

# Sprint Retrospective, Iteration #5

## Task Overview

Task #	Task Assigned To	Estimated Effort per Task (in hours)	Actual Effort per Task (in hours)	Done (yes / no)	Notes
Add button to skip to the next frame with objects	Dean Nguyen	2	2	Yes	
Ensure that the prediction and actual label arrays are aligned	Dean Nguyen	2	2	Yes	
Add a display of the CSV underneath the video	Dean Nguyen	3	6	Yes	We now display the CSV in a table with a lot of functionalities like filtering, searching and skipping to a row in the video
Export the result of the metrics in a series of Excel files	Dean Nguyen	8	14	Yes	Formatting the data took quite a bit of time. Some code created was not reusable, so some refactoring was needed to make the code more concise.
refactor and add more tests for controllers	Thang	10	10	Yes	We need to disable AAD authorization schemes to test the endpoints, make the test neater and follow the AAA pattern
Buttons for submitting and saving.	Ege	4	10	Yes	Since we are not able to send a CSV format to the server, we spent a lot of time meeting up and researching to come up with a solution. In the end, we decided to send a list of dtos.
Get fps and classes from database	Ege	1	1	Yes	
refactor video processing class	Akash	5	5	Yes	Apply factory pattern and singleton pattern to reduce complexity and coupling

Hibernate Fix	Akash	5	5	Yes	There was constraint violation with submission entity and container
Add more tests	Akash	5	5	Yes	I needed to write more tests to figure out what went wrong with Spring Hibernate
Add new controllers for saving csv and fix submission controller	Akash	15	25	Yes	It's difficult for the frontend to send multipart files, so I changed the endpoint in such a way that they only need to send JSON object
Allow users to draw boxes	Tan	5	25	Yes	Took time looking for fast drawing boxes, fixing bugs...
Allow users to log boxes and have it appear on the sidebar immediately	Tan	1	15	Yes	It turns out to be more complicated since we were trying to use requestVideoFrame instead of currentFrame
Allow users to resize, modify boxes	Tan	3	3	Yes	Used Fabricjs for native support
Draw the boxes on the client instead of preprocessing on the backend	Tan	5	5	Yes	Used Fabricjs for native support

## Main Problems Encountered

### Problem 1: Add support for different format in the back-end

**Description:** Previously the back-end only supported uploading of multipart files, however the conversion is quite difficult on the front-end.

**Response:** Change Hibernate so that now the back-end also accepts JSON objects

### Problem 2: Video performance

**Description:** The frames rendered quite slowly so the video feels laggy

**Response:** Use requestVideoFrame instead to boost the performance

### Problem 3: Data is not updated properly in the sidebar

**Description:** When a new box is created the box is not displayed immediately on the sidebar

**Response:** Use useState and useRef hooks to update the information appropriately

