For this assignment you will write a 5-paragraph essay.
- One paragraph introduction about what your senior design project is all about from your individual academic perspective.
- Two paragraphs on how your collective college experiences will guide the development of your project.
    - The first paragraph should focus on your college curriculum and the second paragraph on your co-op experiences. Discuss the role of specific CS courses (include course numbers and titles). Discuss your specific co-op employers (include company names and job titles). In these paragraphs you should discuss technical and non-technical skills, how you acquired them, and how you expect to apply them.
- Final two paragraphs on your motivation for the project and preliminary project approach – Discuss why you are motivated/excited to participate in the project –Discuss your preliminary approach to designing a solution –Discuss what your expected results and accomplishments will be –Discuss how you will self-evaluate your contributions: how will you know when you are done and whether or not you have done a good job?
- Deliverable Requirement: Five total paragraphs; Minimum of 6 sentences per paragraph. Submission can be uploaded to Canvas and should be included in your team project repository. It is recommended that you create a subdirectory in your repo to hold all homework essays.

Para 1 : Intro about senior design project — individual academic perspective
Para 2: College degree guiding project dev (software, dbt…)
para 3: Co-op ….. Data engineering
Para 4: motivation for project
Para 5: preliminary approach

Our Senior design project focus is on building a data driven web application. Our team collectively decided to focus on something that is exponentially growing in our Computer Science Field - DATA. Our potential app is based on enhancing our skillset withing the realm of Data Science. Right now our plan is to build a healthy lifestyle/fitness app that allows users to track various things such as workouts,diets, sleep etc. We plan on calling our app - LyfeOn, pronounced - life on. The ‘DATA’ part is building a recommendation algorithm based on several factors like, but not limited to - user history data, type of muscle groups people want to target, diet/weight loss goals. Now speaking from my individual academic perspective, my ultimate goal is to become a successful data engineer, and several aspects of this data driven project will help enhance my skills within the realm.

I believe that several aspects of my academic experiences thus far, will prove to be beneficial for accomplishing this project. For starters, I strongly believ that the success of a project depends on how well it has been planned and organized. From things that I learned from ENED, to Software Engineering, to Requirements Engineering, I think taking the essential project management techniques will help shape the fundamentals of our capstone project. In addition, the vast variety technical knowledge will help with the application of computer science principles

to bring this project to life. For instance, since we have a data driven application, we need to think about where we are going to host the the app - here I think we will have to use of the knowledge we gained from Cloud Computing and IT fundamentals class. Next to build our recommendation algorithm, we be using concepts learned from the Design and Analysis of algorithms to build the most suitable and efficient solution. While creating the backend - we will heavily be relying on the knowledge of Data Structures, C++ and python that we learned throught the semesters. Another important segment of our project would be DataBase Management that we should be building to hold our user's data to build are recommendation system based off of. Not the forget the User Interaction in the form of front end development that we will be created focusing on the goal of user friendliness, pulling knowledge from the front end dev classes.

As far as co-op goes, my experience has been very varied. I started off in IT Audit that was focused on traditional IT - like servers, networking, operational technology etc. This really helped me understand the fundamentals of IT that I think every computer science student should have in his/her skill set. Audit required a lot of throuough Testing, QA and communication. Pulling from this experience, I think I will be able to ensure that our project is the best version of itself, and has minimal bugs/issues. In Addition, given that we have to present this project at the end of the academic year, I will need to be able to communicate our ideas effectively and can pull from the professional communication skills I learned during Co-ops. During my second co-op I was a software developer at a refinery, there I learned to to create an application pulling from the direct requests and requiements of the field operators. This skill will help me to build an app keepin in mind the users perspective of ease of usability. Next, for my third co-op I was a Data Analyst and for my fourth co-op I was a Data Engineer. The technical skills that I learned when I was in working as those two will be of the most help, in my opinion while building this project. Given that our APP is Data driven, my skills will serve as the backbone. In addition, because this is something that I am interested in building a carrer in, I believe it will be extremely beneficial for my personal growth as well.

The Main motivation for this project for me personally was to be able to work on a project that is associated with my career goals. I was very clear when I was looking for a group for the capstone project that I am interested in working on something that incorporates aspects of the data science realm. I was approached by a couple teams,and I picked my current one because I resonated with their project topic. I am very motivated to hance my data management skills. I consider myself to be a newbie within the data science realm, however I am very interested in learning and enhancing my skills while working on a practical project like ours. Our team collectively agrees that the significance of data is growing day by day. In order to make ourselves very competitive by having these skills under our belt, all of us are looking out for our future. In addition, all of are advocates of health and stongly belive in living a healthy lifestyle, therefore this project is our way of collaborating out interests and skills to build something for the community.

Our preliminary approach to designing this solution included and will continue to include several things. I am going to mention the most important ones here. We are still very new with our project concept and are continuously refining it. This involves a lot of research, communication, brainstorming and most importantly building and discussing a pro cons list. Our idea is to start building our project by first and foremost solidifying our base idea of building a web app.
Some questions we are in the process of asking ourselves are as follows-

1. What platform are we using?
2. Can we building from absolute scratch or should we focus on researching for a good model to base our project on.
3. How are we building the timeline, how are we diving the taks/roles?
4. How are we going to stay on track?
5. Do we have enough technical knowledge to be able to build this, or will we be spending a lot of time learning and researching?

These are just starting points, but once we get a good grip on out outline, we plan on speneding a good chunk of time, discussing how to design the app technically.

For right now we have:
Front End: User Log In, Diet preferences, workout preferences, muscle group targets, healthy recipers - different pages for each segment
Back End - Database storing personalized user data (with some kind of security), Library of recieprs, workout plans etc
Data Engineer/Analytics : Be able to process the user data to build a method of recommenrding relevant workouts, food recipes ie persoanlized content.