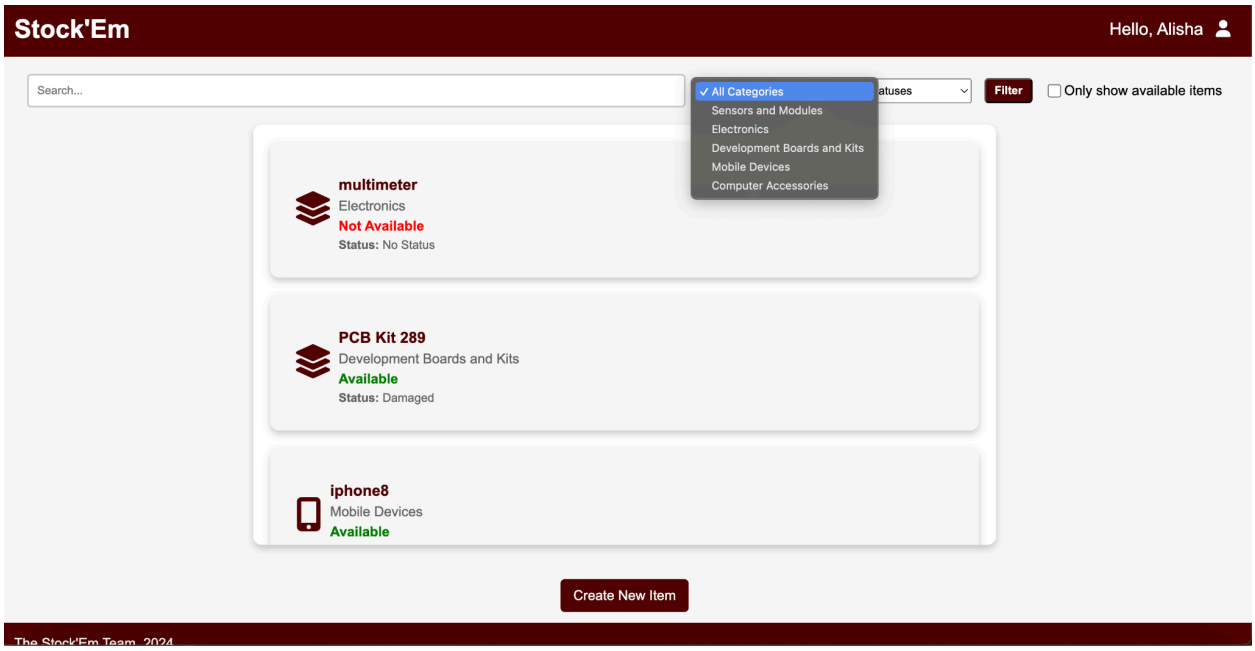


User Profile Page

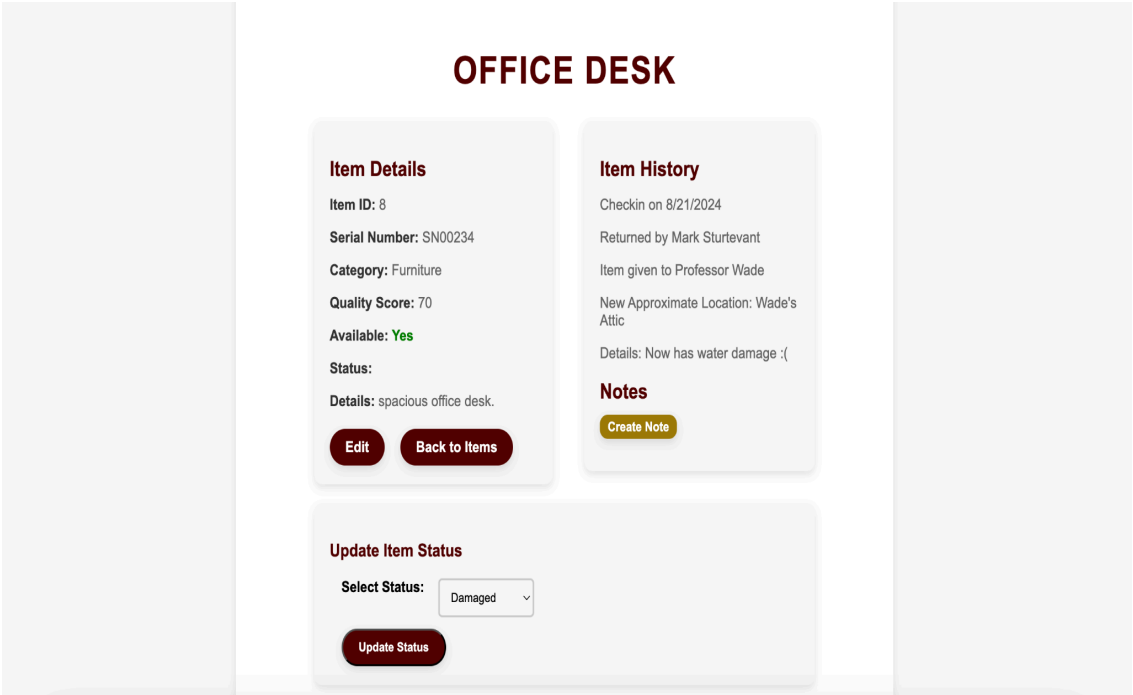


