

Sprint 3 Review Report

USSF GRC Controls - Kubernetes

Sprint Dates:

October 28th, 2024 - November 1st, 2024: Sprint 3

November 4th, 2024 - November 8th, 2024: Sprint 3 Retrospective and Sprint 4 Planning

Links to Important Resources:

Heroku App: [app link](#)

GitHub Repository: [USSF-CSCE606](#)

GitHub Project: [USSF](#)

Team Roles:

- **Product Owner:** Maitreya Niranjana
- **Scrum Master** Duy Vu
- **Developers:** Medha Kaushika Podipireddi, Sahil Fayaz, Shravan Bhat, Vasudha Devarakonda, Aditya Gourishetty

Sprint Goal:








During Sprint 3, we focused on enhancing the GRC Control by implementing the feature to convert reports into CSV format for easy download. We will also fix the 'reloading' bug on the report page. Additionally, we added a runtime object to manage and display all created images. Users will be able to view images associated with each object and access detailed reports for those images. To support flexible compliance tracking, we introduced functionality for creating new images and re-running GRC evaluations on both new and existing images. To summarize, we developed smooth report handling, effective object management, and scanning capabilities.





Sprint Summary and Achievements:

In Sprint 3, our team successfully advanced the GRC Control application by implementing features that enhance report handling and runtime object management. A key achievement was enabling users to download the GRC report in CSV format, making compliance tracking easier and more accessible. We introduced a new home page where users can view all their runtime objects and detailed pages for editing, deleting, and managing associated images. Additionally,

we created functionality to add new runtime objects and share them with other users in a read-only capacity, providing flexibility in object visibility and collaboration. By addressing critical features like editing and deleting both runtime objects and images, and fixing a reloading bug on the report page, we aimed to streamline the user experience, making the application more efficient for compliance monitoring and data management. Overall, this sprint solidified the application's core functionality and enhanced user control over runtime objects and their associated images.

The application is currently hosted on Heroku. We have also achieved good code quality having used rubocop, rubycritic, and code coverage for Rspec and Cucumber test cases. All the committed stories for the sprint have been marked as done.

Story	Story Points	Sub Tasks	Sub Task Points	Assigned To	Status
Download and view the GRC report	3	Implement download functionality	2	Medha	Done 
		Integrate report Data from the database	1	Medha	Done 
Run-time object on the home page	1			Aditya	Done 
Edit Run-time object	2	Create an edit form for a run-time object	1	Shravan	Done 
		Update the run-time object in the database	1	Shravan	Done 
Delete Run-time object	1	Remove run-time object and related images from the database.		Shravan	Done 
Edit Image	2			Vasudha	Done 

Delete Image	1			Vasudha	Done 
Create a new run-time object	2	Show the form for the new run-time object.	1	Aditya	Done 
		Save new object to the database.	1	Aditya	Done 
Permission	3	On the runtime object detail page, there should be a button to share with other users. When tapping on the button, show a list of users that you want to share with.		Sahil	Done 

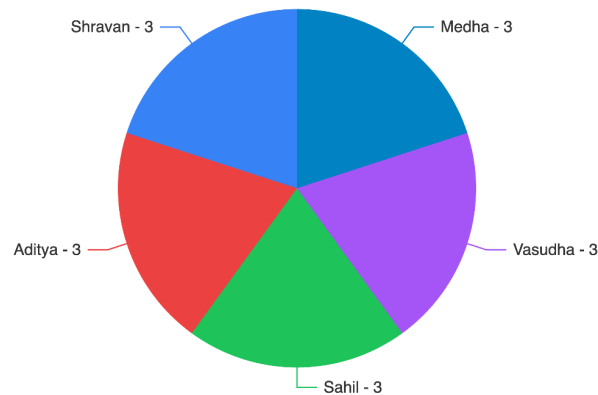
See the [Appendix](#) for story descriptions.

Sprint Backlog Items and Status:

In this sprint, no backlog items were added, modified, or removed after the sprint started. All items were planned and completed as intended with no scope changes. Each story and sub-task was implemented according to the initial plan, and all assigned team members successfully completed their tasks within the sprint.

Team member contributions:

Team Members Sprint Story Point Contribution



Medha: Implemented the download functionality for the GRC report, integrated report data from the database, and ensured accurate data retrieval for CSV export.

Vasudha: Focused on the image management features, implementing both the edit and delete functionalities for individual images, ensuring they functioned independently of other images.

Sahil: Developed the sharing permission feature on the runtime object detail page, allowing users to share objects with other users in a read-only mode and manage user access.

Aditya: Developed the runtime object display on the home page, created the form for adding new runtime objects, and handled database integration for saving new objects.

