Shepley Engineering Notebook

# Week 1 (Beginning of Class-Week of September 12th)

* What I accomplished:
  + I selected my three choices for a project and was assigned a project
  + Met my team and began reading the assignment description
* What I need to work on
  + Understand the product and what Dr. Akbas is asking us to create
  + Begin working on the requirements for the system
* What I Learned
  + MBSE tools are commonly used to provide a virtual representation of physical infrastructure
  + Cyber analysis is extremely important to the protection of the aviation industry

# Week 2 (Week of September 19th)

* What I accomplished
  + Began reading about the protection initiatives in aviation cybersecurity
  + Continued to work and bond with the new project team
* What I need to work on
  + Begin looking at the SRS and SDD documents
* What I Learned
  + The SRS and SDD provide a way for to illustrate the physical and system requirements for the product

# Week 3 (Week of September 26th)

* What I accomplished
  + Completed our first version of the SRS and SDD
  + We worked on creating the requirements for the tool
    - It was difficult since there is no hardware or software expected in the product
* What I need to work on
  + Begin working on the Sprint 1 demo
  + Start looking at the Test Plan
* What I Learned
  + The SDD can be used for MBSE tools as well as physical hardware/software
  + There are significantly more system requirements that need to be addressed than I was expecting
    - For example usage and network requirements

# Week 4 (Week of October 3rd)

* What I accomplished
  + Created the Sprint 1 demo
  + Presented Sprint 1 Demo
* What I need to work on
  + Take feedback from SRS/SDD and reevaluate project direction
* What I Learned
  + We are not adequately understanding project direction
  + Lack of communication leads to struggles in cohesiveness of the product

# Week 5 (Week of October 10th)

* What I accomplished
  + Began working on the Test plan
  + Learned more about our project direction
* What I need to work on
  + Acquiring MagicDraw Licenses
    - There seems to be a problem gaining these licenses
* What I Learned
  + The test plan demonstrates how the requirements listed in the SRS/SDD are tested

# Week 6 (Week of October 17th)

* What I accomplished
  + Began research of our new MBSE tool Capella
  + Worked with Michael to take our side of the project
    - Since we are using two different MBSE tools, the group will use a “divide and conquer” approach and split our efforts between Capella and MagicDraw
* What I need to work on
  + Continue Researching Capella
  + Coordinate with the rest of the team to ensure we are working on the same things using different tools
* What I Learned
  + Capella is an open source tool that can be used without a paid license
  + MBSE is significantly more complex than I expected
    - An entire Industrial Control System can be modeled using these tools

# Week 7 (Week of October 24th)

* What I accomplished
  + Continued to Research Capella
  + Began working on SRS and SDD v2
* What I need to work on
  + SRS v2
  + SDD v2
  + Understanding project direction
* What I Learned
  + There will be no code or infrastructure involved with this project
  + The requirements will be used as a type of “wishlist” for our ideal tool

# Week 8 (Week of October 31st)

* What I accomplished
  + Submitted SRS and SDD v2
  + Wrote several requirements for the SRS and helped identify what could be used on the SDD given the product’s current lack of implementation
  + Sprint 2 Demo
* What I need to work on
  + Continue learning about the project and Capella software
  + Continue discussion with Dr. Akbas to understand his requirements
* What I Learned
  + How to use Capella and better understanding its implementation

# Week 9 (Week of November 7th)

* What I accomplished
  + Talking with Dr. Akbas to lock down the scope and direction of the project
  + Strategizing on a new gameplan for our project’s implementation
* What I need to work on
  + Better understand Capella and how it relates to MagicDraw
  + Start SRS and SDD final draft
* What I Learned
  + The Sprint 2 Demo was on the right track, but not exactly what was expected of us
  + This is more of a policy-based project as opposed to a completely technical coding project

# Week 10 (Week of November 14th)

* What I accomplished
  + Began writing a “Policy Document” that can be used as an auxiliary resource
  + Continued research of Capella and its functionality
* What I need to work on
  + Begin working on the test plan/Demo
* What I Learned
  + To create an ideal tool, there is far more than just usage requirements:
    - Government requirements
    - Network/Usage/Physical Requirements

# Week 11 (Week of November 21st)

* What I accomplished
  + Wrote all of the requirements for the final version of the SRS
* What I need to work on
  + Continue the policy document and use its development to help flesh out the requirements for our ideal tool
* What I Learned
  + The SRS is going to be the foundation of our project, but it does not fit our needs as much as I would like
    - We have no physical components of our project

# Week 12 (Week of November 28th)

* What I accomplished
  + Continued writing my policy document as an auxiliary resource
    - Wrote potential Network Requirements from NIST
    - Determined applicable government regulations and policies
* What I need to work on
  + The test plan needs to be adjusted for the final version
  + The final product needs to be made -- Dr. Akbas suggested a “sales pitch” format
* What I Learned
  + Watching other groups give their final demos helped me understand what was expected of the final presentation

# Week 13 (Week of December 5th)

* What I accomplished
  + Contributed to the final test plan by providing the applicably policy/requirement specifications
  + Wrote the beginning of our “sales pitch” for our Final Sprint demo
  + Helped the team record the demo of the first semester of our project
* What I need to work on
  + N/A
* What I Learned
  + Our project will be continued in the spring where we will be continuing our development of the Cybersecurity Analysis tool