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## CISC 480 Reflection

This portfolio demonstrates my ability to benefit ClassySchedule in their creation of an optimized scheduler system. My coursework and commitment to the common good not only make me a capable applicant but a passionate one. My projects have set me up well for this position by giving me experience in object oriented programming and designing algorithms.

As a St. Thomas student I am constantly thinking about the common good and my upbringing has also led me to have an understanding and commitment to the common good even before I decided where I was going to go for college. To benefit others is how we improve society and create more opportunities for individuals or small groups to benefit many. In addition to that benefiting others gives us our purpose, as Leo Tolstoy famously wrote “The sole meaning of life is to serve humanity.” Our material possessions do not make a difference in anyone else’s life and will not matter when we are gone. What matters and persists is how you are able to make other lives better. Even after we are gone our impact persists. This is the importance of benefiting the common good, to make the world a better place than if you had not existed. To waste your potential for good is to hurt others and live a meaningless life.

In my personal life one of my main focuses in having a positive impact is my interest in preserving and restoring the world that surrounds us. I do this by both monitoring my consumption as well as contributing to clean up efforts in natural landscapes. In addition to my efforts in my personal life I also had a summer job working to protect ash trees from emerald ash

borers in order to preserve the urban forest and maintain all the beneficial services that trees along paths and roadways provide.

My object oriented programming assignment from my course focused on OOP was to create multiple types of employees. This OOP experience prepares me well for work on the implementation of the objects the scheduling algorithm will use. This is especially important for something like labs and courses that have a similar function and could be implemented as a child and parent.

My algorithm assignment from my algorithm course was to find all possible combinations of change for a given monetary total. This assignment and the algorithm course has prepared me for creating an optimized schedule algorithm by considering possible solutions as seen in this assignment. Obviously ClassySchedule also needs to determine what solution(s) are the best. In my AI and Robotics course we did constraint solvers for problems and heuristics but unfortunately because of the method of submission I don't have access to those files since I did not have the foresight to save them in an alternative space.

The mission of ClassySchedule contributes to the common good of education systems worldwide. Being able to have the best possible schedule benefits teachers and professors when their preferences are honored as best as possible, reduces the stress of schedulers like department chairs who previously would have to labor over the many possible solutions for an extended period of times, as well as the students who are taking these classes. This increase in benefits for educators by meeting more of their preferences will allow them to enjoy their work more and they will be more likely to engage and inspire their students because they themselves are happier to be there.

By reducing the time those in administrative positions like department chairs have to spend on schedule creation, the more time they can spend on other aspects of their job, further improving the education system as a whole. There are so many aspects of their jobs that with more time could in turn further benefit educators such as having more time to support the educators they work with and gather feedback and recommendations from those educators on how things are going and what could be improved.

All these benefits for those working in the education system benefits the students. As someone who is completing my undergraduate degree after many years in the education system, this is something that I really value and appreciate. Many of my favorite teachers and professors have obviously been happy to be there and to be able to maximize the work/life balance of educators will create more productive educators as well as reduce the number of educators who feel burnt out and leave for other careers that will offer a better balance and allow them to pursue their other interests more easily.

With administration roles having time freed up from scheduling they'll have more time to improve the curriculum and events/benefits for students in their program. They'll also have more time to meet with students to discuss their course work and future as well as manage any issues they might be experiencing. Additionally, the optimized schedule itself would be a great thing to have as a student.

The work of ClassySchedule to provide this service for the education system has a special place in my heart because one of the big stressors for me as a student was registration. In my four years at St. Thomas, I will have completed four majors in four years which required me to take six full courses in three of my semesters as well as five in all my other semesters except for the first and last, in addition to the associated labs and course work over January term and summer

sessions. This required careful planning of getting into all the classes that would fit within the overlap of my degrees as well as just getting the number of relevant courses in a semester that didn't overlap.

An issue I experienced early in my undergraduate career were courses not meeting student demand in one of my majors which fortunately I had 3 other majors to take courses in until I moved up the registration prioritization. This issue would have been much greater if I was just doing the one degree. I would not have had many options for classes, and I would not have been accumulating credits as quickly to get an earlier registration time that allowed me to avoid those congestion issues in future semesters. Other issues I experienced in my biology degree was courses that were similar in terms of focus all being offered at similar times. This resulted in me taking a few courses intended for premed students in order to complete my degree despite my lack of interest in practicing medicine.

My experience in relevant topics for this company, my interest in the problem, and my passion for helping others makes me a great candidate for this company. I have worked with both algorithms, involving constraints and heuristics, and object oriented programming. As a student I am aware of the issues that can arise in a schedule and would love to be part of the team that creates a solution to mitigate some of those issues. Based on my own values and my education at St. Thomas being part of a team that is able to provide such an important and wide spread benefit would be very fulfilling for me in my pursuit of advancing the common good.