

SOEN 6611 - WINTER 2015

Extracting and Linking Attributes

Assignment #2

Part 1

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Team

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Goals and Questions

Quality Attribute- **Security**

1. Is vulnerability to virus attacks dependent on suspicious extensions?

It is important for a manager to know if prevention of suspicious plug-ins/extensions downloads makes Chrome more secure. Our outcome measure of quality will be the number of reported virus issues as a result of plug-ins/extensions. Our direct measure of quality will be the change in number of viruses introduced with use of blocking IO v/s use of non-blocking IO. Controlling measures such as prevention of coding mistakes and increasing code reviews can be used to control the confounds. Our conjecture is that providing secure coding and ethical hacking training to developers and performing thorough code reviews will confound virus attacks decreasing the negative effect of extensions on security. Ultimately we will test the hypothesis: Downloading suspicious plug-ins induces viruses.

Quality Attribute- **Security**

2. Is vulnerability to virus attacks dependent on the OS being used?

It is important for a manager to know the extent of security with different operating systems. Our outcome measure will be the number of virus issues reported for each operating system. Our direct measure will be the number of pop-up windows opened v/s pop-up windows blocked per operating system. Also, the change in the number of non-https web pages blocked v/s non-blocked non-https web pages per operating system used. Controlling measures like intense unit testing and code reviews that include JavaScript execution and encrypting the html being retrieved and displayed can be used. By using built-in protection in chrome, we can prevent a webpage from being rendered inside another webpage commonly called as site wraps. Ultimately we will test the hypothesis: The probability of virus attacks is different for different operating systems.

Quality Attribute- **Performance**

3. Does the priority of the issues (of a particular category) affect the resolution time and rate?

It is important for a project manager to know if the resolution of the issues was quick, as it directly affects time and cost. Our outcome measure of quality will be time spent on issues, and number of issues resolved of a particular category and priority. Purpose of finding the response time, would help find out the number of issues pending as per priority, success rate in resolving issues on time especially high priority issues. Our direct measure will be the response time in resolving issues as per priority and type, and number of issues resolved in comparison to open issues during a particular time frame. This would help us put a framework to set a timeline for resolving issues effectively. Controlling measures would be to address high priority issues first, and more effort. Also, we can save effort of resolving similar type of issues multiple times and reduce the chances of similar kind of reported issues. Finally, we will test the hypothesis: Effectiveness of resolution of issues reported is higher in case of high priority issues than others.