



Week 6

Project Report

June 7 - 13, 2021



Eric, Vicens, and Ben



StatCan Covid-19

Canada Emergency Wage Subsidy

Dashboard and Report

Overall Progress

- **1st Week:** Project understanding
- **2nd Week:** Data exploration
- **3rd Week:** Dashboard and report
- **4th Week:** Dashboard and report tweaks and enhancements
- **5th Week:** More minor improvements
- **6th Week:** Dashboard conversion

Accomplishments

- **CEWS Dashboard**
 - Research for dashboard conversion to older version of Power BI

StatCan Covid-19

API Feasibility Study

Report and Model

Overall Progress

- **4th Week:** API research
- **5th Week:** API feasibility report and initial model development
- **6th Week:** API feasibility report report tweaks and enhancements, and models development

Accomplishments

- **Twitter Sentiment Analysis**

- Most current tweets mentioning CEWS sentiment analysis

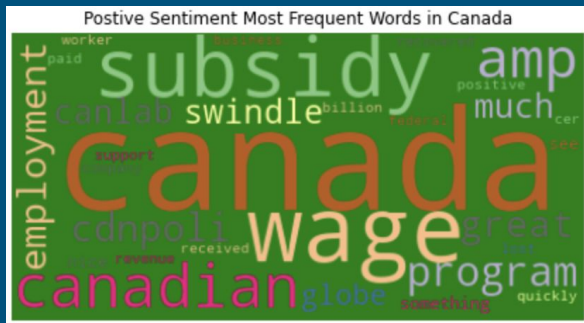
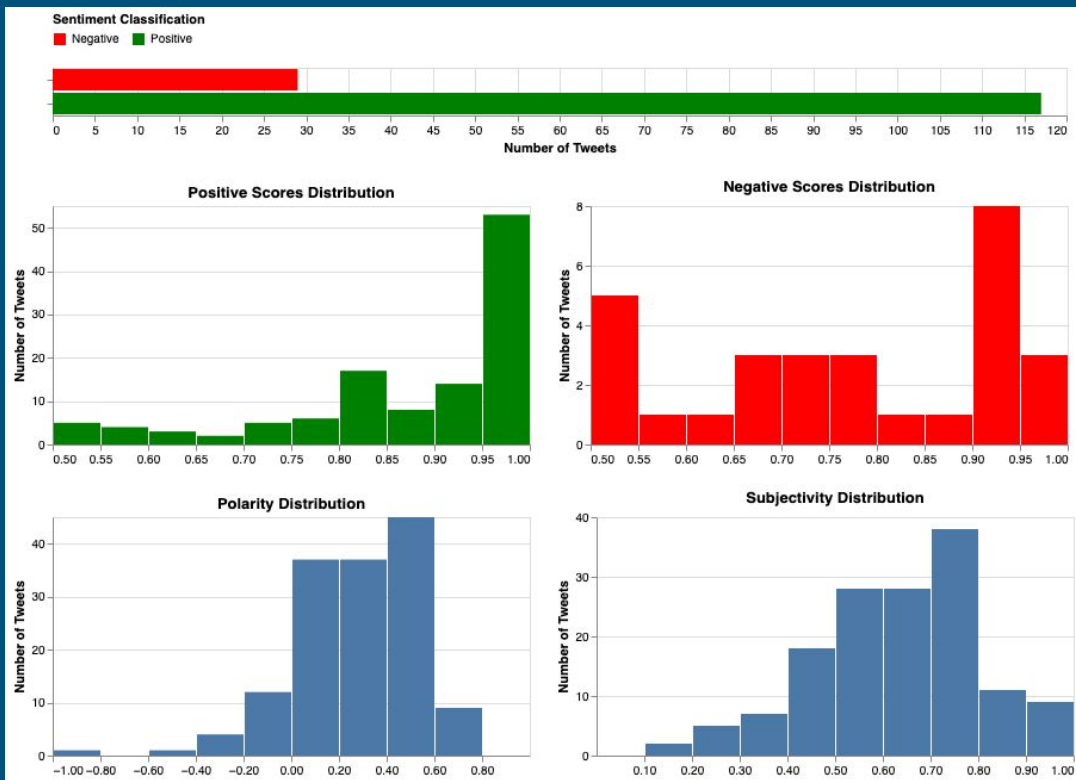
- **Steam**

- Collects 100 most recent game reviews under Plague. Inc, and uses the nltk library to analyze the sentiment intensity.

- **Reddit**

- Search through region-specific subreddits for posts containing COVID-relevant keywords

Twitter CEWS Sentiment Analysis



Steam Game Review Sentiment Analysis

Collecting the Reviews:

- SteamSpy
- Valve API

Sentimental Analysis:

- Python NLTK package

```
6 for rv in review_list["review"]:
7     # print(SA.polarity_scores(rv))
8     neg.append(SA.polarity_scores(rv)["neg"])
9     pos.append(SA.polarity_scores(rv)["pos"])
10    neu.append(SA.polarity_scores(rv)["neu"])
11    compound.append(SA.polarity_scores(rv)["compound"])
12
13 review_list["pos"] = pos
14 review_list["neg"] = neg
15 review_list["neu"] = neu
16 review_list["compound"] = compound
17
18 review_list.sort_values(by = "compound", ascending=False).head(10)
19
20 # I should filter out all comments that contains : ["Covid", "covid"]
21 # I was worrying about I might not be able to get enough comments,
22 # But for demo purposes, this piece of code shows enough knowledge
```

	review	neg	pos	neu	compound
8	This game is great, and it's great playing it ...	0.000	0.281	0.719	0.9763
0	---[Gameplay]---\n□ Try not to get addicted\n□...	0.137	0.224	0.639	0.9700
11	I love this game!\nMy biggest worry was whethe...	0.058	0.190	0.752	0.9656
34	While I wouldn't say it is worth the full aski...	0.103	0.200	0.697	0.9287
42	An amazing game which has almost infinite cont...	0.000	0.316	0.684	0.9211
30	it can be so fun if u play with ur friends	0.000	0.588	0.412	0.8751
12	Works great and plays great, not worth nearly ...	0.088	0.541	0.371	0.8602
21	Plenty of content and unique game modes to kee...	0.061	0.327	0.612	0.8555
40	This game is absolutely amazing. The wide vari...	0.136	0.226	0.638	0.8187
72	My Virus appeared in reality. Pretty cool, wou...	0.000	0.580	0.420	0.8070

Reddit

```
keywords = ["covid", "pandemic", "opening", "immunization", "vaccination", "vaccinated", "COVID-19", "Covid-19"]
df[df['title'].str.contains('|'.join(keywords))]
```

	downs	score	selftext	subreddit	title	ups	upvote_ratio
4	0.0	296.0		toronto	574 cases of COVID-19 in Ontario. 109 in Toron...	296.0	0.96
10	0.0	62.0		toronto	Initiate stage 1 of reopening	62.0	0.83
14	0.0	508.0		toronto	City of Toronto immunization clinics opening 6...	508.0	0.97
26	0.0	214.0	I got an email from Fox and Fiddles saying the...	toronto	Bars opening at 12:01 am tonight?	214.0	0.93
	downs	score	selftext	subreddit	title	ups	upvote_ratio
1	0.0	0.0	Hello everyone, please use this thread to disc...	Calgary	Weekly Covid-19 Discussion Thread	0.0	0.50
9	0.0	14.0		Calgary	COVID-19 outbreak at Calgary hospital linked t...	14.0	0.64
	downs	score	selftext	subreddit	title	ups	upvote_ratio
4	0.0	11.0	Anybody know anything about when Five Guys is ...	newfoundland	Five Guys opening soon?	11.0	0.83
13	0.0	27.0	New Cases:\n\n* The first new confirmed case ...	newfoundland	5(+3) New Cases of COVID-19 in NL(June 10)	27.0	1.00
15	0.0	7.0		newfoundland	Newfoundland and Labrador COVID-19 vaccination...	7.0	0.82

Planning and Action Items

- **CEWS Report**
 - Report editing and proofreading
- **API Feasibility Study**
 - Report editing and proofreading
- **Final presentation and report**

Roadblocks

- CEWS report feedback pending from StatCan
- CEWS dashboard Power BI compatibility problem
- Twitter API limitations
- Most APIs studied have limited potential for StatCan's goals

Deviation From Initial Plan

- More effort required to solve PowerBI compatibility issues
 - Finish API and course work first

Incremental Results

- **1st Week:** Project understanding
- **2nd Week:** Data exploration
- **3rd Week:** Dashboard and report
- **4th Week:** Dashboard and report tweaks
- **5th Week:** Models and API report draft
- **6th Week:** Models and API report tweaks
- **Remaining time:** API project and report/dashboard tweaks, final presentation and report

