1. We will be calling our application **Course Recommendation App**

2. Project Summary: It should be a 1-2 paragraph description of what your project is.

Our project is about creating an application that can help students trying to decide between classes pick the best class for them based on whether they value a higher GPA or better professor rating. It will chose the best class and professor for that class based on the GPA for that professor's class section using Professor Wade Fagen-Ulmschneider's dataset and the professor's rating from RateMyProfessor's data. The application will allow the user to add the courses they're interested in, then move the slider to show whether they prefer a higher GPA or a better rated professor to rank the sections.They'll be able to see the ordered list with the professor, class, professor rating and GPA.

3. Description of an application of your choice. State as clearly as possible what you want to do. What problem do you want to solve, etc.?

Our website will be a course browsing class for UIUC students. The web application will have a section where the user can specify their preferences, for example choosing the split of ranking (25%-75%) between teacher's ratings and class GPA's. We want to rank classes and sections based on the user's preference, so they have a more personalized ranking.

As students, we all have different preferences when it comes to picking classes. While I may value my teacher's rankings more, other students can value course GPAs more. This is the problem our application solves by personally ranking the classes.

4. Usefulness. Explain as clearly as possible why your chosen application is useful. Make sure to answer the following questions: Are there any similar websites/applications out there? If so, what are they, and how is yours different?

There are similar websites such as RateMyProfessor, or Grade Disparity At UIUC. However, a problem with these is looking up other student's professor ratings from one website and the GPAs from another. This means that the student must look up each professor's rankings and decide based on a lengthy search.

Our application gives the student a better analysis based on what they value, all in one ranking board. This makes it easier and less time consuming since the student can get all their results at a single place rather than using multiple sources.

5. Realness. Describe what your data is and where you will get it.

We need two different types of data. The first one is the GPA's of courses offered at UIUC. We can get this data from Professor Wade Fagen-Ulmschneider's dataset github

(https://github.com/wadefagen/datasets). This repo includes gpa's of each course as well as a list of professors ranked as "excellent".

The second data we need is professor rankings. We can use the 'professors ranked as "excellent" ' list, but better results could be obtained by using ratemyprofessors.com's data (https://data.mendeley.com/datasets/fvtfjyvw7d/2) . These dataset's contain student's rankings of professors as well as more detailed ratings such as 'clarity' , 'easiness' or such. This allows us to expand the user preferences and give users more personalized rankings.

6. Description of the functionality that your website offers. This is where you talk about what the website delivers. Talk about how a user would interact with the application (i.e. things that one could create, delete, update, or search for). Read the requirements for stages 4 and 5 to see what other functionalities you want to provide to the users.

The main purpose of this application is for users to be able to filter courses based on previous professor ratings and average GPAs. This data should be updated every semester to provide accurate recommendations.The user would also be able to provide their own professor rankings so that more data can be collected. Additionally, if a professor were to retire or a class were to stop running, these records would be outdated and would need to be deleted and users could do that. Changing the stored records would be done in a simple text box with instructions provided on the website page.

Users would be able to search for a list of courses that are recommended based on the preferences they inputted. This list would be displayed on the website and the preferences would be inputted by selecting options from a dropdown. Additionally, the amount that each preference should weigh would be selected with a slider.

8. We will all be collaborating on the work, but we will also assign people to be more responsible for some specific aspects. Akshay will be in charge of the backend, while Onat and Sahithi will be responsible for the frontend and the database.

CLASS RANKER

explanation of the class ranker tool

Course Department

CS

Course Number

137

ADD

x CS 130 x CS 135

SEARCH

Doe, John CS 130

3.0

3.2

Beck, Sam CS 137

2.5

3.9

Smith, Lisa CS 135

2.4

4.0

Day, Liam CS 135

2.2

3.9