Security in ASP.NET Applications

Course code: GOC3314

Who is the course forThe course is designed for developers, administrators and architectss of web applications on ASP.NET platform
Required skillsExperience with .NET Framework platform
Basic experience with object orientated programming in C# or VB.NET language
Basic experience with development of web application on ASP.NET platform

Teaching methods Instructor-led classroom training with a lot of hands-on labs.
Teaching materialsHands-on lab hand out, printed materials

Course outline Four basic principles of security
Four basic principles of security
A bit of theory on the beginning

Consideration of types of security threats
Revealing of connected problems
Consideration of serioussness of security threats

Ensuring of server platform

Minimization of attack surface
Security Configuration Wizard
Fight against inner enemy
Defence into the depth
Encoding the configuration sections

Ensuring the channel of net communication

How does HTTP protocol work and why is not secure
How does SSL/TLS/HTTPS work
How to apply for web server certificate and how to install it
Quick creation of certificate using the utilities from SDK Platform
Operation of certification authority using Windows Certificate Services
Operation of certification authority using OpenSSL (on the Windows platform and not just there)

Ensuring the application

Identification, authentication, authorization
Security archtectures of web application
Accessible mechanism in IIS
How to write your own authentication modul and why not to do it

Forms Authentication in ASPNET
Authentication tickets and their validity
The time of ticket validity versus the lenght of session
Cookie and Cookieless authentication
Login Controls
Static credentials in web.config
Single sign-on within one domain

Saving of passwords

Encoding, hashing, HMAC
E-mail address verification

GOPAS®

Solving of forgotten password
ASPNET Membership
Membership providers in ASP.NET
Initial setting
ASP.NET Universal Providers
Use of provider of the third party
Creation of your own membership provider

ASPNET Roles

Roles of providers in ASP.NET
Creation of your own role of provider

Ensuring the data by encoding

Secrets, ciphers and paranois in the course of time
Symetric and asymetric encoding, combinations
Handling with keys
Practical implementation of encrypted saving of data in .NET using RSA and AES algorithm and corresponding architectures

Affiliate	Duration	Course price	ITB
Praha	3	12 300 Kč	30
Brno	3	12 000 Kč	30
Bratislava	3	540 €	30

The prices are without VAT.

Course terms

Date	Duration	Course price	Type	Course language	Location
25.02.2025	3	540 €	Online	CZ/SK	GOPAS Bratislava online
25.02.2025	3	12 300 Kč	Online	CZ/SK	GOPAS Praha online
14.04.2025	3	540 €	Presence	CZ/SK	GOPAS Bratislava prezenčne
12.05.2025	3	12 300 Kč	Presence	CZ/SK	GOPAS Praha
04.06.2025	3	540 €	Online	CZ/SK	GOPAS Bratislava online
04.06.2025	3	12 300 Kč	Online	CZ/SK	GOPAS Praha online

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