View Items Page

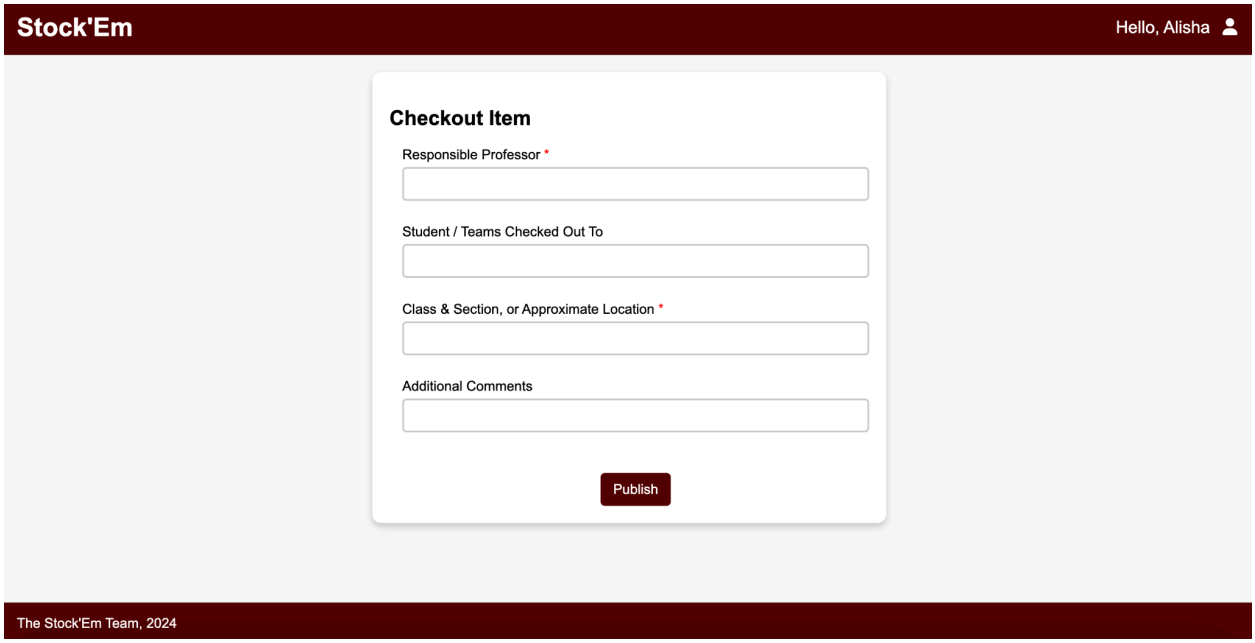
(updated with search filter)



