IS_12: Security Exploits Graph Modelling Dashboard

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Project description:
An attack vector exploiting a system vulnerability to gain acccess may be modelled by a graph of nodes and edges. A node may represent a computational endpoint or digital device while an edge may represent the exploit channel between two nodes. In this project, we are making use of an existing open source graph utility. The scope of the project is to enhance the graph modelling dashboard as follows: 1) Node editing function - CRUD, properties etc. 2) Edge editing function -CRUD, properties etc. 3) Graph viewing function - rotation, zoom in / out 4) Graph manipulation - drag and drop, selective focus etc.

Keywords for the project: Security exploit, system network, graph model, graph dashboard

Prerequisites for the project: Be able to analyze and modify existing source code

Final deliverable(s) for the project:
Tested graph modelling software with dashboard, ITP final report

Is the company willing to provide space for the students to work on their premises?: Yes

Additional information: