1. Team Name
    a. Visual Practice Rank
2. What are the names and NetIDs of all your team members?
    a. Chee Tey (cheeht2)
    b. Michael Renteria (mrente5)
3. Who is the captain?
    a. Michael Renteria (mrente5)
4. What is your free topic/task?
    a. Our goal is to create a visual representation of a supplied ranking function in a form that is comparable to modern search engines with the display of additional data that would typically be only in the background.
5. Why is it important or interesting?
    a. We believe that by showing some of the actual data that is used in a search engine on top of a search engine itself, will help students better understand what exactly is going on.
6. Who will benefit from such a tool?
    a. People, students, and researchers that are trying to understand what is happening in the background while you are using a search engine.
7. What is your planned approach?
    a. Our approach is to
        i. Develop frontend to mimic a search engine look
        ii. Develop a functionality to load data
        iii. Develop a functionality to loop of step through the data to visualize how the data changes over time
        iv. Develop the ability to select popular ranking functions from a dropdown list with the ability to fine tune parameters
        v. Develop the functionality to supply a custom ranking function by utilizing placeholder variables.
        vi. Containerization the application with dependency management
8. What tools, systems or datasets are involved?
    a. The software should be flexible for datasets in a particular format, that can be best compared to the format utilized in the MP assignments.
        i. Qrels file
        ii. Queries file
        iii. Data file
    b. Python, web server, and web application server.
9. What is the expected outcome?
    a. The expected outcome is a tool that will allow users to visualize the detailed workings of a supplied ranking function.
10. How are you going to evaluate your work?
    a. We will be evaluating our work using the criteria below:
        i. Does the tool work?
        ii. Is the ranking function accurate?

        iii. Does the tool visualize the ranking function?
        iv. After utilizing the tool, does the user understand the implementation of the supplied ranking function?
11. Does this kind of tools already exist?
    a. It is possible that something like this does exist, but without looking too much into it, it does not seem well advertised. The good thing about this tool is that it will be tailored towards much of the information we are specifically learning in Text Information Systems, and for that reason, we could see it being very useful to future students.
12. What existing resources can you use?
    a. Metapy
    b. Documented articles/research on ranking functions
13. What techniques/algorithms will you use to develop the tool?
    a. Common ranking functions
    b. Custom ranking functions
    c. NDCG
14. How will you demonstrate the usefulness of your tool?
15. A very rough timeline to show when you expect to finish what. (The timeline doesn't have to be accurate.) [52 Hours]
    a. Setup/Installation [5 Hours]
        i. Containerization [3 Hours]
        ii. Dependency management / base application setup [2 Hours]
    b. Frontend development [30 Hours]
        i. Mimic search engine look [2 Hours]
        ii. Results on tabbed pages [4 Hours]
        iii. Functionality to load data (i.e. qrels, list of queries, bulk data), preferably from file. [8 Hours]
        iv. Functionality to either loop or step through data to see how data changes over time. [6 Hours]
        v. Functionality to select popular ranking functions from a dropdown list with the ability to fine tune parameters [4 Hours]
        vi. Functionality to supply a custom ranking function by utilizing placeholder variables. [6 Hours]
    c. Documentation [5 Hours]
    d. Demo [2 Hours]
    e. Assorted Project Work [4 Hours]
    f. Group Meetings [6 Hours]
16. Which programming language do you plan to use?
    a. Python