



CSE 403

Lecture A

Prioritizing Bugs

http://www.ericSink.com/articles/Four_Questions.html

<http://blog.cardbox.com/2005/12/02/the-0th-rule-of-bug-assessment/>

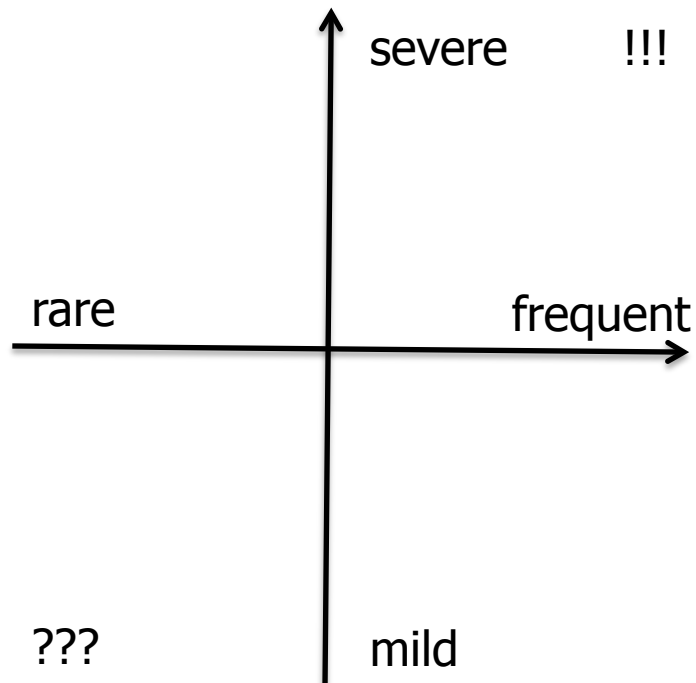
<http://michaellant.com/2010/05/25/a-simple-agile-defect-management-process/>

Four questions to ask (Sink)

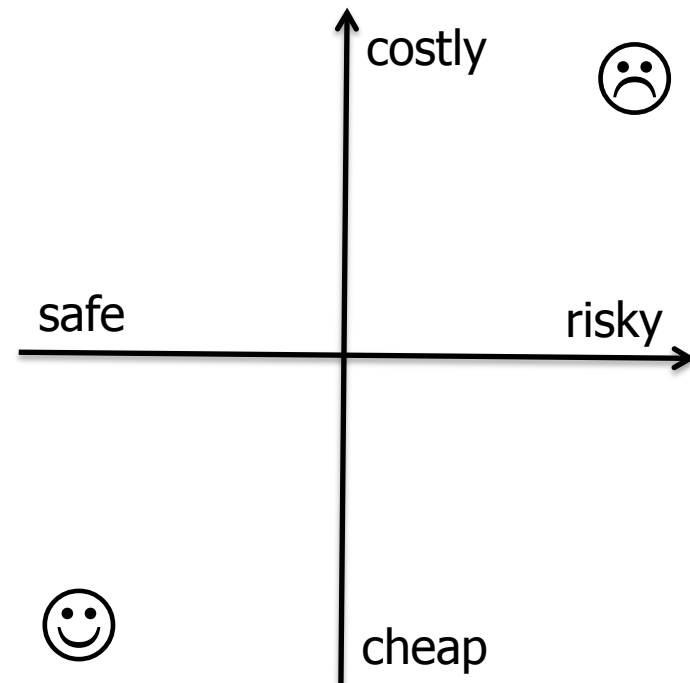
1. "(Severity) – when this bug happens, how bad is the impact?"
2. (Frequency) – How often does this bug happen?"
3. (Cost) – How much effort would be required to fix this bug?"
4. (Risk) – What is the risk of fixing this bug?"

Customer vs. Developer (Sink)

- Customer
 - Severity & Frequency



- Developer
 - Cost & Risk



0th question (Cardbox)

- **“Question 0. Do you know exactly what is causing the bug, and how?”**
 - If the answer is No, do not rest until the answer is Yes.
- The 0th law of bugs is that **most bugs, most of the time, do their damage invisibly.**
- It follows that Rule 0 of quality control is **If you see something go wrong, drop everything and find the underlying bug. If the problem disappears before the bug is found** (for instance, if a modification elsewhere in the program makes it go away), **then panic.”**

Scope vs. Severity (Lant)

- “Scope: How many users are affected or how much of the system is affected
- Severity: How critical is the defect i.e. data loss, data corruption, cosmetic issues, etc...”

Scope (Lant)

Value	Guideline
5	Affects most or all users and/or a very larger range of system functionality
4	Affects a large set of users and/or large range of system functionality
3	Affects a moderate set of users and/or moderate range of system functionality
2	Affects a small set of users and/or a small range of system functionality
1	Affects a minimal set of users and/or a very small range of system functionality

Severity (Lant)

Value	Guideline
5	Data loss, data corruption or system unavailable
4	Important functionality is unavailable with no workaround
3	Important functionality is unavailable but has a reasonable workaround
2	Secondary functionality is unavailable but has a reasonable workaround
1	Cosmetic issues or some functionality unavailable but has a simple workaround

Priority Matrix (Lant)

Scope	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5

Severity

Priority

- Critical
- Serious
- Moderate
- Low