Homework Exercise One

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Topic: Available methods for finding security issues in software

Research question: What combination of methods for finding software security

issues are the most effective?

Security issues in software can lead to security breaches by hackers, which usually lead to data loss or corruption, denial of service issues, and especially, privacy issues [2]. These can cause severe financial, material and credibility problems for the company organisation under attack [2], not to mention the potentially damaging effect it could have for investors, related companies / organisations, and citizens/consumers. A study of data security breaches showed that issues can reduce customer trust in the affected company / organisation, while positively affecting competitors [5]; this allows for the extortion of companies / organisations, especially by competitors. The number of security issues, especially for financial software, has increased [3], potentially raising concerns about customer finances. "Effective" means finding as many issues as possible while minimising the use of resources (such as time and money).

Bibliography (NOTE: Not formatted)

2. QUALITY SOFTWARE & SECURITY TESTING AND ITS IMPACT ON SOFTWARE PRODUCT, <https://search-proquest-com.helicon.vuw.ac.nz/docview/1721566667/fulltext/C388CAFEDB6E4D5CPQ/1?accountid=14782>

3. Finding More Than One Worm in the Apple, <http://dl.acm.org.helicon.vuw.ac.nz/citation.cfm?doid=2622628.2622630>

5. Trust considerations on attitudes towards online purchasing: The moderating effect of privacy and security concerns, <http://www.sciencedirect.com.helicon.vuw.ac.nz/science/article/pii/S0148296309001933?via%3Dihub>