- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must insure all answers are legal as defined by the class syllabus.
- All parts of your answers must be neat and easy to read.
- Paragraphs are at least four properly constructed English sentences.
- Embedding documents within documents does not work with the D2L Bright Space assignments.
- Plagiarism will not be tolerated.
- Unless noted, all lab sections must be done as unprivileged login.

Lab 09: Getting Organized with Initial Audit of the Network & Locking Down the Infrastructure

9.1   Each part is worth six points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 9.1 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.

   9.1.1   Document the building the following on host03 Docker. [24 points]
      9.1.1.1   Provide evidence of installing a web server.
      9.1.1.2   Provide a copy of all web server configuration files.
      9.1.1.3   Provide evidence of securing the web server.
      9.1.1.4   Provide a copy of your installation documentation.
      9.1.1.5   Provide a screen shot from another host showing your non-offensive web page with your name and other desired elements.
   9.1.2   Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]

9.2   Each part is worth four points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 9.2 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.

   9.2.1   Document the building the following on host04 Docker. [24 points]
      9.2.1.1   Provide evidence of installing a web server.
      9.2.1.2   Provide a copy of all web server configuration files.
      9.2.1.3   Provide evidence of securing the web server.
      9.2.1.4   Provide a copy of your installation documentation.
      9.2.1.5   Provide a screen shot from another host showing your non-offensive web page with your name and other desired elements.
   9.2.2   Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]

9.3   Each part is worth three points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 9.3 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.

   9.3.1   Provide evidence of successfully completing the following Qwiklab, Build a Website on Google Cloud (5 hours 30 minutes, 13 credits) [24 points]
      9.3.1.1   Deploy Your Website on Cloud Run
      9.3.1.2   Hosting a Web App on Google Cloud using Compute Engine (video)
      9.3.1.3   Hosting a Web App on Google Cloud Using Compute Engine
      9.3.1.4   Deploy, Scale, and Update Your Website on Google Kubernetes Engine
   9.3.2   Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]

9.4   Each part is worth six points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 8.4 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.

   9.4.1   Provide evidence of successfully completing the following Qwiklab, Build a Website on Google Cloud (5 hours 30 minutes, 13 credits) [12 points]
      9.4.1.1   Migrating a Monolithic Website to Microservices on Google Kubernetes Engine

9.4.1.2   Case Study: Hosting Scalable web apps on Google Cloud

9.4.1.3   Build a Website on Google Cloud: Challenge Lab

9.4.2   Provide the URL showing your earned the badge.   [12 points]

9.4.2.1   If you were not able to finish the quest, explain the troubleshooting you did to resolve the problem(s).

9.4.3   Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [1 point]