1. **Project Title:**
   UIUC Course Search
2. **Project Summary:**
   Our goal is to utilize the large datasets from Prof. Fagen-Ulmschneider which contains UIUC coursework, GPA Info, and "Excellent" ranked professors to create a coursework planning tool. We also found another dataset which contains basic prerequisite requirements for each course. Students would be able to upload a list of their completed coursework, and then display classes which they are eligible to take, filtered by subject or by professor excellence.
3. **Description:**
   Create a faster and more direct way for students to do their coursework planning. Searching through the courses Self-Service or on Department websites can be time-consuming and confusing, so we want to isolate the data that a student prioritizes to give them a clearer image of their potential class pathways.
4. **Creative component:**
   Enable users to sign-into our website. This would allow users to have stored data (e.g. classes taken, favorites) that would personalize the user experience. Users may rate courses and post reviews.
5. **Usefulness:**
   - Our chosen application will provide an overview of UIUC courses based on GPA and professor data. If a user signs in, personalized course recommendations will be displayed based on courses they have already taken and/or user-favorited courses. They may also write reviews for courses they have taken.
   - There is a site for MCS Students to filter classes by rating and workload. However, these only include classes for the UIUC MCS program (400+ level, online CS classes). By using datasets with all coursework at UIUC, we hope to provide similar info to students of all majors and levels.
6. **Realness:**
   - Dataset 1: GPAs
     - Link: UIUC GPA dataset/UIUC Prerequisite Dataset
     - Format: CSV
     - Description: Grade distributions for every class from 2010 to 2023, and the set of all courses at UIUC.
   - Dataset 2: Professors
     - Link: UIUC "Excellent" teachers
     - Format: CSV

■ Description: A list of all UIUC professors ranked as "Excellent" from Fall of 1993 to Summer 2020

7. **Functionality:**

Personalized Course Filtering
University of Illinois Urbana-Champaign

Filter Courses   Upload Courses   ★ Favorites

Filter By:	Prerequisite Completed Courses ◯	Excellent Professors ◯	Average GPA ◯

SUBJECT	NUMBER	NAME	CREDIT HOURS	DEGREE ATTRIB.

- ○ Users can search for courses by name.
- ○ Users can narrow down a list of courses by using filters.
  - ■ Users can filter by subject.
  - ■ Users can filter by professor.
- ○ Users can sign in to the website for a personalized user experience.
  - ■ Users can add courses to their list of favorites.
  - ■ Users can upload courses that they have completed.
  - ■ Users can view classes that they are eligible to take.
  - ■ Users can rate courses.
  - ■ Users can post reviews.
    1. Users can review courses.
    2. Users can review teachers.
- ○ Administrators can sign in to the website to access administrative functionalities.
  - ■ Administrators can add new courses.
  - ■ Administrators can modify existing course information.
  - ■ Administrators can delete courses.

8. **Project work distribution:**

- Backend:
    - Clean up datasets for use
      Members:
        1. Joseph
    - Handle searching and filtering of courses
      Members:
        1. Gene
        2. Ahmed
    - Handle login system for users and administrators
      Members:
        1. Gene
        2. Ahmed
    - Store users' favorite and completed courses
      Members:
        1. Ahmed
    - Store course rating, course reviews and teacher reviews
      Members:
        1. Joseph
    - Store course info and prerequisites
      Members:
        1. Jade
- Frontend:
    - Website functionality for users
      Members:
        1. Joseph
        2. Ahmed
    - Website functionality for administrators
      Members:
        1. Gene
    - Website design
      Members:
        1. Jade