

Three-Day Short Course on Web Application Security

March 29-31, 2016

Programme Schedule

Days	Topics
Day - 1 Forenoon	9:30 AM to 1 PM
Welcome Address (10 minutes)	By Mr. Renjith A, Manager, CERT-K
Inauguration & Address (20 minutes)	Importance of Web Application Security for Government By Shri. Manoj Abraham IPS, IG of Kerala Police
Special Address (10 minutes)	By Prof. Rajasree M.S., Director, IIITM-K
Vote of Thanks (5 minutes)	By Mr. Md. Meraj Uddin, Assistant Professor, IIITM-K
Session - 1 (1 hour + 15 min Q&A)	Introduction to Web application development concepts - PHP Sample web page design ¹ , Database ² By Rejah, Sreenath
Tea Break (15 minutes)	Networking, Visiting Card exchange etc.
Session - 2 (1 hour + 15 min Q&A)	Anatomy of a Web Application - 3 tier Architecture ³ , Sessions & Cookies By Rajesh, Rejah
Lunch Recess	
Day - 1 Afternoon	2 PM to 5:30 PM
Session - 1 (80 min + 15 min Q&A)	Introduction to Web Application Security - Recent patterns, trends & statistics By Rejah, Sreenath
Tea Break (20 minutes)	5 Quiz questions will be asked based on the sessions
Session - 2 (80 min + 15 min Q&A)	OWASP Top 10 Vulnerabilities By Rejah, Rajesh
Home Work ⁵	
Day - 2 Forenoon	9:30 AM to 1 PM
Session - 1 (80 min + 15 min Q&A)	Lab exercises ⁴ for Top 10 vulnerabilities with focus on SQL Injection and XSS By Sreenath, Rajesh
Tea Break (20 minutes)	5 Quiz questions will be asked based on the sessions
Session - 2 (80 min + 15 min Q&A)	Static & Dynamic Application Analysis using LAPSE+ and ZAP By Rajesh, Rejah
Lunch Recess	

Day - 2 Afternoon	2 PM to 5:30 PM
Session - 1 (80 min + 15 min Q&A)	Attack Mitigation Strategies, Importance of Third party audit, Best practices, Cyber Laws By Rajesh, Rejah
Tea Break (20 minutes)	5 Quiz questions will be asked based on the sessions
Session - 2 (80 min + 15 min Q&A)	Introduction to Joomla Application Development By Rejah, Sreenath
Home Work ⁶	
Day - 3 Forenoon	9:30 AM to 1 PM
Session - 1 (80 min + 15 min Q&A)	Security Assessment of Joomla applications and Steps to fix the problems By Rejah, Rajesh
Tea Break (20 minutes)	5 Quiz questions will be asked based on the sessions
Session - 2 (80 min + 15 min Q&A)	Preparation of Audit Reports, Elimination of False positives, Strategies for implementing Security in your organization By Rejah, Rajesh
Lunch Recess	
Day - 3 Afternoon	2 PM to 5:30 PM
Session - 1 (80 min)	Help in Security Audit of Applications brought by Participants By Rejah, Sreenath
Tea Break (20 minutes)	5 Quiz questions will be asked based on the sessions
Session - 2 (80 min)	Summarizing Security Lessons Learnt so far and Self-Assessment Test (30 objective type questions) ⁷ By Sreenath, Rajesh
Valedictory Session & Distribution of Certificates (30 min)	By Prof. Rajasree M.S., Director, IITM-K

Disclosure

1. LAMP Stack is used for development. A pre-configured OWASP branded virtual machine containing all lab exercises will be distributed to the participants. One-week limited support will be provided to the participants who want to try this after the course.
2. MySQL will be used
3. PHP will be used
4. Participants to try Web Goat here
5. Participants have to draw their Application Architecture and note down the technologies used in each stage
6. List down the vulnerabilities faced by participants in their applications
7. Top scorers will be rewarded