

Library Tweet Support

Daniel Imondo

CS4624 – Multimedia, Hypertext, and
Information Access

Dr. Fox

Virginia Tech, Blacksburg VA 24061

4/26/2021

Outline



Project Description



Demo



Future Work



Acknowledgements



References

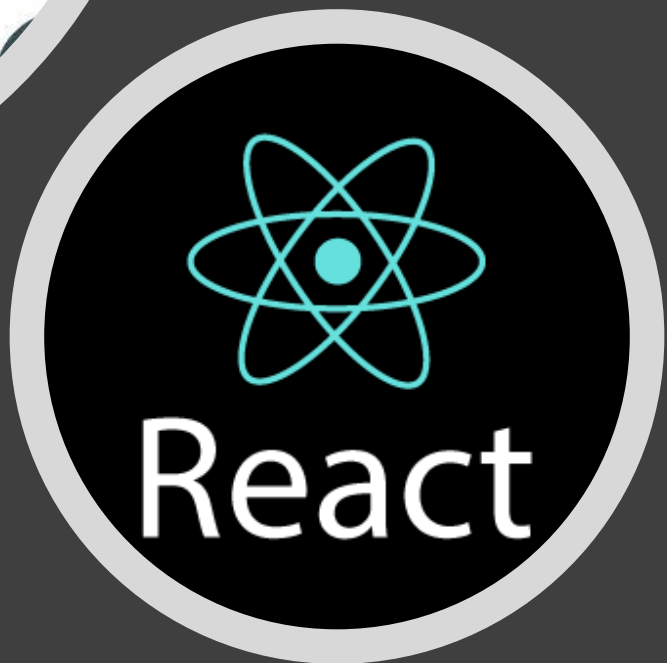
Refresher

- Last Fall, CS5604 built a system to manage 3 collections
 - **Tweets**
 - Webpages
 - Electronic theses and dissertations



Project Description

- Expand the searching features of the tweets side of this site
- Format the search results to more effectively display tweet information.
- I was able to complete these revised goals!



The Stack.

System is mainly built using:

- Docker containers
- Kubernetes
- ElasticSearch
- React.
- Flask (!Python 3.6!)
- CSS

Docker and Flask

Docker is heavily used on the authentication and administration portion of the site which I did not work on

Flask is used to serve and route the dynamic pages created with React components

ElasticSearch and React.



ElasticSearch is used to query the indexed MySQL database using the ElasticSearch React API.



List created by this query is returned and formatted using plain CSS with Flexbox.



Previously the project used bootstrap formatting.

I felt custom CSS could help refine the visual.