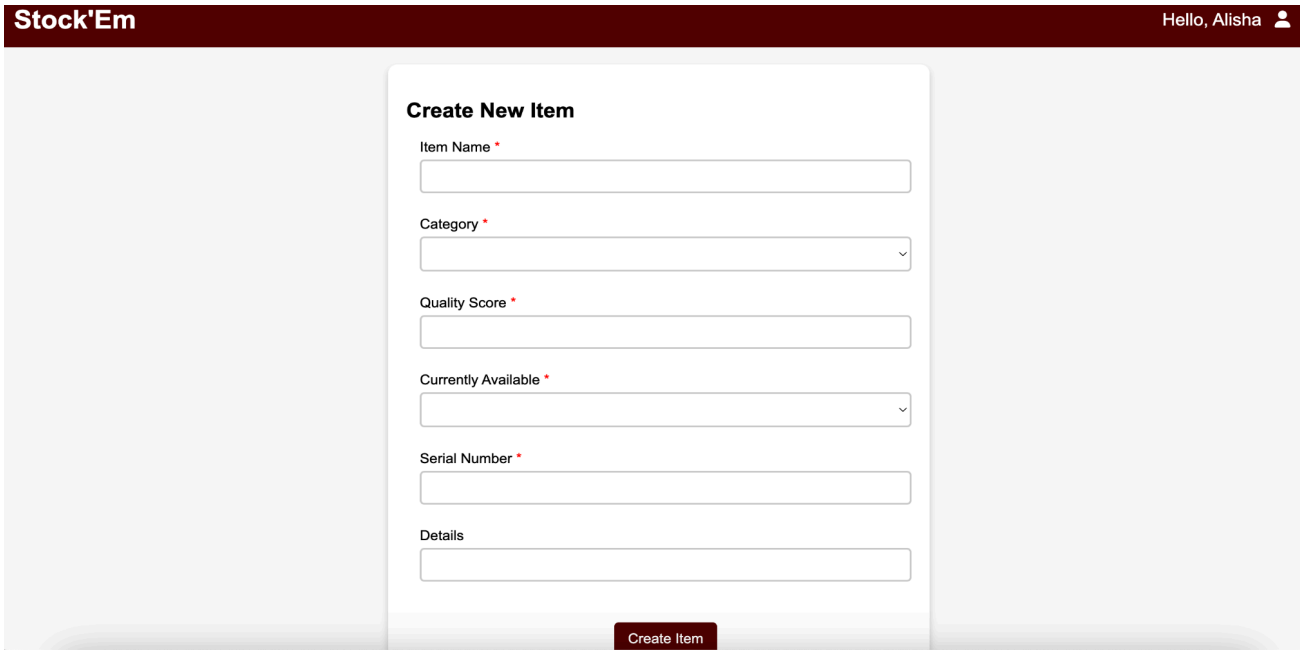
Item Information Page



Checkout item page



Create new Item Page



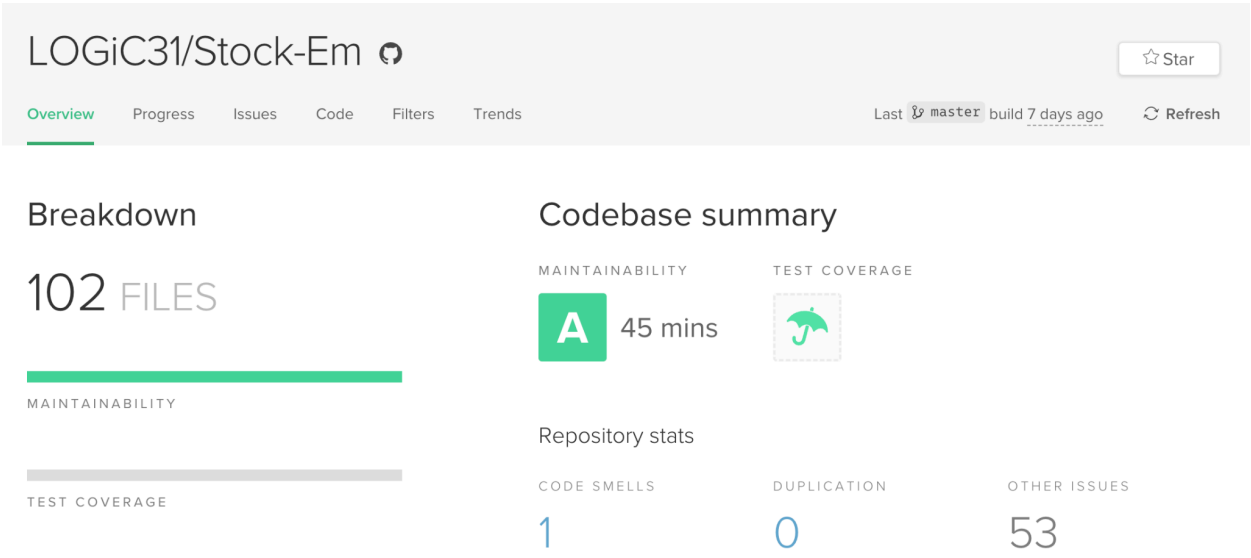
- **Documentation of changes:**

  The following changes have been implemented:

  - The redundant column in the users table has been removed.
  - The Status and Availability fields have been updated to be exhaustive.
  - The search filter bug has been fixed to show all items
  - Pages have been made responsive, and all navigation issues have been addressed.
  - Users can now edit, delete, or relocate individual items.
  - Any updates or edits to an item are now tagged as item history in the events table.
  - All CSS issues have been fixed, and the styling has been optimized by creating a central application CSS for the entire system.
  - More advanced search functionality has been implemented to filter on available status and categories.
  - Users can now check in or check out items, along with viewing the history of an item.
