**IT-4833 Wireless Security Team Project**

**Objective:**

* Gain hands-on experience on using software tools to attack/protect a wireless network.

**Team Project Options**

In this project, students are asked to work in a 4-5-person team to create a technical report on software tools can be used for attacking wireless network. There are two well-known attacks on wireless network: 1). WEP encryption cracking; 2). WPA-PSK handshake cracking. The student team can work on either of the topics and team can also come up with some topics that aren’t on the list. But the topic needs to be approved by the instructor.

**Important** **Note**: DO NOT try hack existing network or any public network. Create your OWN test network and work on it. Let the instructor know if you need to borrow a router.

The activities involved in the project includes:

1. Identify the attack for wireless network that the project is going to focus on;
2. Research the tools and methods used for conducting the selected attack;
3. Download, install, and use the researched tools to perform the selected attack;
4. Write a technical report on your experience.

**Resources.**If a special VM is needed for the project, notify instructor ASAP.

**Deliverables and Grading Guideline**

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| **Deliverables** | **Description** | **Points** |
| **D1** | Create a MS Word compatible file and name it as “Team Project Report 1 Your team ID”, e.g., Team Project Report 1 Group 1. The document should contain a title and a one paragraph describing the topic of the project. One submission per team. Must be submitted to D2L drop box **by the date specified in D2L course site.**  | **10** |
| **D2** | Create a MS Word compatible file and name it as “Team Project Final Report”, e.g., Team Project Final Report Group 1. One submission per team. Must be submitted to D2L drop box by **by the date specified in D2L course site.**  | **70** |
| D2.1 |  **Final Report Formatting requirement:**1. The report should have a title and authors’ names.
2. The report is organized by sections and each section has a proper title.
3. Times New Roman size 12 font for the body of report. Single space. One column.
4. The paper should be free of grammar and spelling errors.
5. The paper should be 5 to 10 pages in length
 | 5 |
| D2.2  | **Final Report Content requirement**:1. Brief description of the attack will be performed;
2. Tools identified and their basic features and operating environment;
3. A user manual on how to download, install, and use the selected tools;
4. Lab manual on how to use the selected tools to perform the attack (screen shots are required).
5. Summary of your experience in this project.
 | 60 |
| D2.3 |   **Reference requirement:**1. There should at least 2 references listed
2. The reference should follow APA citation style. Check out [APA style guide](http://library.csus.edu/guides/rogenmoserd/general/apa.html).
 | 5 |
| **D3** | **Team peer evaluation** – everyone is expected to submit an evaluation report on their team members. A student’s score is the average value of the evaluation score she/he receives. Download the “IT6833PeerEvaluation Worksheet” and renamed it as “IT6833PeerEvaluationWorksheet + You D2L ID”, e.g., IT 6833PeerEvaluationWorksheetLi. | **10** |
| D4 | **Presentation** – each team should create a PowerPoints slides for their project. For hybrid section – an in-class presentation is required (10 minutes presentation and 5 minutes for questions and answers).  | **10** |
| **Total Points** | **100** |