Example of an ElasticSearch Searchbox I used

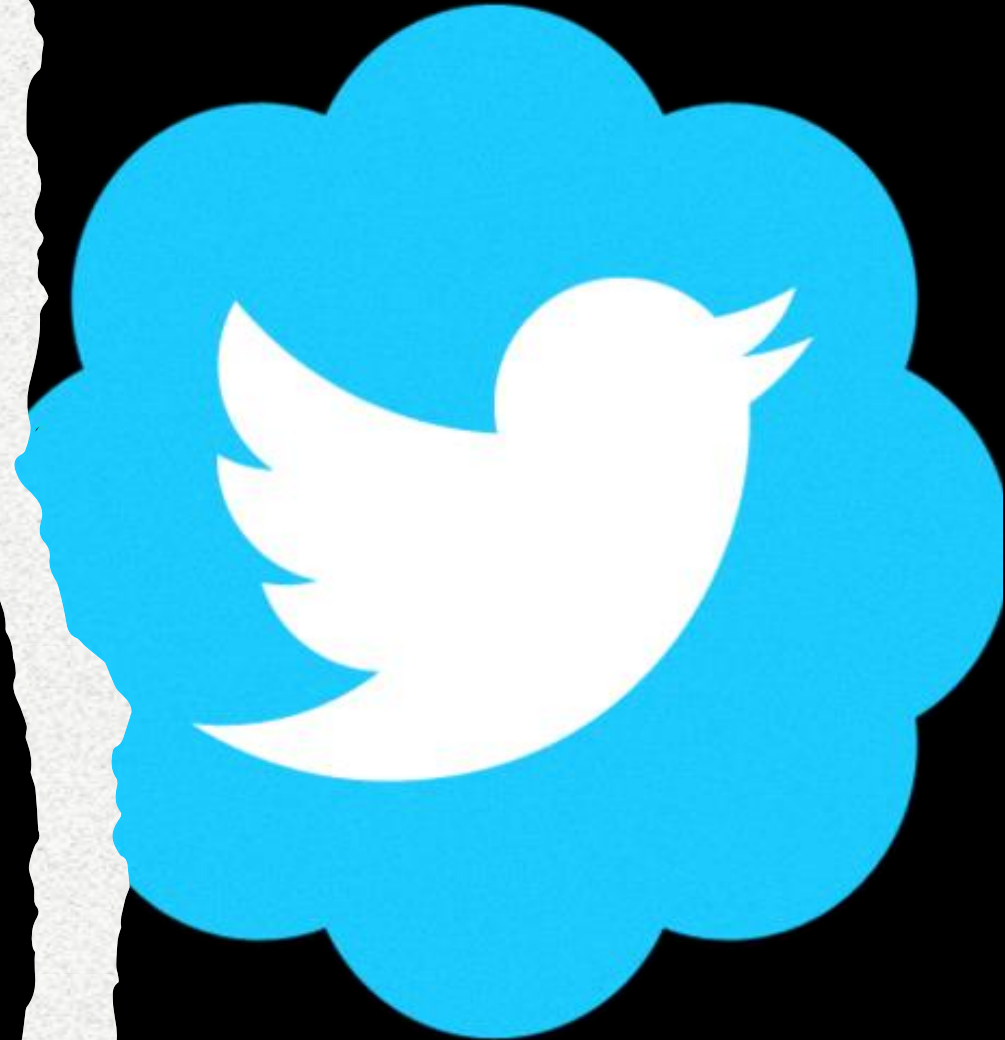
```
<DataSearch
  componentId="searchbox-location"
  autoSuggest={false}
  dataField={["place.full_name", "place.country_code", "user.location"]}
  fieldWeights={[3, 1, 2]}
  placeholder="Search Location"
  queryFormat="and"
  highlight={true}
  style={{
    padding: "5px",
    marginTop: "10px"
  }}
/>
```

Demo

IMPORTANT NOTE:

I had no part in creating the sample data used. And some of the tweets seem to be a bit insensitive (as is the nature of Twitter).

Some of the data is corrupted; data seems to have been imported from Instagram, or with other languages.



25 results found in 12ms

**Mafun Ho** @Tumulus17 5/4/2020

The phoney quarantine is almost over. Bring on the real quarantine. #covid_19 #coronavirus #freebritneyu2026

Replies : 0

Retweets : 0

Favorites : 0

@Tumulus17

Followers : 125

Tweets : 1828

Favorites : 15588

[View Source](#)**Neias N more** @NeiasNmore 5/4/2020

The coronavirus pandemic has taken an undisputed toll on doctors, nurses and other front-line health care workers.u2026

Replies : 0

Retweets : 0

Favorites : 0

@NeiasNmore

Followers : 698

Tweets : 36933

Favorites : 1213

[View Source](#)**Belvy Benjamin Button** @BelvyBenjamin 5/4/2020#quarantine #masks #covid19 #coronavirus #fear
#liberalismisamentaldisorder #socialismisamentaldisorder @
Toronto Cu2026

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6348

Favorites : 11756

[View Source](#)**Belvy Benjamin Button** @BelvyBenjamin 5/4/2020#bigbrother #quarantine #socialdistancing
#liberalismisamentaldisorder #socialismisamentaldisorder
#governmentu2026**@BelvyBenjamin**

Followers : 1509





Tweets : 6349

Favorites : 11756

[View Source](#)

