

IT Security

Application Security & SDLC

by Bjoern Kimminich

Curriculum 2nd Semester

1. Open Web Application Security Project (OWASP)
2. Injection
3. XSS
4. Authentication Flaws
5. Authorization Flaws
6. Cryptographic Failures
7. Insecure Dependencies & Configuration
8. Software & Data Integrity Failures
9. Secure Development Lifecycle

Schedule

- Tuesdays, 09:15 - 11:45
- 9 lectures (03.08. - 28.09.20)
- 🧐 100% via ZOOM (invite distributed via email/calendar)


Test Exam


- CW40 (90min)
- ??:?? - ??:?? / Audimax
- ⚠️ Covers topics from both semesters
- ❌ Adjourning the exam is discouraged

System Requirements

To perform the exercises on your private computer you need

- either [Node.js](#) (16.x, 14.x or 12.x)
- or [Docker](#)


 *On the university computers Node.js should already be available. You can verify this by running `node -v` on the command line. It should display a 12.x (or higher) version.*

 *You can always fall back to your personal laptop for the exercises as it should be free from virtualization, proxying or installation hurdles!*

Recommended Resources

- OWASP: [OWASP Top 10 - 2021](#)
- OWASP: [OWASP Cheat Sheet Series](#)

Literature Recommendations (*optional*)

- Kimminich: [Pwning OWASP Juice Shop](#), 2022
- Stuttard, Pinto: The Web Application Hacker's Handbook 2, 2011
- Zalewski: The Tangled Web: A Guide to Securing Modern Web Applications, 2011
- Zalewski, Heiderich: Tangled Web - Der Security-Leitfaden für Webentwickler, 2012
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Awesome Web Security

Curated list of Web Security materials and resources.

<https://github.com/qazbnm456/awesome-web-security>