  - Rules and procedures for authorization within the system have been set up. Admin roles have been added.

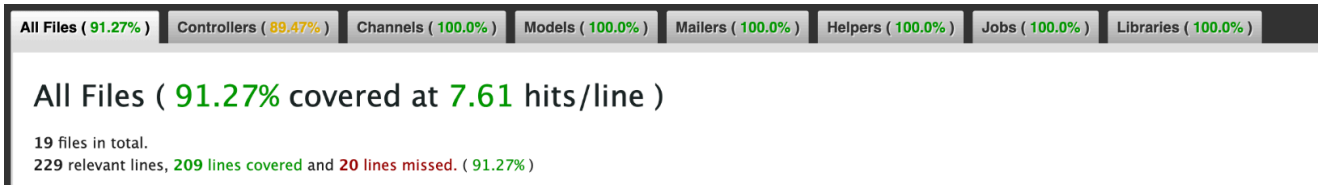
- **Evaluations of code and test quality**

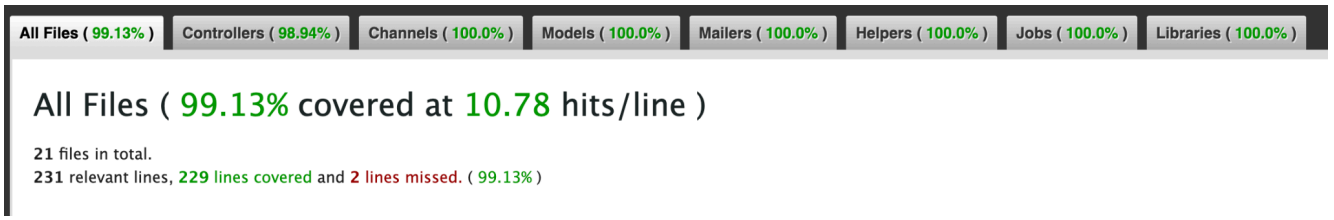
Code Quality by codeclimate:



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

Simplecov code coverage:





- **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: In our recent meeting, the customer reviewed the latest updates to the system and expressed satisfaction with the improvements made. Key enhancements included the merging of redundant fields, the resolution of search filter issues, and the implementation of a responsive design that optimizes navigation across pages. The customer appreciated the new item management capabilities, such as editing, deleting, relocating items, and viewing item history.

The advanced search functionality and centralized CSS were also well-received, and the customer noted that the authorization rules added valuable security to the system.