Start date

End date

Replies : 0	Retweets : 0	Favorites : 0	View Source
 Neias N more @NeiasNmore 5/4/2020 The coronavirus pandemic has taken an undisputed toll on doctors, nurses and other front-line health care workers.u2026	Replies : 0	Retweets : 0	Favorites : 0
 Belvy Benjamin Button @BelvyBenjamin 5/4/2020 #quarantine #masks #covid19 #coronavirus #fear #liberalismisamentaldisorder #socialismisamentaldisorder @ Toronto Cu2026	Replies : 0	Retweets : 0	Favorites : 0
 Belvy Benjamin Button @BelvyBenjamin 5/4/2020 #bigbrother #quarantine #socialdistancing #liberalismisamentaldisorder #socialismisamentaldisorder #governmentu2026	Replies : 0	Retweets : 0	Favorites : 0
 Belvy Benjamin Button @BelvyBenjamin 5/4/2020 #sweetpotatoes #naturalcures #health #immunesystem #covid19 #coronavirus #quarantine #food @ Toronto Cu2022Au2022Nu2022Au2022Du2022A	Replies : 0	Retweets : 0	Favorites : 0

Prev

1

2

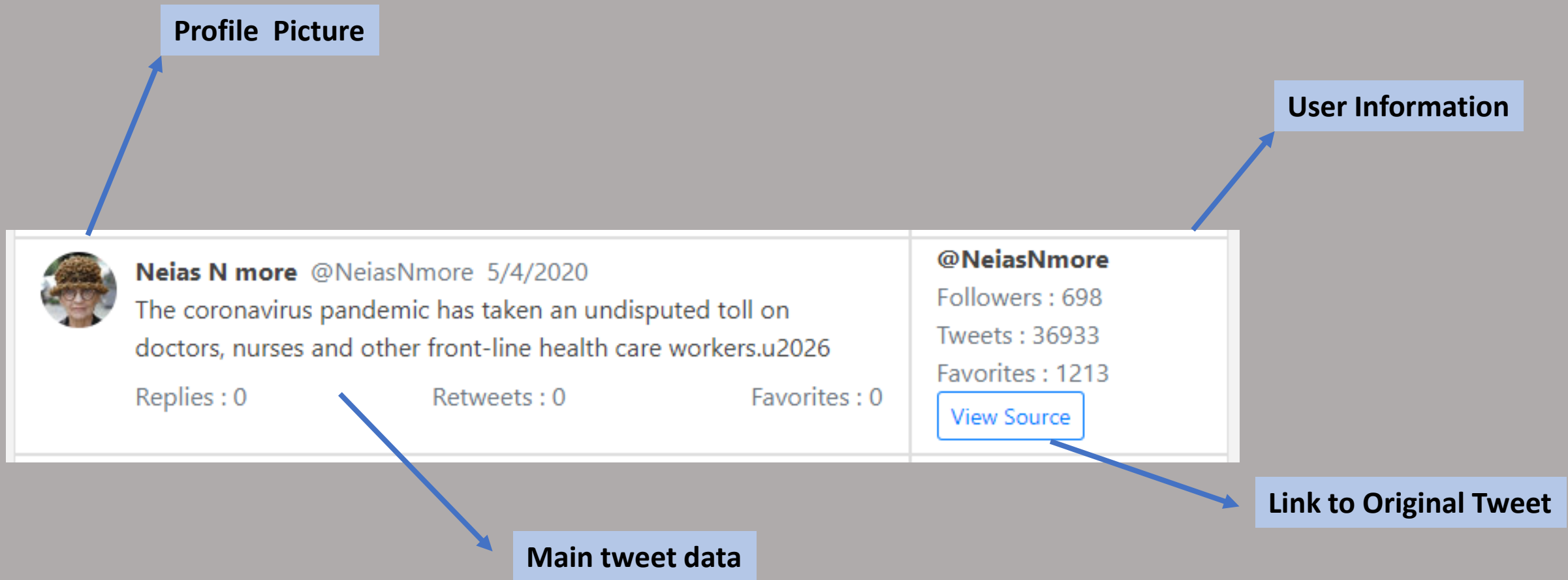
3

4

5

Next

Anatomy of a Search Result:





COV

#CoronaVirus #SP #MetroTiradentes #Covid-19 #NarooMask #NoFear em...

#quarantine #socialdistancing #lockdown2020 #liberalismisamentaldisord...

#coronavirus #covid_19 #IndiaFightsCorona #gujaratfightscoronanvijayru...

ud83dudcc8 Parte oficial del Gobierno andaluz sobre #COVIDu30fc19 nu2...

10:00 The Linenn#24hours #24photographers #lockdown #week4 #24pho...

The phoney quarantine is almost over. Bring on the real quarantine. #covi...

