Final Product Proposal

Introduction and Statement of Purpose

My final product this year in Independent Study and Mentorship will be a prototype for my phone case company. I will have to create a 3D design of the phone case and will need to get it printed in a 3D printer. The prototype will take a lot of hard work as I will have to print it multiple times to make sure it functions well and looks exactly how I want it. Through creating a prototype, I will have the experience of starting a business from start to finish. This is one of the last steps my business will need to take before heading to manufacturing and bringing in a cash flow. I will be creating a useful tool of my mentor as he will guide me through the process and tell me any steps I can take to make the process much easier. I will have to step out of my comfort zone and figure out how to do something I have never done before. The final product will test my abilities and require lots of planning.

Review of Skills and Research

There are a wide variety of research topics that will be vital to my success in creating my final product. It will be important for me to research how people have created 3D designs in the past and all of the steps it will take for me to be able to make mine. This could include reading articles on 3D printing and reaching out to other professionals in this field who could give me advice. I could also speak with 3D designing companies and ask for their opinion on what I should do given my circumstances.

Creating a prototype for my phone case will help me gain a wide variety of skills that will be instrumental for my future. I will gain confidence in trying new things as I am essentially doing the same with my final product. I have no experience in 3D designing, yet I am reaching out on a limb and going for it. Furthermore, I will learn better methods to research as it will be up to me to figure out how to complete this. In order to obtain information from people, I will have to improve my speaking skills and make them want to give me all their knowledge on the topic. In terms of utilizing skills that I currently have, I must use my determination and hardworking ability towards the creation of the prototype. Lastly, I will have to compile everything I have learned this year in ISM and incorporate it in all parts of the process.

Methodology

In order to complete my final product, I will need to:

- Research 3D design software and choose the one that will be most user friendly
- Figure out all the dimensions for the phone case
- Find out how I will want to make the parts on the phone case interchangeable
- Search for someone to help create the 3D design
- Refine the design to my specifications
- Print it and see if anything needs to be amended
- Get others opinions on the 3D design and finalize it

Materials

Materials needed for the final product include:

- A laptop in order to research and find/contact designers
- A 3D printing machine
 - Frisco Public Library
 - Frisco High School
 - CTE Center
- An iPhone 7 to get dimensions
- A ruler to measure how large it will be

Utilization of Higher Level Thinking

Throughout the creation of my product, advanced thinking skills will be incorporated as I will have to synthesize my research and use it towards something I have never done before. I will need to learn all about 3D designing and get familiar with the process. Then, I must put what I have learned into action and hope that I end up creating a phone case that works exactly as I want it to. Furthermore, I must talk to multiple people and get their opinions on the case so I can make changes before manufacturing. Lastly, I must take into consideration what others have said and make the final changes to create the perfect product. In all, I will have used higher level thinking as I will have to learn how to do something I have never done before from beginning to end.

Conclusions

The outcome of my product will be the first step towards kick starting sales in my phone case company. It has real world application as I would be working towards the production of my company. I will be able to speak to manufacturers after I have a prototype and show them what the company is all about. I am going to be able to put myself out there and show people that I am truly a young businessman as I have created something viable.

The phone case will be useful to those who aim to have customization and something new in their life. The case is very stylish and the user has full control over how they want it to look. It is unlike any other case they have ever seen before and will be a hit amongst people from the ages of thirteen to thirty-five. Through its interchangeable parts, the phone case can undergo many different color combinations and even have engraving or logos on some of the pieces.

Throughout the entire process, I will have gained a vast amount of knowledge towards how a business works. I will have experience in the part of business that has to do with creating a new product/idea and placing it into the marketplace. Also, I have touched upon something I have not yet done before in my life which will lead to new learning experiences and life lessons.

Product Calendar/Timeline

(January 30 – February 10)

• Research 3D design software and choose the most user friendly one (February 10 – February 20)

• Figure out the dimensions for the phone case

(February 20 – March 5)

• Refine the way to make the parts on the phone case interchangeable (March 5 – March 14)

• Create sketches of the phone case to show the designer (March 14 – March 27)

• Search for someone to help create the design

(March 27-April 3)

- Get more detailed sketches of the phone case and make sure to have everything submitted to designer so he can start working on the 3D design
- Talk to Mr. Gaona and make sure that the designer has a compatible program with printer at school

(April 3-April 10)

- Get back 3D design from designer and refine the design and make any changes that must be made
- Get others opinions on the phone case and finalize it

(April 10-April 17)

• Finalize the 3D design of the phone case

(April 17-April 24)

• Work on getting the 3D design printed from either the Frisco Public Library or Frisco High School