



Hamarosan kezdünk...

Biztonságos programozás haladóknak
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2016



Biztonságos programozás haladóknak 13. nap

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A wide-angle photograph of a busy city street, likely in London, during the "golden hour" of sunset. The sun is low in the sky, creating a strong, warm glow and long shadows. On the left, a grand, light-colored stone building with classical architectural features like arched windows and a balcony with a Union Jack flag is visible. A street sign on the building reads "GENT STREET W1". A red traffic light is visible in the foreground. In the center, a large, dense crowd of pedestrians is walking across the street. On the right, a white building features a Starbucks logo and a red awning. A red flag with the word "Superdry" is visible in the crowd. The overall atmosphere is one of a bustling, historic urban environment.

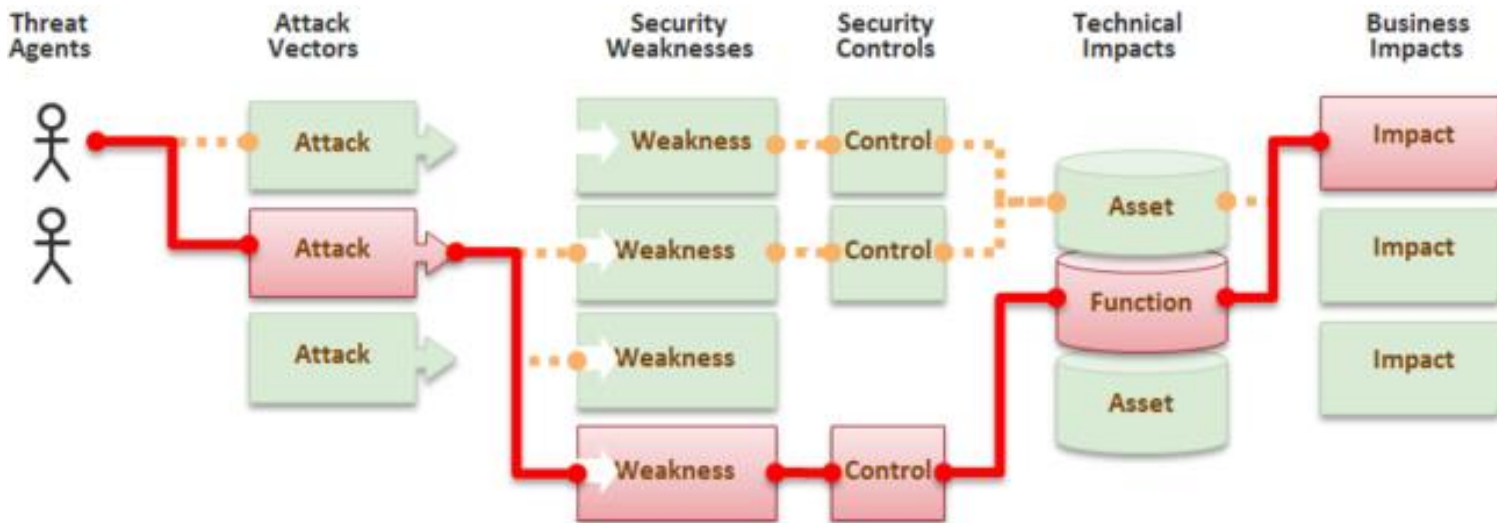
Java Security

OWASP TOP 10

- Open Web Application Security Project
 - Worldwide not-for-profit charitable organization focused on improving the security of software
 - an open community dedicated to enabling organizations to develop, purchase, and maintain applications that can be trusted
- www.owasp.org

- Raise awareness about application security by identifying some of the most critical risks facing organizations
- First released in 2003
- Current version released in 2013
- Can be used by organizations started with security

Application Security Risk







Java Security

SPRING SECURITY

What is Spring Security?

- Integrated with Servlet API
- Integrated with Spring MVC
- Provides solutions to protect against hacker attacks (session fixation, CSRF etc.)
- Provides a JSP taglib
- Web socket support

What is Spring Security?

- Supports wide range of authentication models and technologies
- Supported authentication technologies:
 - JAAS
 - LDAP
 - Form-based
 - HTTP Digest
 - Kerberos
 - Etc.

Why not Java EE standard?

- Servlet API security and/or JAAS
- NOT portable
- lot of work to configure
- lacks important features/support of de-facto standards out-of the box
- out of scope



Java Security

SECURITY RULES

Tips for Java security

- Limit access to your classes, methods and vars
- Make everything final
- Don't depend to package scope
- Avoid inner classes
- Make classes uncloneable
- Make classes unserializable/undeserializable
- Secure app configuration (XML, database, etc.)
- Validate data
- Review code

Tips for Application security

- Grant DB permissions carefully
- Always set root password (never keep empty)
- Never hardcode username/password into Java program/property file
- Use prepared statements

Tips for Application security

- Enable SSL
- Disable BACK button
- Disable after more than 3 unsuccessful login attempts
- Use POST instead of GET
- Alert when hits from a given IP exceeds a specified limit
- Perform client side validation as well
- Never store sensitive information in hidden fields
- Update login passwords periodically

Tips for Application security

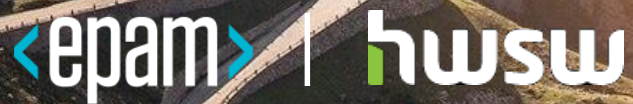
- Never keep important information in a log file
- No „execute” permission in upload directory
- Avoid passing session id in URL
- Check size of files/arrays before processing
- Set proper session timeout



Szünet, Hamarosan folytatjuk

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Köszönöm a figyelmet!

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