Summary of Individual Work

Eric

06/07/2021 – 06/13/2021

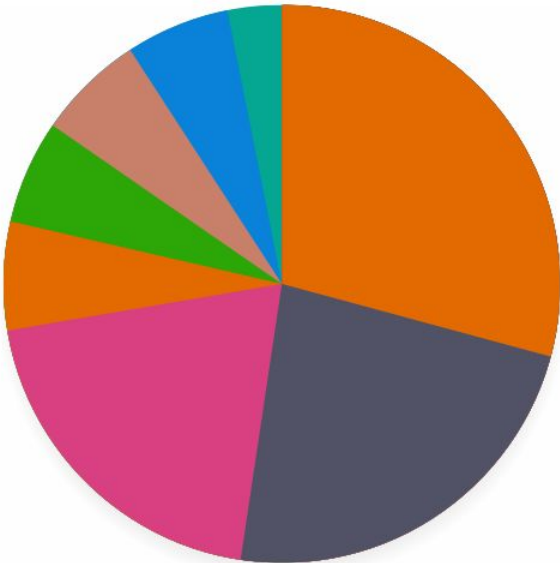
TOTAL HOURS: 32:32:00

TIME ENTRY

DURATION

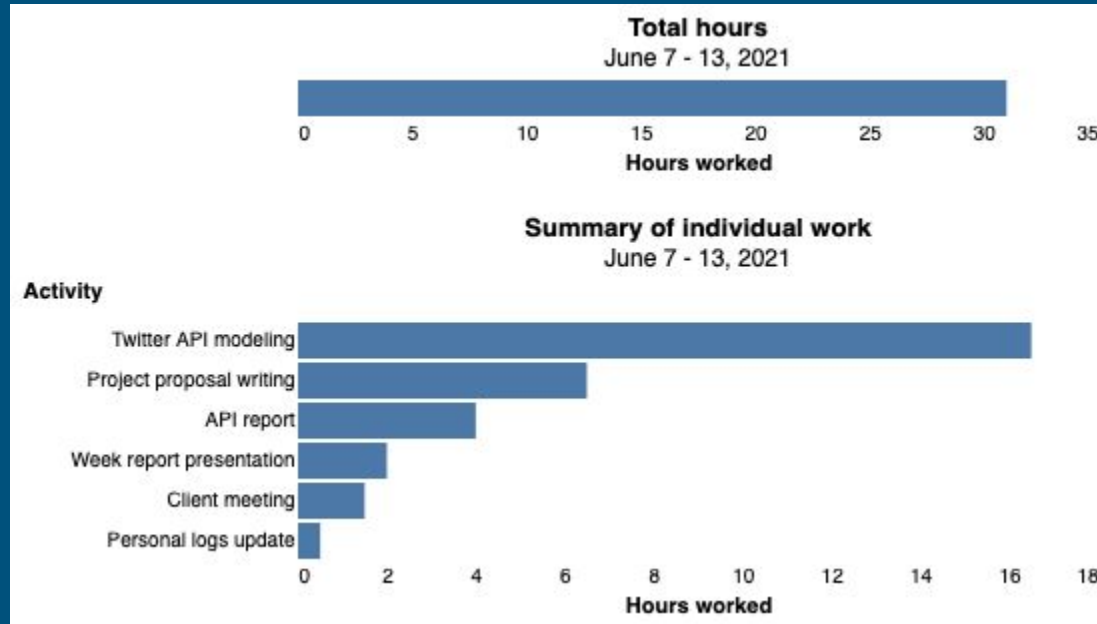
- API Report
- API Report Editing
- Final Report
- Reddit API Prototype
- Final Paper
- Dashboard
- Weekly Presentation
- Client Meeting

9:30:00
7:33:00
6:30:00
2:00:00
2:00:00
2:00:00
1:59:00
1:00:00



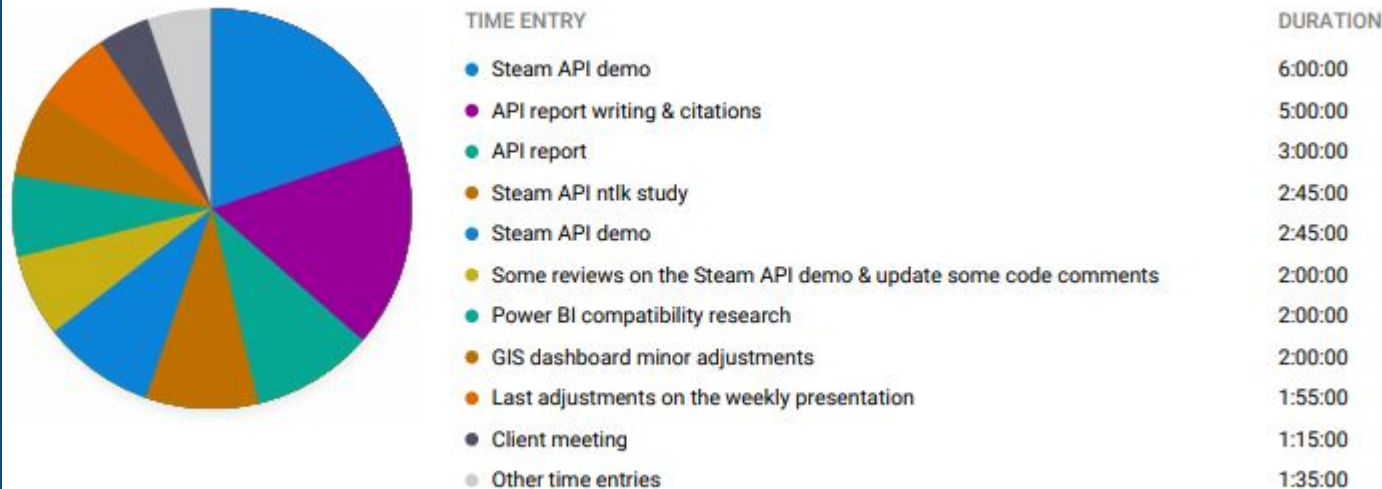
Summary of Individual Work

Vicens



Summary of Individual Work

Ben



DURATION

30:15:00

Client Minutes

https://github.com/ubco-mds-2020-labs/w2020-data599-capstone-projects-statistics-canada-covid-19/blob/main/meeting-logs/meetings_week6.md



Thank you!