# **Encryption**

## Exercise 5.1 ( > / 2 / 1 / 1 )

- 1. Split into working groups of 3 or 4 students
- 2. Each group is assigned one of the topics (by consensus or randomization) described on the following slides
- 3. Every group prepares a digital presentation of 15-20min on their topic
- 4. At least 2 days before the presentation a PDF export of their slides is sent to bjoern.kimminich@nordakademie.de
- 5. All groups present their topic to all their classmates who can ask questions afterwards

### **Presentation Format**

- 15-20min presentation
  - o every group member has to present for at least 5min
- 5-10min Q&A

### **Presentation Topics**

- 1. WEP **FMS** & Chopchop
- 2. WPA2  $\neq$  KRACK
- 3. PGP  $\neq$  EFAIL
- 4. SSL/TLS ≠ POODLE & DROWN
- 5. BitLocker  $\neq$  TCG Opal
- 6. PDF ← Breaking Encryption & Signatures
- The links provided are some documentation/specification (if publicly available) as well as vulnerability research papers. Each group is supposed to gather additional references as needed.

### **Presentation Structure**

- 1. Introduction of the protocol/system
- 2. Explanation of the attack(s)
- 3. Mitigation of the attack(s)
- 4. Recommendations or related information
- i Please provide a list of sources referred to in the presentation as the final slide.

### **Timeline**

- Tue, 17.11.2020 (today)
  - Group building & topic assignment
- Sun, 06.12.2020 (+3 weeks)
  - All PDF-exported presentations delivered to bjoern.kimminich@nordakademie.de
- Tue, 08.12.2020 (+2 days)
  - All groups present their topics between 09:15 and 11:45