**Senior Design I, CIS4951/4961/4971/4981, Winter 2023**

Remember, students will listen to your presentation to help decide which project they want to select, so please focus on those deciding factors.

Presentation Summary:

1. Client Name: Mark Elias

* Computer Network Architect for 30 years.
* Retired from AT&T, who had tools, but not as developed.
  + No good tools for configure several different kinds of devices that need to perform the same function.
  + Concept is to design a tool that acts sort of like a compiler

1. Who did you interview: Mark Elias
2. Client background

* He is a network architect, and he wants to make the lives of other people easier.

1. Related or existing work on this product

* Other companies are working on this same technology where a user can configure settings for a router/switch and the program will translate the settings into the proper configuration format the a given brand of router/switch requires.

1. Project Name: NEAT net configuration Tool
   1. Software Requirements
      1. Virtual Machine software: Docker specifically
      2. Programming development environment (ie Visual Studio)
2. Challenges you see

* 2 major parts: programming , and getting creating a vm that will contain all modules necessary for the program that way all a customer needs is to download the vm.
* \*want to be able to incorporate mode switch
* \*major change: allow excel spreadsheet to be an input file for the data file instead of only using txt or json files as input.

1. Benefits you see

* \*Desires to make this more of a “4th generation language” so that the program itself handles the background language/configuration writing format a given platform requires– a language of automation to make their engineers more productive

1. Other notes about Mark’s availability as a client, etc.

* desired to make/further develop the program in Perl programming language.
* mostly increase efficiency and add features/functionality
* marketing to large companies and the users would be rather sophisticated (software engineers or network architects for example)
* if you are good in python, you should be able to migrate over to (program in) Perl
* goal is to make the program environment integrated in a virtual machined
  + -thus, key product is to test and program and add all functionality inside a virtual machine
* previous success with first version of the tool ( cisco and brokade)
* now juniper is big so new tool needs to integrate that platform (it is similar to json format) into the new version of the neat tool.
* availability of mark: several face to face meetings with previous team, weekly calls, zoom/teams, email (very good on getting back within a day or so), availability is pretty high as this project is fairly high prioty…
* okay with doing in-person kickoff meeting (he lives not too far from campus)