Workshop 2

Security Risk Modelling
Workshop 2 Input
Scenario given during Workshop 1

- Solution of Workshop 1
  - Context and assets description
  - Descriptions of four most important / most severe security risks
  - Description of security countermeasure which mitigate the selected four risks

- Four modelling languages
  - Security risk-oriented BPMN
  - Security risk-aware Secure Tropos
  - Security risk-oriented misuse cases
  - Mal-activities for security modelling
Workshop 2 Input

Scenario given during Workshop 1

- Solution of Workshop 1
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- Four modelling languages
  - Security risk-oriented BPMN
  - Security risk-aware Secure Tropos
  - Security risk-oriented misuse cases
  - Mal-activities for security modelling

Goal of Workshop 2

- Apply modelling languages for model security threats and their mitigation
1. Create security risk management model using security risk-oriented BPMN

- Model should consists of
  - **Context and asset** model,
  - **Security risk model**, showing how security risk harms assets and negate security criteria
  - **Security countermeasure model** showing how the security risk is mitigated
Tasks and Steps

1. Create security risk management model using security risk-oriented BPMN
   - Model should consists of
     • Context and asset model
     • Security risk model, showing how security risk harms assets and negate security criteria
     • Security countermeasure model showing how security risk is mitigated

2. Explain what you were not able to model using the security risk oriented BMPN
Tasks and Steps

3. Create security risk management model using security risk-aware Secure Tropos

- Model should consists of
  - **Context and asset** model,
  - **Security risk model**, showing how security risk harms assets and negate security criteria
  - **Security countermeasure model** showing how security risk is mitigated
Tasks and Steps

3. Create security risk management model using security risk-aware Secure Tropos
   - Model should consists of
     • Context and asset model
     • Security risk model, showing how security risk harms assets and negate security criteria
     • Security countermeasure model showing how security risk is mitigated

4. Explain what you were not able to model using the security risk-aware Secure Tropos
Tasks and Steps

5. Create security risk management model using security risk-oriented misuse cases

- Model should consists of
  - **Context and asset** model
  - **Security risk model**, showing how security risk harms assets and negate security criteria
  - **Security countermeasure model** showing how security risk is mitigated
5. Create security risk management model using security risk-oriented misuse cases
   - Model should consists of
     • Context and asset model
     • Security risk model, showing how security risk harms assets and negate security criteria
     • Security countermeasure model showing how security risk is mitigated

6. Explain what you were not able to model using the security risk-oriented misuse cases
Tasks and Steps

Context and assets

Security Risk.\textit{i} \hspace{1cm} Security Risk.\textit{ii} \hspace{1cm} Security Risk.\textit{iii} \hspace{1cm} Security Risk.\textit{iv}

Security Counter-measures.\textit{i} \hspace{1cm} Security Counter-measures.\textit{ii} \hspace{1cm} Security Counter-measures.\textit{iii} \hspace{1cm} Security Counter-measure.\textit{iv}

7. Create security risk management model using Mal-activities for security risk management

- Model should consists of
  - Context and asset model
  - Security risk model, showing how security risk harms assets and negate security criteria
  - Security countermeasure model showing how security risk is mitigated
Tasks and Steps

Context and assets

Security Risk.  

Security Counter-measure.

8. Explain what you were not able to model using the Mal-activities for security risk management

7. Create security risk management model using Mal-activities for security risk management – Model should consists of:
   - Context and asset model
   - Security risk model, showing how security risk harms assets and negate security criteria
   - Security countermeasure model showing how security risk is mitigated
Tasks and Steps

9. Prepare report with the answers to the above tasks

10. Participate in the team work
   – attend lectures/seminars on the 25 March and 8 April;

11. Start and continuously maintain the **Team management plan**
   – it should be included as a part of your report

12. Record **3-5** minute presentation;
   – (highly recommended) participate in the lecture/ seminar on the 15 April; participate in the presentation discussions
Submission

• Submit report as the PDF file using Upload function in the course Website

• Email the link to presentation to rma@ut.ee with the email Subject: [SSD-workshop2]

Submission deadline:
23:59, 14 April 2021