## Contingency Plan

## Team 29

The main issue the author faced during this paper was that there were several high severity and high probability factor risks within the project that had not been mitigated or handled. The first risk that the author and their team had to deal with was the risk of running out of disk space when scheduling for the large amount of data to be processed. The second high severity risk was the threat of a blizzard causing workers to not come in and observe and monitor the processing, which could threaten the timeline of the data processing that they were on. The author identified and assessed these risks for both internal and external risks to the project and worked with the team to develop a contingency plan in case those risks ever occurred. In doing so, they were able to come up with a plan that would execute if any of these risks ever prevented themselves. For the disk space risk, the team mitigated the risk by using estimates and contacting Data Base Administrators to verify that the system had enough space to handle the updates coming through. For the blizzard risk, after identifying that there was a high risk for a blizzard, the team would bring supplies and stay on-site over the weekend to monitor the processing while also allowing workers the ability to rest and recover so as to not risk mistakes by fatique. By having these mitigations and contingency plans, the team was able to overcome some potentially critical risks both internally and externally to the project.

There aren't really any similarities between the issue "there might not be enough disk space to accommodate the volume of updates scheduled for processing" and the issue of COVID-19 outbreak for our project. This is because the issue of disk space was an internal risk, while the issue of COVID-19 is an external risk. The issue of COVID-19 is similar to the external risk of the possibility of a winter snow/ice storm during the weekend of scheduled processing. The occurrence of a global pandemic, although rare, is completely external to the project just like the weather. However, with a contingency plan, the impact on the project of both can be mitigated.

Due to our project being exclusively software-based, the major impact COVID-19 has presented is changes in how we communicate. While we had already set up tools in which to communicate online amongst the development team and with the client, this switch forces us to move online entirely. In addition, we have lost the set schedule of all gathering on Tuesdays, so the transition to online must address this. Finally, we lose face-to-face time with the client and how they currently solve the problem we are developing an application for, so we must use the transition to online to hopefully account for this.

Contingency plans are important for project success, even if the plan isn't used during the project, it's better to be prepared than to improvise a plan as the risk is happening. In our case, the risk was arguably unforeseeable so we must quickly make contingency plans to adapt to our situation. Because of the pandemic, we are no longer able to meet in person. In response

to this, we must use a video calling software to hold meetings with the team and our advisor and client. Throughout the semester before the pandemic, we had been using Zoom to hold meetings with our advisor and client when we weren't able to meet them in person. In that situation we would all meet as a team on campus and have one person call the advisor with Zoom. However in this case the team will not be able to meet in person. In place of this, we will use Zoom to schedule meetings which we will all attend using our personal computers.

In addition to coming up with a solution to the issue, we must also be able to execute the issue well. In our case, it means being able to hold meetings virtually and complete as much quality work as we have done in the past when we were able to meet face-to-face. To make sure our virtual meetings are productive, we will make sure to always have a goal in mind that needs to be completed during the meetings. This includes making a list of topics that need to be discussed as well as the various tasks that need to be completed as a group. Additionally, each member of the group will join the virtual meetings in a timely manner so that no time is wasted and also be prepared for the meeting so that only quality work is completed. We believe that by following these guidelines for holding future meetings we will have effectively mitigated the issues that COVID-19 presented while also maintaining our expected level of quality work.

In times of crisis, having a plan to follow can be the difference between a huge loss in productivity and resources or the ability to turn that crisis into an opportunity for new success. Which is why in the face of an incipient crisis, a contingency plan should be of the utmost importance for all project teams. Furthermore, this group is fortunate to be in an age where software development can be done fully over ecommuting with thousands of miles between participants with very little impact on productivity thanks to tools such as GitHub, Trello, Discord, etc. So even a pressing emergency such as a global pandemic, the likes of which haven't been seen since the Spanish flu over a century ago, will do little to stunt productivity while allowing people to focus on staying healthy and taking preventative measures in regards to the spread of COVID-19.