Abstract

Security Requirements prioritization is one of the important Processes in the Software engineering, which aims at identifying and prioritizing the most crucial security requirements for the software project. In order to systematically perform this activity, many approaches have been introduced so far. Despite of the functionalities offered, these techniques have got certain pitfalls imbibed in them such as inefficient and inappropriate requirement gathering prioritization and hike in the specified project budget that leads to degradation in the software quality and security. So there is an imperative need for the efficient solution to overcome them. Thus In this paper, we have proposed a new methodology to prioritize the software security requirements generation process. This methodology improves the security in software applications of the business environment by gathering the properly processed requirements, identifying the vulnerabilities and their corresponding threats. Thus, it leads to the reduction in the estimated budget of the software application along with the security implication.

References

- Alexander IF, “Modeling the interplay of conflicting goals with use and misuse cases”. In:
A Novel Framework for Security Requirement Prioritization

Proceedings of the 8th international workshop on requirements engineering: foundation for software quality (REFSQ’02), Essen, Germany, 2002.

- Sindre G, Opdahl AL, “Eliciting security requirements by misuse cases”. In proceeding 37th Conference Techniques of Object-Oriented Languages and Systems, TOOLS Pacific 2000, pp 120-131.
- The Standish group, Chaos. Standish Group Internal
A Novel Framework for Security Requirement Prioritization


- Tom Olzak” A Practical Approach to Threat Modeling”, March 2006.

Index Terms

Computer Science Software Engineering

Keywords
