Outlook

[CS 488T] Sprint 15 Report, Team 11 [stewartc]

From shelbyemailrelay@gmail.com <shelbyemailrelay@gmail.com>
Date Sun 5/18/2025 2:28 PM
To Stewart, Caleb <cstewart15@ewu.edu>

Caleb,

This report describes the activities of your EWU Senior Project team over the previous self-evaluation period (usually Saturday through Friday). It contains only public information. Private information and comments, etc. are available only to the instructor. If you notice any discrepancies or have questions, please contact Dan Tappan at dtappan@ewu.edu.

Sprint 15 Team Report

Team 11: Trademark ID & Analysis Engine

· Lane Keck
· Caleb Stewart
· Logan Taggart

Logged Hours

The team is generally free to work whenever they want during the sprint. The expectation for a team of three members is 45 hours total (15 per member) on average. However, this number will vary throughout the course.

Individual Hours:

		All Sprints							
Member	Hours	Total	Min	Max	Avg[1]	Avg[2]	Std[2]	Count[1]	Missed
Keck	7.0	104.0	3.0	9.0	7.4	7.4	1.4	14	0 (0%)
Stewart	4.0	113.5	2.0	16.0	8.1	8.1	3.3	14	0 (0%)
Taggart	7.5	103.5	3.0	10.0	7.4	7.4	2.0	14	0 (0%)
Team Total:	18.5								

[1]including and [2]excluding missed submissions for required sprints

Team Hours:

Sprint																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Min	Max	Avg	Std
8.0	27.5	24.5	28.5	25.5	22.0	18.0	0.0	29.0	25.0	23.0	25.5	24.5	21.5	18.5	321.0	0.0	29.0	21.4	7.6

The following is optional descriptions of daily work that is not captured as activities below:

Taggart:

- Fixing internal file paths for backend executable
- Preloading imports
- Finishing GitHub workflows
- Preloading imports
- Fixing internal file paths for backend executable

Activities

Activities are member-defined units of work that are formally tracked from sprint to sprint (unlike the optional descriptions above). Every activity must be accounted for from its creation until it is completed or abandoned.

New Activities

These activities were created by during this sprint.

Keck

Activity 137: Add removing option to image search

Add red 'x' to remove logos (one sprint expected)

Stewart

Activity 123: Documentation

Start working on and brainstorming about the documentation (three sprints expected)

Taggart

Activity 124: Fixing backend to work as a single executable

Changing file paths to work properly once it is bundled together. (one sprint expected)

Continuing Activities

These activities were continued from the previous sprint.

Activity 118.1: Packaging backend into executable

Opened in Sprint 13 by Taggart; expected to take two sprints.

Original description: Compiling backend into single executable with Nuitka.

Progress in Sprint 14 (expected to take two more sprints): I have built a workflow in GitHub to be able to automatically build the backend into a single executable, but the backend is not fully prepared to do this just yet.

Progress in Current Sprint (expected to take one more sprint): Workflows in GitHub to bundle backend into an executable, and whole app into a single executable have been completed. I am also going to be using PyInstaller now instead of Nuitka to build backend.

Activity 119.1: Minor cosmetic changes

Opened in Sprint 13 by Taggart; expected to take one sprint.

Original description: Making certain aspects look better.

Progress in Sprint 14 (expected to take one more sprint): Made minor updates to a few different parts of the frontend design.

Progress in Current Sprint (expected to take one more sprint): Made a few more minor updates to the frontend design.

Completed Activities

These activities were completed during this sprint.

Activity 122.1: Prevent overlapping bounding boxes

Opened in Sprint 14 by Keck; expected to take one sprint.

Original description: Change the model to prevent overlaps

Progress in Current Sprint: This has been implemented

Activity 121.1: Cancel processing button

Opened in Sprint 14 by Stewart; expected to take one sprint.

Original description: While a video or image is processing, be able to press the button and cancel the processing

Progress in Current Sprint: Cancel button works accordinly

Activity 120.1: Lazy Loading

Opened in Sprint 14 by Taggart; expected to take two sprints.

Original description: Implementing lazy loading to speed up start time of backend.

Progress in Current Sprint: Finished lazy loading imports and also preloaded some of the larger imports on a separate thread once the server starts up.

Team Reflection

This section refers to the team's collective perception of and reflection on the project over this sprint.

The instructions are: Consider the following four pairs of questions hierarchically. They are not the same question. If you think they are, then you are likely not using an appropriate breadth and depth of software-engineering thought. This course is a practical application of the aspects of product, process, and people. We are trying to account for everything: not just to create a good product, but also to learn from the process to improve the people. Reflect on the experience of the entire team collectively over this sprint. You do not need to account for all work, just two examples that are most representative of easiest and hardest.

For reference, *understand* relates to the comprehension of what needs to be done; *approach* to how you think it should be solved; *solve* to implementing the actual solution; and *evaluate* to demonstrating to yourself and your team (if applicable) that the performance of your solution is consistent with everything else in the project. Remember The Cartoon from CS 350.

Understand

Easiest:	The easiest to understand aspect is what we need to do to finish up the requirements that we assigned to our project. This is basically just getting the program to run as a single executable so that any users of it will not have to install any additional downloads or libraries.
Hardest:	The hardest to understand aspect is how we need to change our file paths within our back end so that our backend executable performs as is expected. We are finding that compiling it into a single executable is adding in many additional files that our project did not previously have, so we are trying to figure out what exactly the new file paths need to be.

Approach

Easiest:	The easiest to approach is converting all of our imports to use lazy loading to speed up the initial loading time of our application. This was easy to approach because we realized that we just had to move all of our current imports from the top of the files to within the specific functions that they were needed in.

Hardest: The hardest to approach is figuring out how to add in the feature to be able to cancel a detection process in the middle of it doing so. We are trying to make sure that the current process cancels, but does not affect or stop any future processes from working.

Solve

Easiest: The easiest to solve is fixing the problem we were having with having overlapping boundary boxes where one logo was being detected twice. After some research we found that there is an additional parameter that we can simply pass in to our model called intersection over union (iou) which we can fine tune the value of to solve this issue.

Hardest: The hardest to solve is why we are running into certain bugs happening only occasionally on our application, and why they are not able to be consistently replicated on different computers/operating systems.

Evaluate

Easiest: The easiest to evaluate is whether using lazy loading on our application was effective. We are able to just simply time the start up of the server which we found is now around 5 seconds in comparison to the previous 45 seconds.

Hardest: The hardest to evaluate is whether or not our backend executable is working as is expected because the process to compile it into an executable using PyInstaller takes a while and can be very confusing to be able to debug/troubleshoot as much of the internal logic is hidden deep within the files it generates.

Completion: 95%. We are just putting the last finishing touches and details on the project and will definitely reach our goal.

Contact: N/A

Comments: We have no issues, comments, or concerns regarding the project.

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