Social KISStancingu2757ufe0fu2757ufe0fu2757ufe0fnud83dudc79u2b50uf...

#quarantine #masks #covid19 #coronavirus #fear #liberalismisamentaldis...

#sweetpotatoes #naturalcures #health #immunesystem #covid19 #corona...

25 results found in 12ms

**Mafun Ho** @Tumulus17 5/4/2020The phoney quarantine is almost over. Bring on the real quarantine. [#covid_19](#) [#coronavirus](#) [#freebritneyu2026](#)

Replies : 0

Retweets : 0

Favorites : 0

@Tumulus17

Followers : 125

Tweets : 1828

Favorites : 15588

[View Source](#)**Neias N more** @NeiasNmore 5/4/2020

The coronavirus pandemic has taken an undisputed toll on doctors, nurses and other front-line health care workers.u2026

Replies : 0

Retweets : 0

Favorites : 0

@NeiasNmore

Followers : 698

Tweets : 36933

Favorites : 1213

[View Source](#)**Belvy Benjamin Button** @BelvyBenjamin 5/4/2020[#quarantine](#) [#masks](#) [#covid19](#) [#coronavirus](#) [#fear](#) [#liberalismisamentaldisorder](#) [#socialismisamentaldisorder](#) @Toronto Cu2026

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6348

Favorites : 11756

[View Source](#)**Belvy Benjamin Button** @BelvyBenjamin 5/4/2020[#bigbrother](#) [#quarantine](#) [#socialdistancing](#) [#liberalismisamentaldisorder](#) [#socialismisamentaldisorder](#) [#governmentu2026](#)**@BelvyBenjamin**

Followers : 1509

Tweets : 6349

Favorites : 11756

[View Source](#)

Search Terms

CS5604 F2020 Front End

Home Search Q&A

Hi username.

Profile

Logout

#Covid

Search Location

Start date

End date

searchbox: #Covid X Clear All

10 results found in 6ms



J. Victor Casartelli @jvcasartelli 5/4/2020

#CoronaVirus #SP #MetroTiradentes #Covid-19 #NarooMask
#NoFear em Su00e3o Paulo, Brazil

Replies : 0

Retweets : 0

Favorites : 0

@jvcasartelli

Followers : 318

Tweets : 2590

Favorites : 1831

[View Source](#)



Belvy Benjamin Button @BelvyBenjamin 5/4/2020

#quarantine #socialdistancing #lockdown2020
#liberalismisamentaldisorder #socialismisamentaldisorder
#covid19u2026

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6352

Favorites : 11756

[View Source](#)



Amit Mavdiya @Amit_Mavadiya 5/4/2020

#coronavirus #covid_19 #IndiaFightsCorona
#gujaratfightscoronanvijayrupanibjp @narendramodi @ Port
Porbandar, Gujar2026

Replies : 0

Retweets : 0

Favorites : 0

@Amit_Mavadiya

Followers : 71

Tweets : 1294

Favorites : 2974

[View Source](#)



Ayuntamiento de Hornachuelos @aythornachuelos 5/4/2020

ud83dudcc8 Parte oficial del Gobierno andaluz sobre
#COVIDu30fc19 nu26d1ufe0f Son 14.349 los casos positivos de

@aythornachuelos

Followers : 452

Tweets : 981

Multiple Search Terms

searchbox: #Covid | X

searchbox-location: Toronto, Ontario | X

[Clear All](#)

3 results found in 19ms



Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#quarantine #socialdistancing #lockdown2020
#liberalismisamentaldisorder #socialismisamentaldisorder
#covid19u2026

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6352

Favorites : 11756

[View Source](#)



Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#quarantine #masks #covid19 #coronavirus #fear
#liberalismisamentaldisorder #socialismisamentaldisorder @
Toronto Cu2026

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6348

Favorites : 11756

[View Source](#)



Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#sweetpotatoes #naturalcures #health #immunesystem #covid19
#coronavirus #quarantine #food @ Toronto
Cu2022Au2022Nu2022Au2022Du2022A

Replies : 0

Retweets : 0

Favorites : 0

@BelvyBenjamin

Followers : 1509

Tweets : 6350

Favorites : 11756

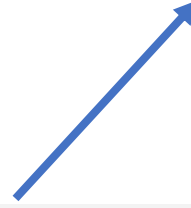
[View Source](#)

[Prev](#)

1

[Next](#)

All Search Terms, no Results



searchbox: #Covid ×

searchbox-location: Toronto, Ontario ×

DateSensor: 2021-04-06, 2021-04-07 ×

[Clear All](#)

No Results found.

