Final Product Proposal

Introduction and Statement of Purpose

The proposed product is a custom website hosted on Amazon Web Service (AWS) along with a research paper covering the necessary labs and basics to host the website. The purpose of this product is for both personal knowledge and to teach others who are new to cloud infrastructure. This knowledge will cover the fundamentals of cloud computing, how the services used to create my website are correlated with each other, and how they are similar to other platforms. My goal is to gain knowledge of this field before going into college, as it will help me through my studies in college. I look forward to obtaining a clear understanding of what it means to be a cloud architect and what the day to day routine consists of. My work could be beneficial to Amazon as well as professors who teach cloud computing as it gives the basic essentials to become a professional in this career.

Review of Skills and Research

There are so many resources and research instruments that will be crucial for aiding in the creation of my final product. To start off, it will be vital for me to complete the labs that my mentor told me to look at, in order to help me build the foundation to create my product. I will need to take proper notes over these labs and properly document how these labs are helping for my research over the course of my research assessments. It will also be important to see how the AWS website architecture is planned and implemented. Without looking up how to properly use the tools to create my website with AWS, I would be blindly creating a product that is neither reflective of my knowledge in ISM, nor helpful to the viewers who look forward to learning something from my research. Finally, I will need to continue receiving feedback from my mentor regarding my work, and searching for areas to improve my product and research paper.

Creating this website and research paper will help me develop the basic skills I need for designing, building, and maintaining an AWS cloud environment. I will learn about networking fundamentals, as it will eventually carry over into the cloud architecture that I will be learning later on. I will also have to learn more about scripting, coding, and programming languages as they are related to the technical skills needed for this career. Designing this product will also teach me how to properly use languages such as HTML to markup and design the displays of webpages. On top of this, note taking will be a great lesson to learn as I go into a computer science degree plan in college. This will help me take better notes on the subjects of computers and technical aspects because they are going to be a part of my future in college. Along with this, my current cybersecurity class at the CTE center will help me get more involved with operating systems such as Linux and Windows, and getting comfortable with various languages such as Python. This process will give me real-world experience on computer science, cybersecurity, and cloud architecture.

Methodology

In order to bring my product to completion, I will need to:
- Finish the labs my mentor assigned to me
- Reach out to my mentor to receive feedback about the process
- Research cloud computing basics, which includes:
  - Servers
  - Databases
  - Storage
  - Networking
  - Software
  - Analytics
  - Artificial Intelligence
  - Cybersecurity
- Explore how to build a static website with AWS
- Analyze my mentor's website
- Learn about what s3 is and how it works in the creation of the website

Materials

Materials necessary for my website and research paper include:
- A computer for labs, creating a website, and final research paper
- Notebook for taking notes over the labs and research over basics of networking

Conclusions

The outcome of my product will be a website hosted on AWS that will explain the basics of cloud architecture and how it works. Along with that, I will be writing up a research paper about all of the work that was needed prior to creating the website. Having the experience, as well as the foundation for designing and maintaining a webpage will be beneficial for me in the future as I go towards the computer field. I am looking for a proper experience in this field as I may want to do this early in the future. I am hoping that my product will teach me along with others about how cloud computing works, and to show how interrelated all of the topics in computer science and cloud architecture are.

Calendar

1st week - Begin the labs and research my mentor recommended towards the website
5th week - Begin working on website along with mentor's help
10th week - Finalize the website and remove/add any extra features
12th week - Begin writing research paper talking about everything that I did over the course of the year and specifically focus on what I did for my final product
16th week - Final adjustments to research paper
17th week - Begin working on presentation for final presentation night
20th week - Get ready for final presentation and present on May 18th