CS 410 Course Project Proposal

Team Goons

1. *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. **Captain**:
      i. Name: Kevin Choi
      ii. NetID: kevinsc2
   b. **Member**:
      i. Name: YongHun Chang
      ii. NetID: ychan43

2. *What topic have you chosen? Why is it a problem? How does it relate to the theme and to the class?*

   a. **Topic**: Chrome extension that gives movie ratings according to viewer reviews
   b. **Problem**: Sometimes movie ratings given by critics can be inaccurate to what viewers think. Due to movie ratings inherently being subjective, the overall review given by a few critics may not be conclusive enough and can potentially discourage someone from watching a movie that they may have liked. This extension aims to provide a more informed rating from many viewer written reviews on IMDB for users to also look at before deciding if they want to watch the movie.
   c. **Related to the theme**: This topic relates to the theme because this extension idea adds intelligence to the browser. By retrieving text in the form of user reviews, our extension becomes a personal intelligent assistant that transforms how users can access web information to decide which movies they want to watch. This makes the user's overall movie watching decision process more productive and straightforward.

3. *Briefly describe any datasets, algorithms or techniques you plan to use*

   a. Dataset: Movie reviews scraped from IMDB website
   b. Algorithm: sentiment analysis
   c. When the user searches up a movie, the extension will find reviews of the movie from IMDB and create a rating based on sentiment analysis of viewer reviews.

4. *How will you demonstrate that your approach will work as expected?*

   a. The results will be shown through a demonstration of the extension working on movie searches. We can show that our approach works as expected by showing the breakdown of the sentiment analysis of the viewer reviews. The sentiment analysis can show how different words were weighted to contribute to the final score and can compare this final score to the critic review. If the score is similar to the critic review, it indicates that the viewers generally agree with the critic's review. However, if the score is quite different, it indicates that the viewers had a different viewing experience to the critic and the user can use that information to decide whether they still want to watch the movie.

5. *Which programming language do you plan to use?*

    a. HTML, CSS, JS, Python

6. *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. N = 2 ; Workload = 40 Hrs
    b. Our workload justification is derived on the estimated time of each completing each task of creating the extension as shown below.

#	Task	Hrs
1	Create Chrome extension	~ 5
2	Scrape IMDB reviews page of the specific movie searched by user	~ 8
3	Create sentiment analysis for each review and rank each comment	~10
4	Calculate rating according to sentiment scores	~ 12
5	Display keywords and text summary using HTML, CSS	~5