Ten-Day Training on

Secure Software Development Lifecycle Practices Professional Certification Program

Conduction Mode: Online

Every Saturday from 9:00 AM to 11:00 AM

Instruction Details:

- Resource persons will deliver Theory & Demo;
- Participants have to complete Lab Exercises. Necessary manuals will be provided.

Schedule:

Number of Batches	Start Date	End Date
Batch I	March 22 2025	May 24 2025

List of Topics

Session	Module Name	Topic Name	Duration
Day 1			
Session 1	Introduction to Secure Software Development Lifecycle	Need for Secure SDLC	40 min
Session 2		CIAAA Defence in Depth and Resiliency Cryptography and Security Metrics	40 min
Session 3	Secure Software Requirements	Define Security Requirements	40 mins
Day 2			
Session 1	Secure Software Requirements	Data Classification and Data Privacy Requirements	1 hour
Session 2		Security Requirements Traceability Matrix	1 hour
Day 3			

Session 1	Secure Software Design Considerations and Principles	Secure Software Design Considerations	1 hour
		Secure Software Architecture Principles	
		Secure Software Design Principles	
Session 3		Threat Analysis and Attack Surface Evaluation	1 hour
		Threat Modelling Methodologies	
Day 4			
Session 1	Secure Software Design Considerations and Principles	Software Composition Analysis	1 hour
Session2		Secure Design with Cloud (A Case Study)	1 hour
Day 5			
Session 1	Secure Software Implementation	Secure Coding Guidelines JavaScript	1 hour
Session 2		OWASP Top 10 Security Vulnerabilities	1 hour
Day 6			
Session 1	Secure Software Implementation	Web Security Configuration	1 hour
Session 2		Web Application Firewall (WAF)	1 hour
Day 7			
Session 1	Secure Software Implementation	REST API Security	40 min
Session2		Code Review (SAST&DAST)	40 mins
Session 3		Secure Coding Guidelines Python	40 mins
Day 8			

Session 1		Docker Architecture	2 hours
		Docker Commands	
		Docker Swarm Network	
		Building Docker Images	
		Docker Security	
Day 9			
Session 1		REST API Security	40 mins
Session 2	Secure Software Implementation	Secure Coding Guidelines Java	40 mins
Session 3		Secure Coding Guidelines C++	40 mins
Day 10			
Session 1	Security Testing	Develop Security Test Cases	30 mins
		OWASP ZAP Demo	
Session 2	Operations and Maintenance	Continuous Integration/Continuous Deployment Tools	40 mins
Doubts Clarification			

Training Requirements:

1. Participants should be well-versed in the SDLC lifecycle phases. Participants having a minimum of one year working experience in software development are preferred for nominations and having knowledge in the following programming languages HTML, JavaScript, and Python programming are desirable.

2. Participants may use their own laptop with Ubuntu 20.04 Operating System for carrying out lab exercises during the training program. Before the commencement of the training program, participants will be provided with an installation manual for prerequisites.

3. During theory and demo sessions open-source software will be used to cover the session topics and participants have to submit lab assignments and a case study after the training program. In a few topics, demos will be given based on trial versions or subscription-based commercial software.

4. Participants will be encouraged to participate in interactive sessions to clarify doubts after the training program.

5. Participants will be given online access only to the course material and virtual lab environment for 3 months and they may opt to appear for the certification examination as and when the exam is scheduled.

6. The training program fee is Rs 5900/- (including taxes) and is non-refundable. For the certification examination, a separate fee of Rs.1000/- (including taxes) has to be paid during examination registration.

7. For participants from **Academic Institutes** and **Startups only**, the registration fee for training is Rs 3540/-(including taxes). No fee for certification examination (Applicable before July 31, 2025).

8. The training program fee has to be paid as per the below particulars (Note:- Fee will be refunded only if the training program is cancelled due to administrative reasons)

Name of the Organization	Centre for Development of Advanced Computing(C-DAC)
Bank Name	Bank of India
Branch	Shamshabad, Hyderabad
Account Number	566310110004393
IFSC Code	BKID0005663

9. Participants attending the training program and those who submit the lab exercises and assignments will be considered to have participated in the training program. Such participants only will be given a Participation Certificate.

10. A certification examination (NOT included in the training program) would be conducted by CDAC Hyderabad and IIT Bhilai on designated days and locations or online periodically. The participants who have registered for the certification examination must attain a minimum of 65% (with 30% weightage for assignments and case studies and 70% weightage for the certification examination). Participants who register, and fulfill the above criteria will be given a Professional Certificate.

For more details about the program format please visit https://ssdlcp.in/page.php?id=3

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