Sean Lai

CS410

Project Proposal

Improving a System: ExpertSearch System

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.
2. What system have you chosen? Which subtopic(s) under the system?
3. Briefly describe the datasets, algorithms or techniques you plan to use
4. If you are adding a function, how will you demonstrate that it works as expected? If you are improving a function, how will you show your implementation actually works better?
5. How will your code communicate with or utilize the system? It is also fine to build your own systems, just please state your plan clearly
6. Which programming language do you plan to use?
7. 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.

1. Sean Lai – seanlai2 (Individual project)
2. ExpertSearch System. Planning to improve the functionality of allowing downloading slide in bulk. Specifically, I am thinking to implement a buffer loading for previous and next slides so user experiences are better. Currently the system only allow one slide loading at a time and will only load the next or previous slide if user makes a click.
3. Using data structures to store preloaded slides for the interface, possibly a list. Using updated functionality to improve the system on web interface. The dataset will be the slides to load on user clicks.
4. This can be demonstrated by comparing the average time loading a slide in the original system, to the new system. This can be done in a report, and also video demonstration if required.
5. My code will likely update a function within the original system, replacing or adding more onto the original logic. I will fork my own repo and make my update on my own environment.
6. Python, JavaScript, and whatever else is needed.
7. Task and hours rough estimate
    a. Spike the usage on the original system. 3h
    b. Set up environment for the project. 1h
    c. Look for function and area that needs to be updated. 2h
    d. Coding and testing. 10h
    e. Collect data for time comparison. 2h
    f. Create documentation, report, and presentation material. 2h

ExpertSearch - http://timan102.cs.illinois.edu/expertsearch//

Original Github Repo - https://github.com/CS410Fall2020/ExpertSearch/