In terms of additional features, the customer suggested introducing a mass item creation feature to streamline bulk entries and requested a dropdown menu to simplify updating the location of items. These suggestions will be considered in upcoming development cycles to further improve the user experience.

- **BDD and TDD charts:**

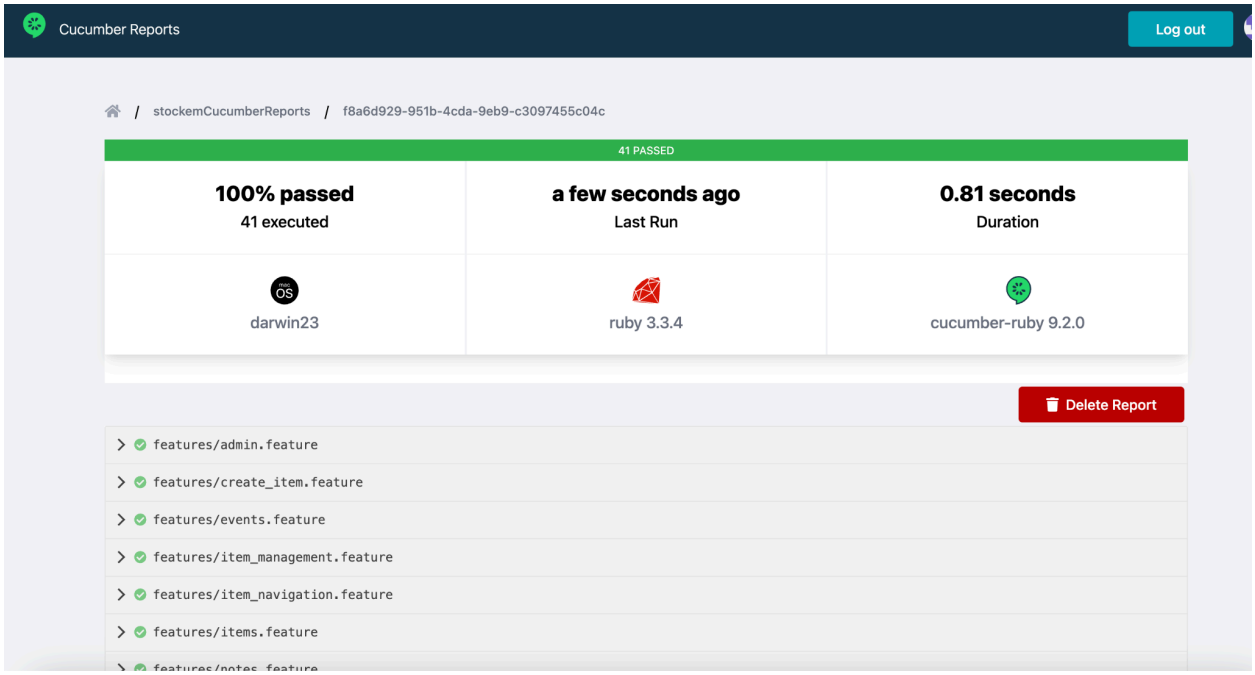
Cucumber Tests: We implemented tests for all of the User Story categories in this sprint, including:

