# Project Summary

# csci205\_final\_project

### **Project Details**

#### Members

- Aidan Finkler
- Alec Sanders
- Geoffrey Gaines
- Sean O'Connor

### **Project Retrospective**

#### What was your initial goal?

Build a program to scrape multiple APIs and show price history for a product.

### What did you achieve?

We were able to build a program that searches for products and shows their ratings and prices from a single source, Walmart.

### What went well in the project?

We worked well together, and were able to complete the tasks in a timely manner.

### What could be improved?

We'd like to have implemented more APIs to access, as our dataset is quite small.

### What would you change if you did the project again?

We'd research the APIs and their costs before we agreed on the project scope.

### Charts

### Health Bar

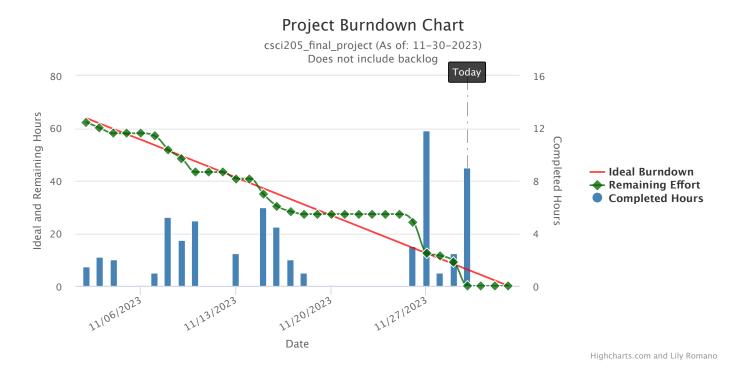
#### Project Health

csci205\_final\_project (As of: 11–30–2023) Includes backlog



We were able to complete all work as planned, although we adjusted the plans according to the changes made to the project scope.

### **Burndown Chart**



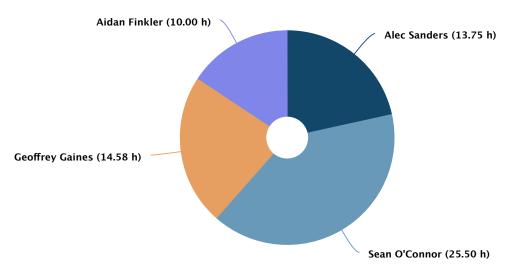
We completed more and more work as the end of the project became closer, however our work was pretty spread out throughout the duration of the four sprints.

### **Assignee Chart**

#### Project Hours assigned vs. completed

csci205\_final\_project (As of: 11-30-2023)

Does not include backlog



Highcharts.com and Lily Romano

We all took a significant amount of the work, allowing for fluctuations between people as we all have packed schedules, and some of us were more specialized in specific subjects.

| Name            | User<br>Stories | Bugs | Tech.<br>Tasks | Design<br>Tasks | Spikes | Doc. |
|-----------------|-----------------|------|----------------|-----------------|--------|------|
| Aidan Finkler   | 0               | 0    | 0.5            | 4.75            | 4.75   | 0    |
| Alec Sanders    | 0               | 0    | 0              | 9               | 4.75   | 0    |
| Geoffrey Gaines | 0.25            | 0    | 6              | 3.33            | 5      | 0    |
| Sean O'Connor   | 7               | 0    | 6.5            | 4.5             | 7.5    | 0    |

# Sprints

# Sprint 1

#### **Dates:**

11-2-2023 to 11-9-2023

#### What went well in the sprint?

We did a large amount of research.

#### What could be improved?

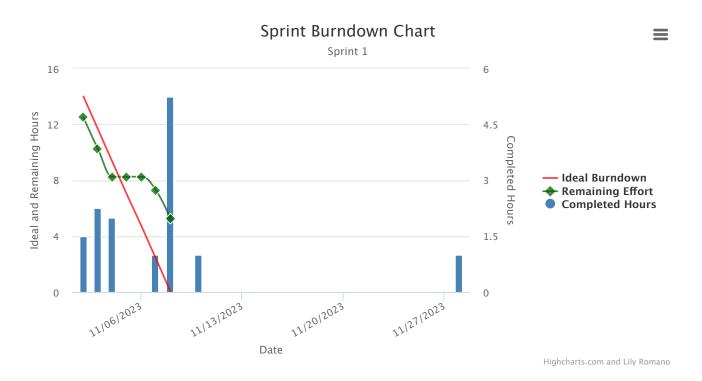
We hit a few roadblocks- we need a more specific focus on what to build, and what services to pull from.

#### Are you on track? What is your plan if not?

We're not necessarily on track, but we need to make up the work as we go.

