1- Project Plan

* 1. This deliverable aims to identify a semester project for CSC 472, highlight key elements of the project, the group’s intentions, and historical basis for the existence of the project.
  2. This group has hereby selected to design a DBMS design of a grading and feedback system as showcased in Project 9.7 of the provided Course Project list.
  3. This project will have two key portions, the requirements of the project to satisfy the course requirements and one that will aid us on our resume for future job hunts (out of scope for this course).
     1. This group aims to timely submit all required deliverables and appropriate documentation as the semester progresses. This includes but is not limited to, the overall and complete design of our database for a grading and feedback system pursuant to Project 9.7 of the Course Project Selection List.
     2. This group, or some of the members, optionally opted to implement our design once all adequate submittals have been met. This is an effort to boost our portfolio, and we recognize that this will not be reflected in the course grade and evaluation.
  4. This group has opted into using Discord for meeting/communication and the use of other version technology such as GitHub to keep track of iterations of our project, both of which include the appropriate submittal and the optional implementation.

4 – Benefit of Analysis

1. Whereas the reason, identification, and the overview of the project point to feedback systems, it is also important to highlight other contexts of where such a project may exist. There are two forms of existence that this project can be a benefit to, the first is the improvement of an existing feedback/grading system with no DBMS and the second is the upgrade to a dedicated feedback/grading system in which no such digital system exists (i.e., paper copies are returned to employers/students as the main feedback).
2. Scenario 1: there exists such a system with no adequate DBMS.
   1. The main improvement here would be that of convenience and redundancy over the existing system. Taking us back to the stone age, let’s assume there is a course in which a professor tracks their grades on a grading notebook where they file the student’s grades one-by-one throughout the semester. An appropriate system and dedicated DBMS would:
      1. Flexibility: the professor would not be concerned about space in their grading notebook as they could simply add another assignment/relation for each student.
      2. Redundancy/Security: no student would be able to simply gather and change grades in the grade notebooks (at least not as easy as stealing the notebook and making changes).
      3. Convenience: the professor could systematically deploy grades and respond to rebuttals on such grades as both the student and professor could both access such grades at any time.
      4. Efficiency: the professor could also include additional feedback for the student, allowing them to know and refer to their previous grades in future assignments. Enabling a positive learning environment.
3. Scenario 2: there exists no system with no DBMS.
   1. For example, various employees, whether it be in the public or private sector, all are subject to performance reviews – these reviews are often engaged with and carried out on a piece of paper. Feedback is often lost, as is proper grading.
   2. Improvements would include all the stated in the first scenario as well as the ability to simply have more data. More data, in the right setting, is a good thing.

6 – Documents Needed

1. When designing a DBMS, or any computer system for that matter, documentation is vital to not only the initial success of the system but also retained success.
2. Documentation needed to be developed, but not limited to, is defined below.
   1. Overview of DBMS Design, this would fall in line with the 3rd-5th deliverable as here was putting together the pieces for the project.
   2. Reasonings as to design choices, why did we choose to include a table A but not a table C?
   3. Iterative changes, what changed from design K to design P? What were the steps taken? Was this an improvement?
   4. Project Timeline and Updates, journaling is generally a great idea when creating a project from scratch.
3. Documentation that is not to be developed but is needed and already exists.
   1. Course book.
   2. Geek-for-Geek Articles
   3. Research papers on feedback to define what is essential and what is bloating in design.