## STAR (Situation Task Action Result) Key Concept – Prepared Answers:

## Ability to rapidly learn new technologies:

Situation: In a software analysis class (SE 421) ...

Task: ...there is a software that is used for large software analysis queries that I had to learn and start using in assignments in the same week.

Action: ...The software was an extension to the IDE Eclipse that I was already familiar with, so my first step that I took was setting up the extension similar to that of other software that I have used in the IDE. I then ran through some example queries that were relatively small on a software I already knew the design of that I would be able to confirm by hand. From there I re-read the documentation on parts that I hadn't fully grasped yet, and experimented with the software with larger examples.

Result: ...From this I was able to effectively learn how to use the software relatively quickly, and still move onto using it in the work that I needed to accomplish.

Situation: In a software architecture (SE 339) class...

Task: ...there was a project that required me to learn the architecture of a programming project that was located on git, and then create a report on the architecture complete with various types of diagrams – all in a short time frame.

Action: ...This required that I run through the documentation, the code, and perform some user operation to completely learn, from scratch, how the architecture is established and how to demonstrate this. I established the functionality of the program through a Use Case diagram, and figured out the operators as well as actions the operators could take. I identified that the program was completely a local based software from the documentation and was able to identify the diagrams that would be needed other than Use Case to be a Communication Diagram showing how each aspect communicated with the others.

Result: ... This resulted in a good project with a comprehensive architecture outline while being a technology that I had to learn and document in a short time frame.

## Strong analytical, communication, and intrapersonal skills:

Situation: In a software management project course (SE 329)...

Task: ... I had to work with a team of four other people to create a comprehensive project management plan for a hypothetical software project.

Action: ...This required that I use and develop a variety of skills including: analytical, time management, communication, and intrapersonal skills. I had to communicate with my team to figure out the tasks that needed to be accomplished, and planning out how they would align with others. I had to use time management skills to ensure the project would be completed with continual progress while also creating a hypothetical timeline for the software project the plan was focused around. I used analytical skills in performing a general analysis of the revision stage to ensure everything was at a high level of quality. I had to use intrapersonal skills by managing to cope with challenges that arose from working on a group project that focused on the management side of a project.

Result: ... I was able to complete my responsibilities along with my team in a large wide varying type of project.

Situation: In an algorithm analysis course (COM S 311)...

Task: ...I had to be able to perform analytical observations on a daily basis, with a specific example being when I needed to look over an algorithms code and come up with various information such as its complexity, its potential for error throwing, and ways it could be rewritten to improve either of these conditions.

Action: ...I began with a simple analysis of the code at first in order to familiarize myself with what was occurring. I then wrote up some simple inputs that I believed would work, as well as some that I believed might cause errors. I ran through these and made note of the results, including the errors I identified that could be broken down to setting a bound limit on the input. From there I began working through time complexity math looking for a better loop setup, or if recursion would have been more optimal in the situation.

Result: ...I ultimately was able to identify the errors through this analytical approach, as well as find that the existing code structure was the best for complexity.

## Prepared Weakness:

I have trouble saying "no."

My greatest weakness is that I have difficulty declining request that would require me to take on more work, and subsequently increasing the time I have to spend working. Luckily, one of my greatest skills is my Time Management ability – meaning that taking on more responsibilities does not usually affect my ability to complete my work, but rather it increases it potentially taking away from someone else.

(SE 309 project) A specific example of this is from a group project I have had in college that had a group of four people and had to complete software that would function as an android app. I had one person in that group that was relatively new to group software collaboration, and they had difficulties utilizing git and figuring out how to do a large part of their assigned tasks in relation to the rest of the project.

They would sometimes come to me asking for assistance, but not in figuring out how to do it, but rather for examples. The problem with this is, I didn't want to say no to helping them, and I didn't want to say no to their idea of how they wanted to learn what needed to be done. So, I would get on a call with them and walk them through the questions that they had. This ultimately caused parts of the section they were in charge of to take up both our time, and that, from the way we were doing it, they never really learned the process of git or the finer details specific to android studio because I would tell them what to because that is what was being asked.

What I should have done was take time and teach them what I knew, so that they would be able to do it on their own. This would have meant I needed to say no to their request in walking them through the process. I have been working on improving this, since then I have had a project (SE 329) where someone asked me for assistance with making a Gantt chart in Excel. I did help them, but I made sure that I was teaching them how to use the specialized features of Excel that I knew rather than taking on that portion of the work like my team member of this other project first suggested.