

# Web Application Security with SDL

Learn via: **Classroom**

Duration: **3 Days**

## **Overview**

The course gives an insight into secure software design, development and testing through Microsoft Secure Development Lifecycle (SDL) with a focus on web application security. It provides a overview of the fundamental building blocks of SDL, followed by design techniques to apply to detect and fix flaws in early stages of the development process of web applications.

Dealing with the development phase, the course gives an overview of the typical security relevant programming bugs in web applications. In this it follows the OWASP Top Ten, but also introduces some client-side issues tackling Javascript security, Ajax and HTML5.

Attack methods are presented for the discussed vulnerabilities along with the associated mitigation techniques. Introduction of different security testing methods is followed by the effectiveness of various testing tools. Participants can understand the operation of these tools through a number of practical exercises by applying the tools to the already discussed vulnerable code.

## **Prerequisites**

There are no prerequisites for this course.

## **Who Should Attend**

Project managers, software developers, architects and developers.

## **What You Will Learn**

- Understand basic concepts of security, IT security and secure coding
- Get known to the essential steps of Microsoft Secure Development Lifecycle
- Learn secure design and development practices
- Learn about secure implementation principles
- Learn client-side vulnerabilities and secure coding practices
- Learn about XML security
- Learn about denial of service attacks and protections
- Understand security testing methodology
- Get sources and further readings on secure coding practices

## **Outline**

- IT security and secure coding
- Introduction to the Microsoft® Security Development Lifecycle (SDL)
- Secure design principles
- Secure implementation principles
- Client-side security
- XML security
- Denial of service
- Secure verification principles
- Principles of security and secure coding
- Knowledge sources