



Poznan University of Technology
Faculty of Computing and Telecommunications

michal.apolinarski[at]put.poznan.pl

Course: Application Security – laboratories

Lecturer: Michał Apolinarski, Ph.D.

Topic: Security audit – white-box approach (code review)

Duration (on site): 270 min.

PREREQUISITES:

Knowledge of computer networks, operating systems, cryptography. Knowledge of programming languages, basic knowledge of penetration tests.

GOALS:

- The aim of the class is to security audit in a **white-box approach** of your / your colleagues' / open-source software to find any vulnerabilities that results in access gain to unauthorized operations and malfunction.
- Preparing a report of the performed tasks.

INSTRUCION (tasks for a group of max 2 persons):

1. Like in the previous class as the target of security audit choose:
 - a. custom application developed and shared by your colleagues' during this course,
 - b. open-source application from previous classes of this course,
 - c. your own applications (if you don't have above options).
2. In white-box approach you have access to apps components – analyze internal structures in search of potential security vulnerabilities, malfunctions or design failures.
3. Use the knowledge you have gained about the application and run the selected penetration tests again (using Kali Linux or other tools) and own manual tests as in previous classes.
4. Prepare and send to the lecturer a report of performed tests (positive and false), results and your analysis.



REPORT:

- Should include a title page with full details of the student, course and exercise being reported.
- Should be carefully edited and provide evidence of the completion of all exercises confirmed by screenshots, answers and conclusions.
- Complete report should be send to the lecturer.