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Individual Reflection

MET 330 Final Project

12/14/21

- Do you think what you learn is important for your professional career?
  Yes. I can see a lot of benefit for my future from the things I learned in this project as well as fluid mechanics. The final project was one of the first times I have been asked to work on a group project and it was definitely a learning curve. With that being said, I would much prefer working in a group, as opposed to individually, for as many other classes or professional settings that will allow it. It gave a really good insight of how it will be when we are assigned an actual project from an employer and how the client/bosses opinions matter and the input of your colleagues can be really beneficial. I also think working in a group taught some responsibility and patience because your team relied on you, and sometimes you had to wait until they were able to do things that were needed.

- Where do you think you will be using everything you learned?
  Using the actual topics of fluid mechanics will be dependent on the type of career I end up going into. The concepts in the group project will be useful any time that I could be assigned a project for a client or my company. It was presented very similarly to how I would imagine a project in a company would be.

- How would you explain the project and your contribution to the project in a job interview?
  I would first point out that it was a very good learning experience and my first project in college thus far that was assigned with a group to mimic how the workplace will be. The purpose of the project was to design a pipeline system for a manufacturing facility. We were asked to include pumps, valves, and 3 different sized tanks. The goal was to be able to move coolant from a rail car on the ground to a storage tank and a machine shop tank, then have it drain or be pumped into a dirty coolant tank and be able to empty that tank into a truck to be removed. That makes it seem simple, but I soon learned that it was no task for the faint of heart. We had many other design considerations to consider, motors to account for, support for the pipes, computing tank sizes and fill times, and pump variables just to name a few. In the end, we were able to use nearly all the concepts we learned in Fluid Mechanics to finish what I believe to be a well-done project.

- How would you explain how your strengths helped you contribute to the project in a job interview?
  I would say that my biggest strength in the project was making sure I asked as many questions as necessary to ensure I was completing my part correctly. At times I did struggle, but by having a professor and teammates to reach out to, I was able to learn a lot and do my portions of the project to the best of my ability. I was also able to stay in communication with my group and professor which was a huge help in making sure we were all informed of all things necessary pertaining to the class or the project.

- How would you explain in a job interview how your weaknesses affected your ability to work on this project and how did you address them (or what part of the class helped you address them)?
  One of my biggest flaws in the project was having a lack good time management. I do think that I improved with this as the project came to an end because I knew that I had other group members depending on me. I was also able to realize that it is best to not tackle too much on your own when you have others there to help you. As one of my good friends says, “Teamwork makes the dream work” and for a project like this that couldn’t have been truer.

- Explain the technical strengths and weaknesses in your project.
  One strength of my group project was that we were able to take criticism and use it to make our project better. One weakness was that we chose to use rectangular tanks instead of cylindrical. We assumed this would make it simpler, but it did not. I struggled to find the appropriate thickness equation because all the equations were designed around cylinder tanks. I’m sure that our project still is not perfect, but speaking for myself, I learned a lot and that was the biggest goal in my opinion.

- If you were starting the class over again, what advice would you give yourself to ensure that you had a successful semester and a successful final project?
  If I were to start this class over, I would like to try to be more dedicated to it. I really enjoyed learning the material, but I feel like it only scratched the surface of what could have been learned or better understood had I spent more time on it. With that being said, I do feel like I did well for it being my first full semester at ODU taking 14 credits.