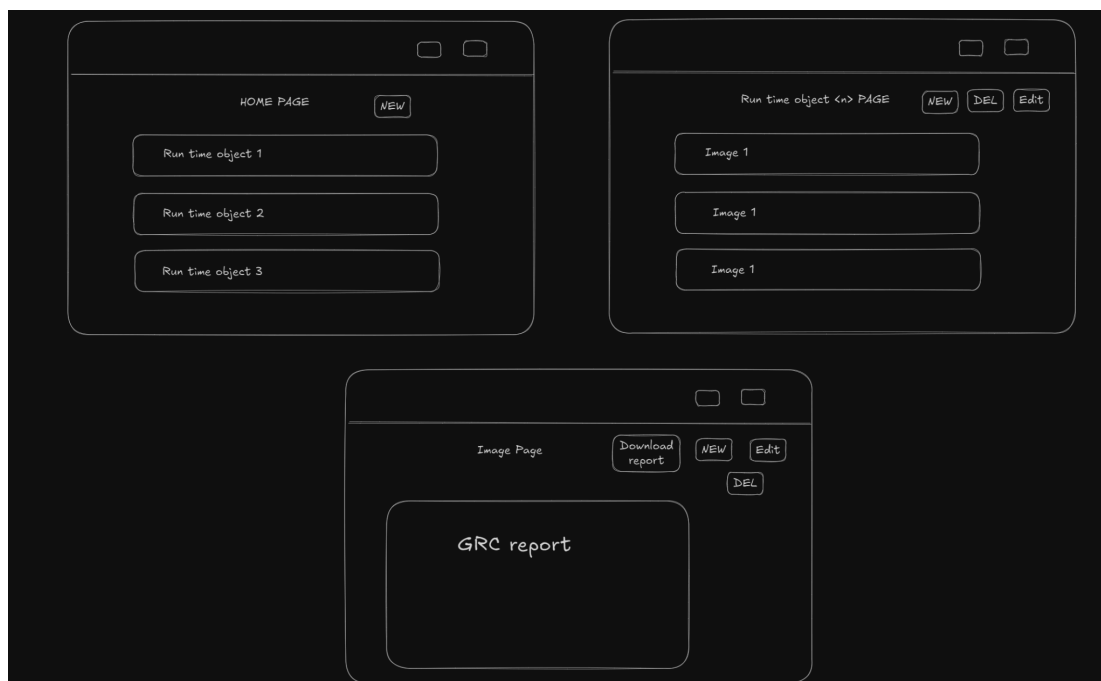
Shravan: Worked on the edit functionality for runtime objects by creating an edit form and updating objects in the database. Also implemented the deletion of runtime objects and associated images.

Burn Down Chart:



The y-axis represents the story points committed for the sprint.

Design Diagrams and UI Mockups:



Document of Changes:

In Sprint 3, the primary design change was the addition of a run-time-object table to the database schema. This new table is used to store a list of Docker images associated with each runtime object, enabling better organization and management of image data within the application.

Aside from this addition, there were no other changes to the design, stories, mock-ups, storyboards, or code organization in Sprint 3 compared to Sprint 2.

Code Evaluations:

Rspec and Cucumber Coverage:

```
18 scenarios (18 passed)
104 steps (104 passed)
0m6.789s

Share your Cucumber Report with your team at https://reports.cucumber.io

Command line option:  --publish
Environment variable:  CUCUMBER_PUBLISH_ENABLED=true
cucumber.yml:         default: --publish

More information at https://cucumber.io/docs/cucumber/environment-variables/

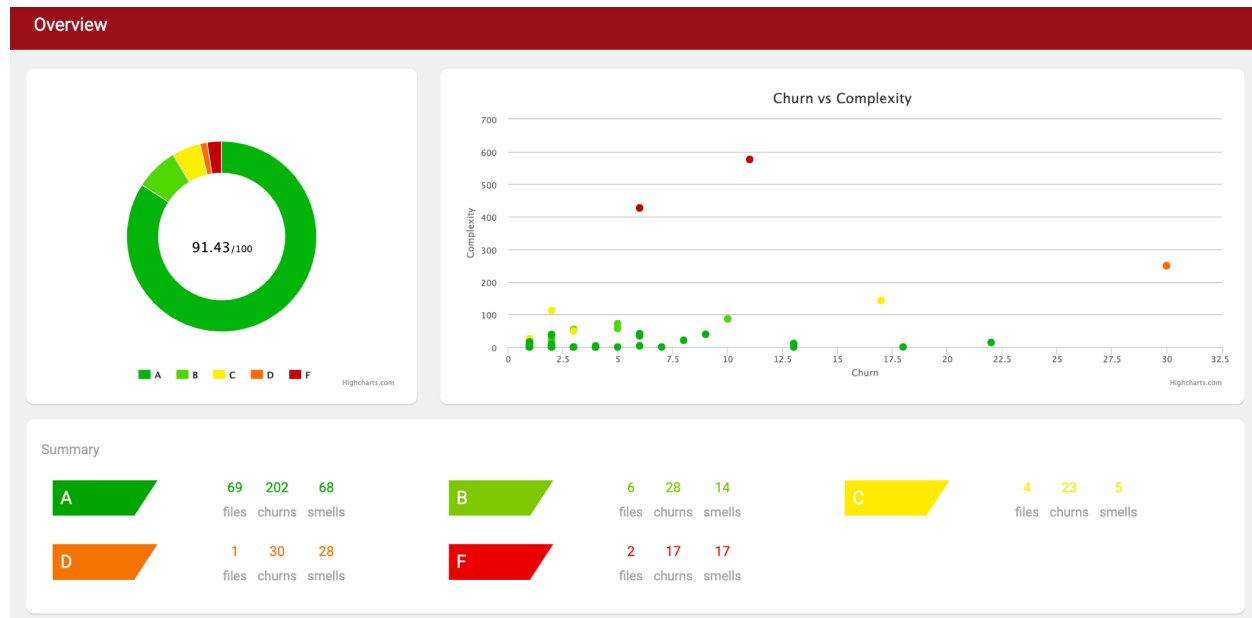
To disable this message, specify CUCUMBER_PUBLISH_QUIET=true or use the
--publish-quiet option. You can also add this to your cucumber.yml:
default: --publish-quiet

Coverage report generated for Cucumber Features, RSpec to /Users/duyvuquoc/RubymineProjects/USSF-CSCE606/coverage.
Line Coverage: 97.27% (214 / 220)

Finished in 3.37 seconds (files took 1.53 seconds to load)
66 examples, 0 failures

Coverage report generated for Cucumber Features, RSpec to /Users/duyvuquoc/RubymineProjects/USSF-CSCE606/coverage.
Line Coverage: 97.27% (214 / 220)
```

