Site: The Virtual Learning Environment

Course: Security and Risk Management August 2022 (SRM\_PCOM7E August 2022)

Glossary: Module Wiki

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## **Process for Attack Simulation and Threat Analysis (PASTA)**

The Process of Attack Simulation and Threat Analysis (PASTA) is a risk-centric threat modeling methodology co-founded in 2015 by VerSprite CEO <u>Tony UcedaVélez</u> and security leader Marco M. Morana. Organizations all over the world, like GitLab, are adopting PASTA as their internal threat modeling standard because of its risk-centric approach, collaborative tendencies, evidence-based threat intel, and focus on the probability of each attack. PASTA allows for collaboration between developer and business stakeholders to truly understand your application's inherent risk, its likelihood of attack, and the business impact if there was a compromise.

## **Security Frameworks**

Artifacts for an Integrated Risk Management for an International Bank Settings (IRMIS) PRM and PAM have been designed in order to design and construct process models offering a solution to the study topic. According to Barafort et al., a Design Science Research methodology was used in this study. The authors have complied with the requirements of ISO/IEC 3300414 for creating PRMs and PAMs for the Build portion of the Design Science Research approach. Additionally, a transformation process was applied. This procedure is a systematic method for designing PRMs and PAMs that is based on goal-oriented requirements engineering methodologies. It consists of the following nine steps, which are all detailed in Barafort et al:

- Determine simple sentences We used the word "requirements" in a group of assertions (in Barafort et al.). When referring to the numerous ISO standards that we have chosen for our research, we use the term "statements" interchangeably.;
- Structure and organise the statements;
- Identify and group the shared goals based on those statements;
- Determine the consequences of the shared purposes, factor them in, and link them to the associated goals;
- assemble activities into a practise and link it to the corresponding results;
- Assign each technique to a particular level of capability;
- Results and process explanation