



PRODUCT PROPOSAL – SENIOR CAPSTONE CAREER PROJECT

Student Name: Sean Bisel

SENIOR PROJECT English teacher: Ms. Dasher

Date: August 12, 2016

Designated Timeline: Yearlong

Focus: Capstone and Career

1. What is your product? In other words, what will you actually produce? What will be the end result of the application of the skills you acquire? Will you produce a tangible product, such as a piece of furniture or a set of blueprints? Will you use your skills to produce an intangible product, such as an event, a performance, a certification, a donation, service to the community, or a combination of these? Will you produce notes from a job shadowing or internship experience in a composition notebook? How does this project represent your career goals?

My product will be both tangible and intangible. I will build a computer with a fully custom water cooling loop and use the enhanced cooling power of the loop to overclock or make the system run faster than stock. I will also be learning the skills to build different loops in the future adding to the intangible part of the project.

2. Is your project a capstone project, a career-related project, or both?

My product will be a capstone project as well as a career-related project. I have taken the three classes in the computer science pathway: Intro to Digital Technologies, Computer Science Principles, and AP Computer Science, making this qualify as a capstone project. I also intend to work in the field of IT and computer science, qualifying this project as a career-related project.

3. What skills will you develop during the course of your Senior Capstone Career Project? List three or more skills specific to your project.

I will develop planning and logic skills as well as fine motor skills. I will have to plan out the path of my custom cooling loop using logic along the way to make sure no computer component gets above safe operating temperature. I will also have to further develop my fine motor skills in order to work delicately with very small and fragile parts that must be configured in very specific ways to function properly.

4. How will you use these skills in the future? You must explain how these skills will serve you in a future career and/or endeavor.

I plan to always build computers whether or not I am employed to do so. These skills will assist me in my hobby as well as the job market. Logic and planning skills are extraordinarily valuable to employers, and I will thoroughly develop them throughout the course of the project. A project of any magnitude will never go as perfectly as planned; I will also develop troubleshooting skills to help me overcome this complication of modern technology.

5. Why have you chosen this product?

Complex electronics have always excited and interested me. I have been wanting to build a computer with a custom cooling loop for some time now. The senior project has given me the motivation to build a custom cooled computer, and it has also given me the resources I would need to do it correctly; my facilitator will help me with tasks I find confusing and/or too challenging to handle on my own.

6. What previous experience or prior knowledge do you have that relates to your Senior Capstone Career Project?

I have been building computers for years now, and I have built a computer with a prebuilt water cooling solution before. I have taken all three classes in the computer science career pathway. I have extensive experience in testing for the stability of computers. I know how to test for general computer performance using both synthetic and real-world tests.

7. How will you acquire the skills necessary to produce your product?

I will acquire the skills necessary through conversation and collaboration with my project facilitator as well as through research on my own. Some skills, however, can only be learned through practice. I learn best through real-world activities, and this project will give me an opportunity to develop new skills in that way.

8. Who is your project facilitator? What education and/or experience does he or she have that will help you acquire the skills you intend to develop through your Senior Career Capstone Project? Attach his or her business card to the front of your proposal if he or she has one.

My project facilitator is Mr. Kevin Carson. Mr. Carson has 40 years of industry experience in computer software and testing. He has also been a judge on past senior projects, so he will be able to help me complete this project more smoothly.