



TOWSON UNIVERSITY

Application Software Security

General Instructions

Students are expected to bring their laptops/computers to lab sessions.

Lab instructions

We will be using lab material provided by the SEED project (http://www.cis.syr.edu/~wedu/seed/all_labs.html). To obtain the lab environment, visit the Lab Environment page at http://www.cis.syr.edu/~wedu/seed/lab_env.html and download the latest image SEEDUbuntu12.04.zip. The following core applications, mostly free, are expected to be installed in the computer

- VMWare Player (Virtual Machine Player - <http://www.vmware.com/go/downloadplayer/>) or Virtual Box (<https://www.virtualbox.org/>)
- SEED Ubuntu image 12.04

Lab sessions

In lab sessions, students will be experimenting software application vulnerabilities according to the instructor's guideline. **Lab report, one for each group, is due within 04 days of the session (unless extended by the instructor) and will consist of 30% of the homework assigned to it.**

Textbook Live CD instructions

Please download the following LiveCD that goes with the book and setup it so that you can access it at boot time

1. Download the LiveCD (<https://drive.google.com/file/d/0B0VUUqxOyFjEd0RZdjdfQkIwVmM/view?usp=sharing>). This is the same CD that was included in the textbook. Put it in the same folder as you SEEDUbuntu12.04 folder.
2. Open VMWarePlayer, choose SEEDUbuntu12.04 in the left panel.
3. Choose to edit settings for this virtual machine
4. Change CD to Hacking Source ISO files, Choose Connect On Power On
5. Add 2 lines to the Virtual Image .vmx file
 bios.forceSetupOnce = "TRUE"
 bios.bootDelay = "10000"
6. Reboot your virtual machine. Choose CD when boot (Press ESC)

Literature review instructions

1. What is the paper about? What is/are the vulnerability? What cause the vulnerability?
2. What is/are the contributions of the paper? How was the vulnerability or insecurity discovered?
3. The detailed techniques to solve the problem.
4. What are the strength/weaknesses of the paper?
5. What can you do better?

Project report instructions

1. What is the topic of interest? Why do you want to do that?
2. Literature review: What has been done on this research?
3. What do you think you can do better? How does that work?
4. What is/are the techniques that you use? Explain.
5. How the techniques are implemented? What language did you use? Which platform (PC, Mobile device)?
6. Demo (optional).