QuickStart to PCI Compliance for Developers - TT8160

Empower developers to confidently secure payment data, master PCI compliance, and build applications that exceed industry security standards.

Duration: 1 Day
Skill Level: Introductory
Available Format: Instructor-Led Online ; On Public Schedule

This **Quick Start to PCI Compliance for Developers** course is a practical, skills-focused program designed to help experienced developers confidently navigate the essentials of PCI DSS compliance. Through a mix of engaging discussions, real-world examples, and light hands-on labs, participants will learn how to integrate secure coding practices into their workflows to protect sensitive payment card data. Key topics include understanding PCI requirements, encrypting data securely, validating user input, and testing applications for compliance. By the end of the day, developers will have actionable skills to build and maintain PCI-compliant applications, ensuring robust security for payment transactions while meeting industry standards.

What You'll Learn

Overview

This **Quick Start to PCI Compliance for Developers** course is a practical, skills-focused program designed to help experienced developers confidently navigate the essentials of PCI DSS compliance. Through a mix of engaging discussions, real-world examples, and light hands-on labs, participants will learn how to integrate secure coding practices into their workflows to protect sensitive payment card data. Key topics include understanding PCI requirements, encrypting data securely, validating user input, and testing applications for compliance. By the end of the day, developers will have actionable skills to build and maintain PCI-compliant applications, ensuring robust security for payment transactions while meeting industry standards.

Objectives

This course combines engaging instructor-led presentations and useful demonstrations with light hands-on labs and engaging group activities. Throughout the course you'll learn how to:

- **Understand PCI DSS Fundamentals.** Gain a clear understanding of PCI DSS requirements and their application to secure software development.
- **Implement Secure Data Encryption.** Learn how to use encryption techniques and cryptographic libraries to securely protect sensitive payment card data.
- **Apply Input Validation Techniques.** Master input validation practices to defend against vulnerabilities like SQL injection and cross-site scripting in applications.
- **Test Applications for Compliance.** Develop the ability to conduct vulnerability assessments and secure code reviews to ensure PCI DSS compliance.
- **Integrate PCI Compliance into Development.** Learn strategies to incorporate PCI compliance into the development lifecycle and adapt to changing requirements.

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

Audience

This course is designed for experienced developers who want to enhance their skills in building secure, PCI-compliant applications. It's perfect for those already familiar with software development who need a practical understanding of PCI DSS requirements and secure coding practices. Whether you work on backend systems, web applications, or data handling, this course provides actionable skills to confidently meet industry standards.

Pre-Requisites

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- Basic Programming Knowledge: Familiarity with a programming language such as Java, Python, or C#, including working with libraries and handling data.
- Understanding of Web Application Development: Experience in building or maintaining applications, including handling input/output and interacting with databases.
- Awareness of Security Concepts: Basic knowledge of encryption, hashing, and secure data handling principles, even if not applied hands-on before.

Agenda

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We'll collaborate with you to tune this course and level of coverage to target the skills you need most. Topics, agenda and labs are subject to change and may adjust during live delivery based on audience skill level, interests and participation.

Morning Session (9:00 AM - 12:00 PM)

1. **Introduction to PCI Compliance**
   - Understand the purpose and importance of PCI DSS in protecting payment card data and its relevance to developers.

2. **Understanding PCI DSS Requirements**
   - Identify and interpret the 12 PCI DSS requirements, with a focus on those applicable to secure coding and application development.

3. **Lab 1: Encrypting Payment Card Data**
   - Apply encryption techniques to securely store payment card data, adhering to PCI DSS guidelines.

Afternoon Session (1:00 PM - 5:00 PM)

4. **Secure Development Practices**
   - Learn to integrate secure coding practices into the software development lifecycle to mitigate risks and ensure compliance.

5. **Lab 2: Input Validation for Secure Code**
   - Implement input validation techniques to prevent vulnerabilities like SQL injection and cross-site scripting, improving application security.

6. **Testing and Validation for PCI Compliance**
   - Explore tools and methods for identifying and addressing vulnerabilities to ensure applications meet PCI DSS requirements.

7. **Maintaining Compliance in Evolving Environments**
   - Develop strategies for maintaining PCI compliance as applications and regulatory requirements evolve.

8.   Wrap-Up and Q&A
- Review key takeaways, clarify any remaining questions, and identify resources for continued learning and application of PCI DSS principles.

Related Courses

TT8120   Web Application Security Essentials: Understanding OWASP Risks and Fixes That Really Work

Setup Made Simple! Learning Experience Platform (LXP)

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our "easy access, single source, no install required" online Learning Experience Platform (LXP), remote lab and content environment. Access periods vary by course. We'll collaborate with you to ensure your team is set up and ready to go well in advance of the class. Please inquire about set up details and options for your specific course of interest.

For More Information

Please contact us or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.