#### What will you improve on in the next sprint?

Make up for the setbacks and set more attainable goals.



### Sprint 2

#### Dates:

11-9-2023 to 11-16-2023

#### Goal:

Get items from eBay API and sort by assorted variables

#### What went well in the sprint?

We extended our initial goal- we wanted the sprint to end with a command line program, but we instead reached a basic GUI program

#### What could be improved?

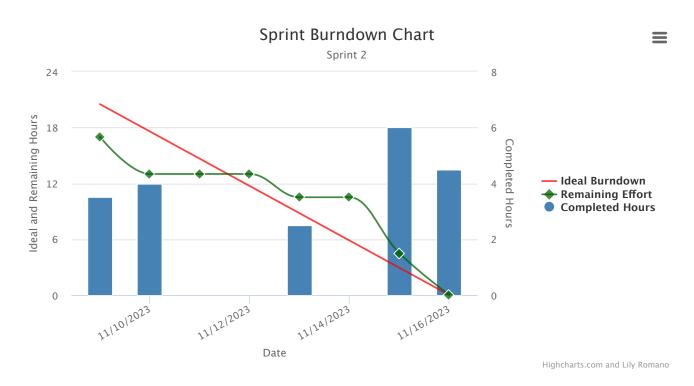
Distribution of work- We all separated the work by type, but we all had to catch each other up on what each specific section of work included.

#### Are you on track? What is your plan if not?

Yes, we are on track

#### What will you improve on in the next sprint?

We'd improve communication, maybe meet a few times more/record what happens more verbosely.



### Sprint 3

#### Dates:

11-16-2023 to 11-27-2023

#### Goal:

Enhance our GUI application with more user-facing convenience features

#### What went well in the sprint?

Most of the time of the sprint was during break- but the days we were on campus, we did a few cleaning tasks.

#### What could be improved?

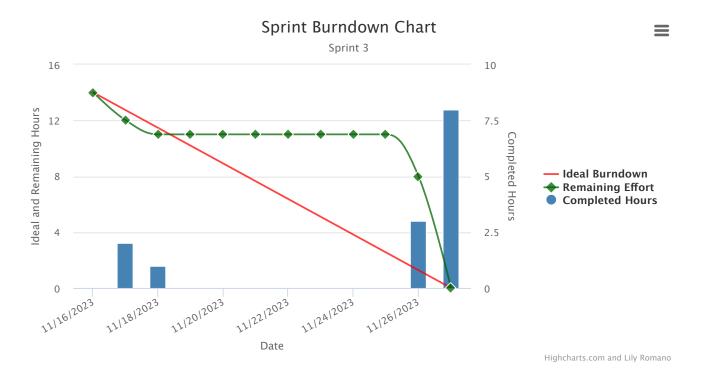
We didn't do much, but we were in a spot where we didn't need to do much, so things worked out.

### Are you on track? What is your plan if not?

Yes. We need to spend the next two weeks finalizing the project's deliverables.

#### What will you improve on in the next sprint?

Not much.



### Sprint 4

#### Dates:

11-27-2023 to 12-4-2023

#### Goal:

Finalize project deliverables

#### What went well in the sprint?

We were able to finish all work on the estimated timeline.

#### What could be improved?

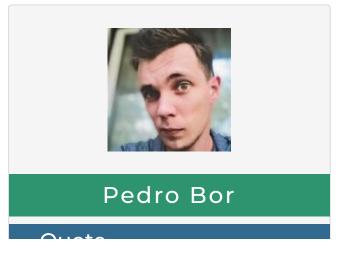
Not much, we didn't have too much to do at the end so it was pretty easy to finish up.

# If you were to continue the project, what would you improve on in the next sprint?

We'd work to add more features to the final product.



### Personas





#### Quote

"I want to buy this product right now!"

#### **Narrative**

This is a user of the application that wants to buy an item as soon as possible. They do not care about getting the minimum possible price.



### Johnni Franklin

### Quote

"I want to save money!"

### Narrative

This user wants to buy an item at the lowest possible price. They do not care when they receive the product, as long as they get the best possible price.

#### Quote

"I want to resell my items"

### **Narrative**

This user wants to buy low, and sell high. They use the platform to buy an item, receive it, post a listing, and sell at a higher price for a profit.



### Marina Martínez

### Quote

"I do research on market fluctuations"

#### Narrative

This user utilizes the platform to record and analyze market data over multiple market platforms.



### Gustav Pedersen

### Quote

"Buy my goods!"

### Narrative

This user wants to sell their goods. They browse the market to find other prices to sell at, and determine a price that fits their item(s).



