King Fahd University of ... m and Minerals

College of Computer S ... ineering

Information and Computer Scie...

Next Offering: February 11-14, 2015

Short Course

Web Hacking and Security

Essential Knowledge for IT Survival

Description:

Firewalls, Antiviruses, operating system security, and the latest patches are all powerless to stop a new generation of attacks that are increasing in frequency and sophistication: Web Attacks.
The Web has become the primary vector for infecting computers. The web developers themselves, are barely aware of the extent of the threats to their sites and the fragility of the code they write.

This intensive course is centered around Web Attacks. As a participant, you will be exposed to two main aspects. First, we catalog the greatest attacks that web applications can face and explain in detail how they work. These include Online Password Cracking, advanced SQL Injection, exotic Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF), UI Redress, etc. Second, we illustrate how web developers and users can protect against these attacks.

Duration: 4 days (Weekend)

Dates: February 11-14, 2015

Location: ICS Department (KFUPM)

Instructor: Dr. Sami Zhioua

Certificate: A graduate certificate will be awarded to participants

Information about the course:
zhioua@kfupm.edu.sa

Registration: Department of Continuing Education, Building 54, Room 107

Short Course Overview

1. Introduction to Web Technology:
- HTTP Protocol, HTML, Cookies, Dynamic websites
- Client-Side Technology
- Server-Side Technology
- Encoding Schemes

2. Web Spidering
- Mapping Websites
- Discovering Hidden Content

3. Attacking Authentication
- Bypassing Brute-Forcing Protection
- Exploiting Password Change Functionality
- Exploiting Forgotten Password Functionality

4. Attacking Session Management
- Exploiting Poor Cookie Generation
- Exploiting Poorly Protected Cookies

5. Attacking Databases: SQL Injection
- Bypassing Login
- Blind SQL Injection
- Time-Delay SQL Injection

6. Attacking the Server
- OS Command Injection
- Path Traversal
- HTTP Parameter Pollution

7. Cross-Site Scripting (XSS)
- Reflected Vs Stored XSS
- Bypassing Defensive Filters
- Beating Sanitization

8. Cross-Site Request Forgery (CSRF)
- Cross-Site Vs On-Site Request Forgery
- Defeating Anti-CSRF Tokens
- UI Redress
- Attacking the Browser

Website: http://faculty.kfupm.edu.sa/ics/zhioua/WebHacking