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MATH 450 Spring 2017

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This is my one page paper that describes my journey of this class, and officially my last class of my Major in Mathematics. At the start of the class I was under the impression that I have gathered enough knowledge about math to call myself a graduate in mathematics, and this course will not give me any new knowledge.

I was so wrong.

Given my background in computer science, I like things being small and precise. Little did I know that those two words are not the same. The background that I came from had given me a mindset of the “need to know” ideology. For instance, my journey of my proof presentation, I understood graph theory just enough to be able comfortably talk about it among others and do little to no exploring in it. My first 2 drafts in for that proof reflected that shallowness of my knowledge and the severe lack of rigor I had. From a software engineer point of you I had enough knowledge to say program something in graph theory, but from a mathematician point of view by proof could we sit in the garbage next to old rotten banana peel.

As you would see, the progress that I made throughout the semester, you would see the transition and inclusion of rigor I had in proofs. My journey and goal in this class changed in this transition. My journey might have been different from most of my peers, because I did not lack the basic fundamental knowledge or any gaps in concepts that I have learned in math throughout the last 4 years but, making them air tight and see the little nitty gritty of the proofs that run the world of Science and technology.

Was it had? You guessed it! It was hard, to the point I wanted to give up my Math major altogether and withdraw from this course. I did not feel like improving myself anymore. But then I took one night off everything where I did some reflection. I have come so far (physically about 10K miles and mentally) I cannot give up. The way I saw it was I had swum the entire ocean of undergraduate and I am losing hope in myself in a small tide right by the shore.

Adding rigor to proofs was a process, something that I learned and want to keep on learning after this course. The other thing that I also learned was to, write proofs in a way that it is accessible to as many people as possible. Whether it can be a Calc 1 student or a PhD student or even a mathematician. While working on the proof for my presentation, I came across proofs that were written by known Mathematicians but I was not able to understand. By learning how to add rigor in my proofs and attempting to make it “Air tight” I learned that I can make my proofs readable by adding proper amount of rigor.

I think I had an overall positive experience in this course and I did do a lot of learning not about just math but way more valuable lessons of life and how Math helped me solve it. I think I will remember this course even after I turn 70 (hopefully).

Thank you for giving this opportunity and helping me push through and pick me up every time I fell and lost hope.