ITCO103
Unit 4 Lab

Introduction

LabSim PC Pro is used to provide a simulated, hands-on laboratory for the purposes of learning about important hardware and software concepts. In an online environment it is impossible for students to work directly with hardware or software in administrative scenarios. Therefore, LabSim is the tool that supports students in their pursuit to understand difficult concepts in an online environment.

Use of LabSim PC Pro requires a one-time registration process. You should have received an activation code from the bookstore (Words of Wisdom). Notify the bookstore immediately if you have not yet received your activation code. Contact them at aiuonlinebooks@wordsofwisdombooks.com.

Instructions for accessing LabSim can be found in the Course Materials section. You can also contact your instructor with any questions. You will have access to PC Pro for 36 months (3 years) from the date of registration.

Note that LabSim PC Pro is aligned with CompTIA's A+ certification. Completing this lab will not qualify you to complete the exam. One must complete several courses in order to cover all the concepts included in the certification exam. Further, completing the coursework does not conclude with automatic certification. Those students who wish to pursue certification may do so outside the classroom. For those students that qualify, they may contact the Registrar's office for receipt of a discounted certification voucher honored by CompTIA.

Hardware Requirements: Refer here to verify that you meet the necessary Hardware Requirements. Note that you will need speakers.

Expected Time for Completion: **Five (5) hours or more depending on hardware and familiarity with LabSim**. You may complete the tasks in numerous iterations. You do not need to complete all the lab tasks in one sitting.

Lab Description

Upon completion, depending on your choices, you may:

- describe mobile device networking;
- implement workstation security;
- discuss social engineering, malware protection and other security mechanism;
- explain BIOS security.

Lab Tasks

Each module contains numerous Sections. Each section contains sub-sections. The last sub-section contains Practice Questions related to the topic of that sub-section. The Practice Questions are **not** required. Completing the Practice Questions are **optional**. The results of the Practice Questions do **not** impact your course grade one way or the other.

Our focus this unit is networking security. Below are two Modules covering Mobile Devices and Security. These modules contain many of sections that include hands-on simulations. You may complete any or all of these sections. You are **required to choose four sections from these two Modules, at a minimum**. **Review all videos, demos and simulations included in those four sections that you choose to complete.**

You are required to choose and complete four sections only. But you may choose to complete anywhere from four sections to all the sections, depending upon your time availability. Note that you are permitted to return to this module at any time throughout the course and the program if you wish to complete more than the four sections required for this assignment. However, the grade for this Unit 4 IP assignment will be determined based upon the chosen sections completed during Unit 4.

Module 8 Mobile Devices

Section 8.6 Mobile Device Networking (Review demos and complete **simulation**: Sections 8.6.1, 8.6.3, 8.6.5, 8.6.7)

Module 12.0 Security

Section 12.1 Best Practices (Review videos and complete **simulation**: Sections 12.1.1, 12.1.3, 12.1.4)

Section 12.2 Incident Response (Review videos: Sections 12.2.1, 12.2.2)

Section 12.3 Physical Security (Review videos, demos and complete **simulation**: Sections 12.3.1, 12.3.3, 12.3.4, 12.3.5, 12.3.6)

Section 12.4 Social Engineering (Review video: Section 12.4.1)

Section 12.5 BIOS/UEFI Security (Review video, demo and complete **simulation**: Sections 12.5.1, 12.5.2, 12.5.4)

Section 12.9 Network Security (Review videos: Sections 12.9.1, 12.9.3)

Section 12.10 Firewalls (Review videos, demos and complete **simulation**: Sections 12.10.1, 12.10.2, 12.10.4, 12.10.5)

Section 12.11 Proxy Servers (Review video, demo and **simulation**: Sections 12.11.1, 12.11.2, 12.11.4)

Section 12.12 VPN (Review video, demo and complete **simulation**: Sections 12.12.1, 12.121.2, 12.12.4)

The above Sections include the following hands-on simulations.

8.6.7 Manage Mobile Devices

12.1.3 Implement Workstation Security
12.3.6 Require a Screen Saver Password
12.5.4 Configure BIOS/UEFI Security
12.10.4 Configure the Windows Firewall
12.11.4 Use a Proxy Server