

Secure Software Engineering Lab

Lab 1: Security Requirements

Institute of Software Security (E-22)

1. Objectives

Apply the knowledge acquired in the lectures on the following areas of software security:

- Elicitation of security goals.
- Elicitation of security requirements.
- Elaboration of misuse and abuse cases.
- Security specification patterns (KAOS).

2. Tasks

1. **Read and discuss the “Metaverse Case Study”.**
2. **Elaborate on the functional requirements of the Metaverse.**
 - Use the “user stories” template.
 - Leave quality attributes like privacy and security out of your analysis at this stage.
3. **Elaborate the security goals of the Metaverse.**
 - Identify the assets from the user stories.
 - Conduct a harm analysis.
 - Identify avoid goals.
 - Identify achieve goals.
4. **Identify potential security threats to the Metaverse.**
 - Identify potential attackers of the system.
 - Elaborate misuse cases and extract security requirements.
5. **Elaborate security goals and anti-goals using the KAOS specification patters.**

3. Materials

Case study, lecture slides, lab slides, and the “user stories” template.