RubyCritic:



Client Sprint MVP meeting information:

Date: 11/07/2024

Time: 19:00 - 20:00

Location: Google Meet

Attendees: Aditya Gourishetty, Maitreya Niranjana, Duy Vu, Prof. Shreyas Kumar, Medha Kaushika Podipireddi, Sahil Fayaz, Shravan Bhat, Vasudha Devarakonda

The team presented the latest version of the application to Prof. Sheyras Kumar, showcasing the application navigation, scanning and downloading functionality, and container sharing feature across users.

Feedback from Prof. Sheyras Kumar:

- Suggested interface updates for clarity and user experience:
 - Ensure the image URL and title are displayed in a single, horizontal line for consistency.
 - Add a descriptive "Help" section in the menu that explains the purpose of each feature.
 - Remove the display of email addresses in the info section.
 - Standardize button shapes and colors for visual consistency across the application.
- Requested functional improvements:

- Fix the bug where the application reloads after a download is completed.
- Provide more details on images, particularly default images.
- Implement sorting functionality in tables, specifically by properties such as ID.
- Modify "Unknown" or "Uncategorized" labels to something more descriptive.
- Access control and user roles:
 - Create user roles, such as Admin, with permission management (e.g., ability to delete users).
 - Rename "Access" to a more intuitive term like "Share" to avoid confusion.
- Accessibility:
 - Make the website accessible for users with disabilities, especially considering government ADA compliance. Suggested features for color blindness and screen-reader support were discussed.

Additional requirements:

- Adjust font sizes for better readability, ensure titles and colors are consistent, and enhance the user experience for visually impaired users if feasible.

This feedback provides a clear roadmap for upcoming improvements to enhance the user experience, accessibility, and consistency of the application.

Appendix:

Story Descriptions:

Feature: Download and view the GRC report as a CSV

- **As a user** of the application
- **So that** I can download the report to my local machine
- **I want** to convert the report to CSV format and download it

Feature: New RunTime Object Page

- **As a user** of the application
- **So that** I can create a new run-time object for scanning.
- **I want** a form where I can give details of the new object.

Feature: View RunTime Objects in Home Page

- **As a user** of the application
- **So that** I can view all my run-time objects
- **I want** a home page with a formatted list of objects created by me.

Feature: View Images of RunTime Object

- **As a user** of the application
- **So that** I can view different images associated with each run-time object created by me
- **I want** a page with a formatted list of images linked to a particular run-time object.

Feature: Edit the run-time object

- **As a user** of the application
- **So that** I can edit the existing run-time object
- **I want** a page where I can edit a particular run-time object

Feature: Delete the run-time object and all the images associated with it

- **As a user** of the application
- **So that** I can delete the existing run-time object
- **I want** a button where I can delete a particular run-time object and all its associated images.

Feature: Edit the image

- **As a user** of the application
- **So that** I can edit the existing image
- **I want** a page where I can edit a particular image

Feature: Delete the image

- **As a user** of the application
- **So that** I can delete the existing image
- **I want** a button where I can delete a particular image without affecting the other images.

Feature: Permission

- **As a user** of the application
- **So that** I want to share the runtime objects with other (read-only)
- **I want** a button to share with other users (read-only)