# Question 1

1. Usability: Fonts on webpage must be readable from 1m away, font on mobile app must be readable from 2ft away
2. Reliability: Server should not crash more than once a month
3. Performance: Logging in a user should take <1 second 90% of the time
4. Implementation: Website should be developed using ReactJS
5. Implementation: Server should be Ubuntu 20.04

# Question 2

1. System should notify students when they are matched with a mentor
2. System should allow students to login via their VT account
3. System must require student name, year, and email during account creation
4. System should provide filtering options for students and mentors to look for matching profiles
5. System should provide contact information of both students and mentors when a match is made

# Question 3

Non Functional Requirements:

1. Adjusting fonts for readability to ensure they are legible from a distance of 1 meter on the webpage and 2 feet on the mobile app. This task is relatively straightforward and requires minimal effort as it mainly involves font adjustments.
2. Implementing server monitoring and crash recovery mechanisms to ensure the server remains stable and doesn't crash more than once a month. This task demands a moderate effort due to setting up monitoring tools and testing recovery procedures.
3. Optimizing the login process for speed, with the aim of ensuring that logging in takes less than 1 second for 90% of users. This is a moderately complex task as it involves optimizing various aspects of the system to meet the performance criteria. May require breaking up into smaller tasks to optimize the system entirely.
4. Developing the website using ReactJS, a moderately complex task that encompasses designing the user interface, creating components, and integrating ReactJS into the project.
5. Configuring the server using Ubuntu 20.04, a relatively straightforward task with low effort, primarily involving the installation and basic configuration of the server software.

Functional Requirements:

1. Developing a notification system to inform students when they are matched with a mentor, involving real-time notifications and profile integration. This task is moderately complex due to the real-time nature of the notifications and the need to integrate them with user profiles.
2. Creating the functionality for students to log in using their VT (Virginia Tech) accounts, a moderately complex task that requires integration with an external authentication system like Duo or other domain systems.
3. Developing the account creation process with data validation and user input handling to require student name, year, and email. This task is moderately complex as it involves the design and implementation of the account creation system.
4. Building filtering options for students and mentors to search for matching profiles, a moderately complex task that includes developing various search criteria and options.
5. Implementing the functionality to provide contact information to both students and mentors when a match is made, a moderately complex task due to data privacy considerations and secure sharing mechanisms.

# Question 4

1. As a Mentor on ByteBuddies, I want to be able to review and accept mentee requests for mentorship so that I can help students achieve their academic goals and share my expertise in computer science. Having the ability to accept or decline incoming mentee requests directly through the platform will enable me to connect with students who genuinely need my guidance, making it easier to create meaningful mentorship relationships. Without this feature, I might miss out on valuable opportunities to assist students in their academic goals, and the process would be less efficient.
2. As a Mentee on ByteBuddies, I am looking for experienced mentors to support my academic goals in my elementary programming courses in computer science. In doing so, I want to send mentorship requests through the platform, in order to streamline the process of finding mentors whose expertise align with my goals. This will enable me to access valuable insight and support to excel in my studies.
3. As a Mentee on ByteBuddies, I want the ability to access the contact information of my selected mentor, so I can efficiently arrange meetings and seek guidance for my academic pursuits in computer science. By having access to my mentor's contact details within the platform, I aim to streamline the process of scheduling meetings and communication, ensuring a smoother mentorship experience. This feature will save time and allow me to have timely interactions with my mentor. Without this capability, coordinating meetings and gaining the necessary guidance could be more challenging and time-consuming, potentially slowing down my academic progress.

# Question 5

One risk would be a particular technology that we want to use ends up being inadequate for whatever reason. This would halt our development process and potentially force us to start over. To mitigate this, we would research in-depth each technology we choose to use. We would also establish alternative technologies in case the first one still fails.

Another risk could be scope creep, where we keep adding new features as we think of them. This could overload our tasks and interrupt current development. To mitigate this, we would stick to our Scrum work process. When we think of a new feature, we add it to the backlog and focus on the tasks for our current Sprint. That way, we can remember good ideas without being distracted from our current work.

# 6. Describe which process your team would use for requirements elicitation from clients or customers, and explain why.

We think interviewing would be a good choice for requirements elicitation since the other processes aren’t as useful. We already have a good idea of what our product would look like, so brainstorming won’t be much use. However, we don’t have enough ideas to create a prototype. Ethnography is too time consuming so it’s not worth it. Furthermore, interviewing is a good choice in and of itself since we lack the finer details regarding what features our product would have. Through interviews, we can get detailed feedback from stakeholders.