CS410 Project Proposal

Rudy Rath

Names and Net ID

Q: *What are the names and NetIDs of all your team members? Who is the captain? The captain will have more administrative duties than team members.*

A: I'm planning to make a **Solo Submission (Team of 1)** for the Course Project and my details are:

> **Name:** Rudy Rath
>
> **NetID:** rudrar2
>
> **Captain:** Rudy

Project Description (Free Topic)

Q: *What is your free topic? Please give a detailed description. What is the task? Why is it important or interesting? What is your planned approach? What tools, systems or datasets are involved? What is the expected outcome? How are you going to evaluate your work?*

A: My Free Topic is ***Sentiment Analysis of Twitter data***

Twitter is one of the most popular social networking platforms with hundreds of millions of active users. With Twitter sentiment analysis –

- Businesses can discover insights their products and services to make better business decisions
- We can understand public views on a variety of current topics from President Biden's Infrastructure Bill, COVID-19 Booster Shots, Dave Chapelle Netflix show etc.
- And many other applications…

My approach is to –

- Collect Twitter data
- Process the data
- Perform sentiment analysis

I will be using tools like NLTK and VADER (Valence Aware Dictionary and sEntiment Reasoner)

The expected outcome is an easy-to-understand Visualization of the Sentiment Analysis results.

I will evaluate my results by comparing my sentiment analysis results with search findings from the internet.

Programming Language

Q: *Which programming language do you plan to use?*

A: Python

Project Workload

Q: *Please justify that the workload of your topic is at least 20*N hours, N being the total number of students in your team. You may list the main tasks to be completed, and the estimated time cost for each task.*

A: Since this is a solo submission, I will have to complete all the project deliverables (Project Proposal, Progress Report, Software code submission with Documentation, Software Usage tutorial presentation) by myself.

Here are my estimates for the workload -

- Project Research (Tools, Packages and Twitter data): 5 hours
- Software Design and Proof of Concept: 5 hours
- Software Development, Testing and Debugging: 10 hours
- Project Documentation and Admin Tasks: 5 hours

Total Estimate: 25 hours