Evidence of Learning #1

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Topic: Introduction to Fusion 360 & Project One-Pager

What did I learn?

For this analysis, I tried to learn Fusion 360, which is the CAD that I will use for my design process. Right now, I am in the introductory learning phase and, therefore, working on the basics of the tool: basic tools, parametric modeling, and constraints before complex designs.

Additionally, my mentor had me create a one-pager to help me better understand the industry and gain perspective on issues occurring in the medical field. Creating this document allows me to explore current challenges and think critically about how I can contribute to solving them. It serves as a foundation for developing my research approach and refining my project's direction.

Why Is it Important?

This course in mastering Fusion 360 is quite indispensable; precision in CAD modeling is among the most vital sequences in product development. I would not have gone a step further in making my prototype without knowing how to sketch, extrude, and apply constraints.

This one pager is also important because it will guide me in trying to keep my eyes on trying to understand challenges within the industry and finding real-world applications. This will allow me to analyze key issues in the medical field and give critical thought to how I can apply my capacities to contribute toward solving such issues. It will also facilitate discussing insights with mentors, teachers, or potential industry connections.

How does it impact my thinking as it pertains to my topic?

Initially, I thought I could just dive into designing my prototype, but I've learned that, first, I must have a solid foundation of Fusion 360. The process of learning CAD is really quite linear, and this process taught me to plan before acting.

The making of the one-pager has also made me reflect critically on the impact I could make through being a part of the biotech industry. It helped me simplify and refine my ideas so that they become clear, structured, and will help in future research and presentations.

Plan of Action

In moving forward with Fusion 360 to prepare for prototyping, I will:

- Go through basic tutorials on Fusion 360 to understand how to sketch, constrain, and extrude.
 - Practice simple models to build confidence before attempting my actual prototype.
- Review biomedical device design principles to ensure that my prototype meets industry standards.
- Seek feedback from my mentor regarding my learning process for CAD and refine my approach accordingly.
- Gradually move into complex designs, incorporating feedback and developing my skills.

How will I use this information moving forward?

- I will continue to learn Fusion 360, working my Plan of Action in order to prepare for my prototype.
- I will use the one-pager as a guiding document to think about innovations and trends in the biomedical industry.
- I will then document the progress in my ISM portfolio, ensuring that evidence of learning is available in every stage.
- I will be doing regular checks-in with my mentors to stay on track, and improving my technical skills.

Supplementary Work

One-Pager Document