Jesse Gomez
SID: 861056174
NetID: jgome026

Required Student Instrument: Part 1

A. Fill out the attached Team Self-Assessment Questionnaire below.

To what extent… Please answer the following questions by placing a mark in the column that best represents your opinion.	**Not at All 1**	**2**	**Some what 3**	**4**	**To a Great Extent 5**
1. Did you learn a new skill or useful behavior from a teammate?				X	
2. Would you be willing to work with the same team on a new project?				X	
3. Where the roles and responsibilities of team members clearly defined?				X	
4. Did your all team members (including yourself) contribute their fair share of the work?				X	
5. Was there conflict or disagreement between team members?		X			
6. Was conflict or disagreement between team members handled fairly to everyone's satisfaction?				X	
7. Did the team members feel free to express their opinions honestly and openly to each other?					X
8. Did you find working in a team more enjoyable than working alone?				X	

B. Note that there is a blank space for more questions. Imagine you are the head of a company that employees 1,000 software engineers, which typically work in teams consisting of 5 to 20 individuals. What questions would you add to this list? (You must add two to four). What would knowing the results of these questions tell you, what action could you take if the numbers report were disappointing? (We expect you to write at least 500 words).

ANS:

If I were the head of a company that employs a large number of software engineers and had to analyze how well smaller teams were able to work together accurately, I would add the following questions to the above survey. Were all team members able to communicate with each other effectively? Was your team able to meet both individual and team project deadlines? Were your team members open to constructive criticism regarding their contribution to the project? And finally, was this project size and deadlines reasonably proportionate to the capability of the team?

The first question I would add to the list would address how effective the team was in being able to communicate with one another. This is important because each team member must be able to contribute their own ideas to the team whenever possible to improve the overall outcome of the project. If one team member realizes that there is a better approach to a complex problem, they should be able to effectively communicate what this new discovery is and why it better than the current process.

The second question I'm suggesting involves the team's ability to stay on task and meet project deadlines both within the team and to actual set deadlines. This is a critical element to consider when evaluating a team as they could be producing the best results but if they're not meeting self set goals, they will most likely fall behind on actual goals as well.

The third question I added concerns the team's attitude towards differing perspectives on the project. The team must be able to freely self address their own and other team member's progress to ensure that everything is coming together well. One team member may be hard at work and focused on one specific aspect of the project that he could get carried away and miss the objective of the overall project. It is important then for this team member to be open to criticism from his team and pivot towards the correct end goal.

The fourth question I would add is in regards to the distribution of the project itself. Was a team of this certain size able to handle all the different details of the project? Or were they overwhelmed by the amount of features they had to design or implement. Or, was this project not nearly substantial enough to require a group of this size or experience? These are important distinctions to make as you don't want to let talent go to waste but you also want to maintain maximum team efficiency.

These questions that I added to the list are meant to quantify as many different aspects of a team based project as possible, as it's not always feasible to analyze everything at the most detailed level. That would clearly not be reasonable in this scenario where you would be in charge of dozens of teams and have to evaluate each and every one of them and figure out how and why a certain team is or is not effective.

C. Write a short essay (500 words) in which you describe your experience working in a team, the bullet-points below can be used to brainstorm a topic(s) for your essay.

- Your team's collaboration method, was it one of the above methods, or something new?
- Give an example of a situation (different team size, different locations of team members, different skills/age/time commitments, different type of product etc) in which you think a different collaboration method might work better, why?
- Consider the amount of work perform by your team. Did each team member "pull their weight"? If not, how do you think you could fix this for future group projects.
- Lessons learned, what would you do differently?
- People have been collaborating for centuries. The widespread availability of the telephone (in the 1950s) made collaboration a lot easier. What tools, devices, software or technologies made your collaboration easer?

ANS:

I was very content with how are team was able to work together on this project. We did our best to try and divide the work evenly between team members while also taking into consideration the strength and weaknesses of each team member in an objective manner. We each understood that we weren't the best possible programmers in all of aspects of programming and were able to freely accept suggestions from each other in regards to what and how we wanted to accomplish certain goals for the project.

Some team members were better at laying out the foundation of certain parts of the project while others were better at building upon these elements into something more creative and interesting. An example of this would be in the second phase of the project. Nobody in our team had used Hadoop or Cassandra before but once one member was able to figure out exactly how something worked they were able to relay that knowledge to another team member. Then, once we designed a basic mapreduce job we were able to build upon that to produce more interesting information from our data. Each of us could have learned about the different features of Hadoop on our own but since we were able to collaborate we expedited this process and formed far more interesting applications for our data.

It was however difficult to meet in person outside of scheduled lab times as we each had different obligations and lived a fair distance apart. Because of this, we used different methods such as Skype to collaborate on the project. If one of us was having difficulty diagnosing a certain problem with Hadoop, a new set of eyes was often enough to figure out what was going on and continue with the project. One such case was figuring out how to use our sentiment analysis library on the school managed servers since we didn't have administrator access to install anything. Luckily, one of our members had already had experience with this problem in the past and was able to provide the most reliable solution.

As mentioned before, I am satisfied with how each member of our team was able to contribute towards the success of our project. We each brought a unique perspective and certain set of skills that we were able to pull together and rely on each other adequately.

Skype and file sharing services such as Google Drive made our collaboration much easier as we would have otherwise been out of sync on our progress from day to day, or worse we would have lose time commuting to and from a centralized location. Version control systems such as git would have also been extremely helpful in a situation such as our own, but since we each wrote scripts or other code that were independent from each other, it wasn't necessary for this project. If we had rather been working on a single program that had many different parts wihch were dependent on each other, something like git would be far more efficient than manually diffing files to figure out what was added or removed.