When you click a hashtag



Mafun Ho @Tumulus17 5/4/2020

The phoney quarantine is almost over. Bring on the real quarantine. [#covid_19](#) [#coronavirus](#) [#freebritneyu2026](#)

Replies : 0

Retweets : 0

Favorites : 0

@Tumulus17

Followers : 125

Tweets : 1828

Favorites : 15588

[View Source](#)

The screenshot shows a browser window at twitter.com/hashtag/covid_19. The page features a navigation sidebar on the left with options: Home, Explore, Notifications (5), Messages, Bookmarks, Lists, Profile, and More. A blue 'Tweet' button is also visible. The main content area is titled '#covid_19' and has tabs for 'Top', 'Latest', 'People', 'Photos', and 'Videos'. The 'Top' tab is selected, displaying a section titled 'Know the facts' with a message from the Centers for Disease Control and Prevention (CDC) and a blue button to visit their website. Below this is a 'Related Topic' section for 'COVID-19 News' with a 'Follow' button. A 'People' section follows, featuring the CDC's official Twitter account (@CDCgov) with a 'Follow' button. On the right side, there are 'Search filters' for 'People' (From anyone, People you follow) and 'Location' (Anywhere, Near you), along with an 'Advanced search' link. Below the filters is a 'What's happening' section with a news item: 'US national news · 2 hours ago: Texas gains two new seats in Congress, while New York, California and five other states lose seats following new Census numbers'. At the bottom, a 'Messages' section is partially visible.

When you click “View Source”



Tweet



LovemoreLwazi @Tumulus17 · May 4, 2020



The phoney quarantine is almost over. Bring on the real quarantine.
[#covid_19](#) [#coronavirus](#) [#freebritney](#) [#wrayandnephew](#) @ Guelph, Ontario
[instagram.com/p/B_w6qFEnTYF/...](https://www.instagram.com/p/B_w6qFEnTYF/)



What did it look like before?

CS5604 F2020 Front End Home Search Curation Services Upload Admin Monitor Q&A Hi rmazloom Profile Logout

25 results found in 3ms

Search for twitter

Start date - End date

hashtag

Mafun Ho @Tumulus17 5/4/2020
The phoney quarantine is almost over. Bring on the real quarantine. #covid_19 #coronavirus #freebritneyu2026 <https://t.co/BJTCp8fl6y>

Neias N more @NeiasNmore 5/4/2020
The coronavirus pandemic has taken an undisputed toll on doctors, nurses and other front-line health care workers.u2026 <https://t.co/VpxRklsq0d>

Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#quarantine #masks #covid19 #coronavirus #fear #liberalismisamentaldisorder #socialismisamentaldisorder @ Toronto Cu2026 <https://t.co/vYUN983E8R>

Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#bigbrother #quarantine #socialdistancing #liberalismisamentaldisorder #socialismisamentaldisorder #governmentu2026 <https://t.co/SqPXGipDIw>

Belvy Benjamin Button @BelvyBenjamin 5/4/2020
#sweetpotatoes #naturalcures #health #immunesystem #covid19 #coronavirus #quarantine #food @ Toronto Cu2022Au2022Nu2022Au2022Du2022A <https://t.co/UnhIdlI2IB>



Future Work

- I will be working on documentation of this project that will be a part of my final report.
- Indexing and importing the large collection of tweets that the library has will be by them.



Acknowledgements

Client: Bill Ingram, Assistant Dean & IT Director, University Libraries, waingram@vt.edu

Additionally: Thank you to the previous frontend team for creating stepping stones for me to walk on!

References

- CS 5604 2020: Information Storage and Retrieval TWT - Tweet Collection Management Team:
<https://vtechworks.lib.vt.edu/handle/10919/101520>
- CS5604 (Information Retrieval) Fall 2020 Front-end (FE) Team Project
<https://vtechworks.lib.vt.edu/handle/10919/101526>
- Social Feed Manager <https://library.gwu.edu/scholarly-technology-group/social-feed-manager>

Any
Questions?