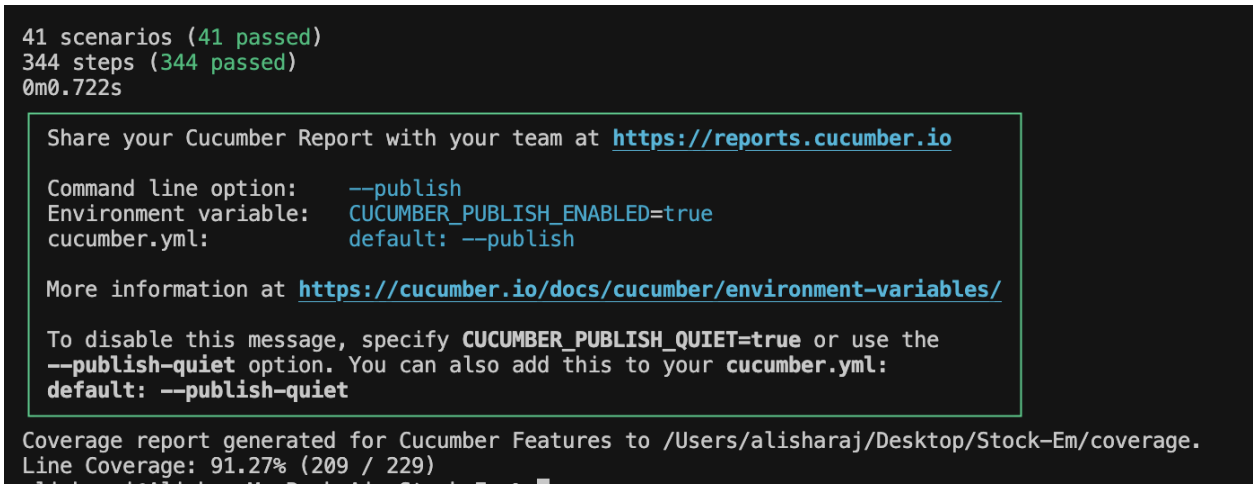
- As a user, I want the users table to be streamlined, so that redundant columns are removed, ensuring data is concise and relevant.

- As a user, I want the Status and Availability fields to be combined, so that item availability is clearly reflected in one place.
- As a user, I want the search filter to function correctly, so that I can easily find specific items without encountering errors.
- As a user, I want all pages to be responsive and have smooth navigation, so that I can use the system seamlessly across different devices and screen sizes.
- As a user, I want to be able to edit, delete, or relocate individual items, so that I can manage inventory effectively.
- As a user, I want any updates or edits to an item to be recorded as item history in the events table, so that I have a record of changes for future reference.
- As a user, I want the system's CSS to be consistent and optimized through a central stylesheet, so that the UI has a cohesive look and loads efficiently.
- As a user, I want to use advanced search functionality, so that I can filter items based on various criteria and find what I need faster.
- As a user, I want to check in or check out items and view their history, so that I can track the movement of items within the system.
- As a user, I want clear rules and procedures for authorization, so that only permitted users can perform certain actions within the system.
- As a user, I want a feature for mass item creation, so that I can add multiple items to the system in bulk, saving time when updating inventory.

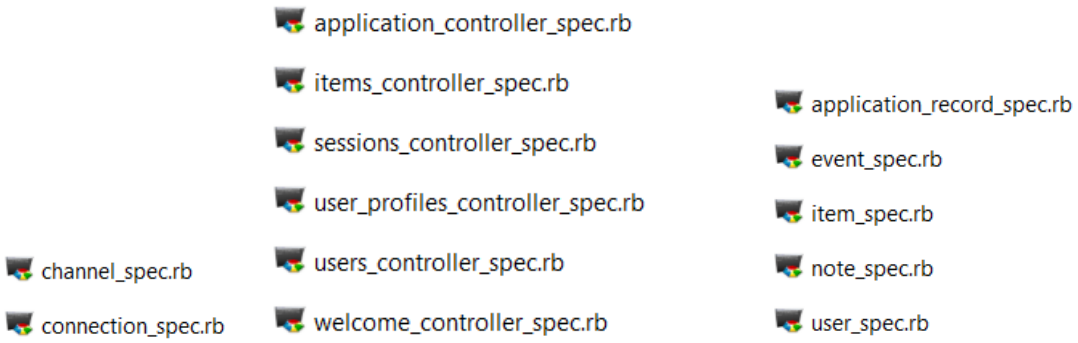
- As a user, I want a dropdown for updating item locations, so that I can quickly assign a new location to items without complex navigation.

Our results are given below and can be viewed in more detail at:https://reports.cucumber.io/reports/f8a6d929-951b-4cda-9eb9-c3097455c04c





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:

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73 examples, 0 failures

Coverage report generated for Cucumber Features, RSpec to /Users/alisharaj/Desktop/Stock-Em/coverage.
Line Coverage: 99.13% (229 / 231)
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