# **Margot Paulus**

### Quote

"I'm just bored and want to look at stuff"

### **Narrative**

This user has no intent of purchasing any items, they just want to browse the available marketplaces.

### Table of Work

Search:

| Title                      | Туре           | Est.       | Spent      |
|----------------------------|----------------|------------|------------|
| Closed (23)                |                | 63 h, 50 m | 63 h, 50 m |
| Sprint 1 (6)               |                | 14 h       | 14 h       |
| Amazon API class           | Technical Task | 4 h, 30 m  | 4 h, 30 m  |
| Ebay API research          | Technical Task | 1 h        | 1 h        |
| Learn APIs                 | Spike          | 5 h, 30 m  | 5 h, 30 m  |
| Personas Using Our Service | Design Need    | 30 m       | 30 m       |
| UML                        | Design Need    | 1 h, 30 m  | 1 h, 30 m  |
| Use case diagram           | Design Need    | 1 h        | 1 h        |
| Sprint 2 (9)               |                | 20 h, 30 m | 20 h, 30 m |

| Add sort type to search   | User Story  | 1 h   | 1 h   |
|---|---|---|---|
| Drafting GUI  | Design Need   | 2 h, 15 m                                     | 2 h, 15 m                                     |
| Frontend GUI search   | User Story  | 6 h, 15 m                                     | 6 h, 15 m                                     |
| Item Class  | Technical Task  | 1 h   | 1 h   |
| Lab - API progress/research   | Spike   | 2 h, 30 m                                     | 2 h, 30 m                                     |
| Learn APIs  | Spike   | 2 h   | 2 h   |
| Register for BestBuy/Etsy API Keys  | Technical Task  | 30 m  | 30 m  |
| UML   | Design Need   | 1 h   | 1 h   |
| Walmart API class   | Technical Task  | 4 h   | 4 h   |
| Sprint 7 /7)  |   | 14 h  | 14 h  |
| Sprint 3 (3)  |   | 1411  | 1411  |
| Lab 11  | Spike   | 9 h   | 9 h   |
|   | Spike<br>Spike  |   |   |
| Lab 11  | ·   | 9 h   | 9 h   |
| Lab 11 Refine User Interface  | Spike   | 9 h<br>3 h                                    | 9 h<br>3 h                                    |
| Lab 11 Refine User Interface VPN practice   | Spike   | 9 h<br>3 h<br>2 h                             | 9 h<br>3 h<br>2 h                             |
| Lab 11 Refine User Interface VPN practice Sprint 4 (5)  | Spike<br>Technical Task                                   | 9 h<br>3 h<br>2 h<br>15 h, 20 m               | 9 h<br>3 h<br>2 h<br>15 h, 20 m               |
| Lab 11  Refine User Interface  VPN practice  Sprint 4 (5)  CRC/Powerpoint   | Spike Technical Task  Design Need                         | 9 h<br>3 h<br>2 h<br>15 h, 20 m<br>1 h        | 9 h<br>3 h<br>2 h<br>15 h, 20 m<br>1 h        |
| Lab 11 Refine User Interface VPN practice Sprint 4 (5) CRC/Powerpoint Finalize Project files/Deliverables             | Spike Technical Task  Design Need Design Need             | 9 h<br>3 h<br>2 h<br>15 h, 20 m<br>1 h<br>6 h | 9 h<br>3 h<br>2 h<br>15 h, 20 m<br>1 h<br>6 h |
| Lab 11 Refine User Interface VPN practice Sprint 4 (5) CRC/Powerpoint Finalize Project files/Deliverables JUnit tests | Spike Technical Task  Design Need Design Need Design Need | 9 h 3 h 2 h 15 h, 20 m 1 h 6 h 2 h, 50 m      | 9 h 3 h 2 h 15 h, 20 m 1 h 6 h 2 h, 50 m      |

# Daily Scrum

# Daily Scrum Notes

11/8 What did you accomplish? This week we did R&D for APIs

What are you working on? Implementing APIs so we can build a console-driven program

What are your challenges? Learning new tech

11/9 thru 11/13 We spent our entire sprint 1 reseraching API's, pivoting often as we ran into paywalls.

11/13 We all tested out the WalmartSearch class to see what the API has to offer and decide what is able to be manipulated and or shift the trajectory of where we can go with the available data. Focusing on Walmart seems to be the goal for now, with updating UML and creating UI as we progress. Maybe towards the end we can apply another API for a one-to-one comparison compTo() --> basically designing a simplified marketplace frontend

11/15 Walmart API works, we're going to work with the Walmart API

11/16 Walmart API and GUI work, we can get info from the walmart API and display it to a GUI