

Frequently Asked Questions

Influential Bug Reporting Workshop, Worqference 2022

What is a Bug?

- Anything that causes an unnecessary or unreasonable reduction of the quality of a software product. – Dr. Cem Kaner
- Bug is anything about the product that threatens it's value. - James Bach & Michael Bolton

What is the difference between bugs, faults, failure, defect, etc.?

- Fault - Mistake in the Code
- Failure - Misbehavior caused by the fault
- Error - Something wrong with the product
- Critical Condition - Data value or environment condition or step to reveal the problem
- Defect – Issue with a Legal Implications. Generally used in lawsuits
- Symptom - Behavior that suggests underlying problem

What is a Bug Report and Why is it important?

- Tester's primary work product
- It is often seen by people outside testing group and helps bridge visibility with the non-testing group.
- People notice and remember it!
- Decides (and influences) quality of communication
- Tool to sell the programmer to spend their:
 - Time
 - Energy

What is a Typical Bug Workflow?



What are the Common Challenges in Bug Reporting?

- Balancing Time between Improving our understanding and communication of our findings v/s Finding new bugs.
- Deal with conflicts of interest among stakeholders?
- Present problems to people under stress and pressure?
- How to preserve our Credibility and Integrity.

What is Quality?

Quality has multiple definitions and viewpoints associated to it, However, for the sake of simplicity we would use the three popular definitions:

1. Conformance with requirements - Philip Crosby
2. Quality is Fitness for Use! - Joseph Juran
3. Quality is value to some person. - Jerry Weinberg

Quality is multidimensional and testers cannot assure quality.

Recommended Reading: [Testers: Get Out of the Quality Assurance Business « Developsense Blog](#)

What is RIMGEA?

RIMGEA is a popular bug reporting mnemonic coined by Dr. Cem Kaner. It helps to report bug clearly, rationally, and impartially!







RIMGEA - Bug Reporting Mnemonic

✓ R - Replicate It	★ Try to see if you can replicate the bug!
● I - Isolate It	★ Try to limit the steps or the conditions that trigger the bug.
● M - Maximize It	★ Try to do follow-up steps to see if you can trigger a worse failure.
● G - Generalize It	★ Try to broaden the extent of the bug.
● E - Externalize It	★ Try to see the value/impact in other stakeholder's perspective.
● A - And say it clearly and dispassionately	★ Try to have bug reports easy to understand and neutral in nature.


































What are some common Bug Handling related Judgements & Decisions?



Bug Handling, Judgement, & Decisions

 Tester	Should I report this bug? awkwardness? minor issue?	
	Raise all similar as one? or Different?	
	How much time should I spent on analysis & reporting?	
	Should I appeal the deferral of this bug?	
	Critical Lesson:	If you're going to fight, win!
Programmer	Should I fix this bug or defer it?	
 Project Manager	Should I defer / approve this bug?	
	Do I / Programmer know what the underlying problem is?	
	Do we know if there are risks? Can I trust the programmer?	
 Test Lead	Should I make an issue about this bug?	
	Should I raise it to senior management?	
	Is my team treated with respect in the process?	
	Are the defferals due to weak bug reports by my team?	
 Customer Service, Marketing Team	Should I ask the project manager to reopen the bug?	
	Should I support the tester this time?	
	Should I spend time trying to figure this thing out?	
	Will this require extra work on the help / support / etc.?	
Director / VP	Should I override the project manager's deferral of this bug?	

What are some of the typical fields in a bug report?

 Typical Fields in a Report	
 Problem Summary	 One liner description
	 Most important part of the report
	 Use a "Failure - When" structure
 Release Number	
 Product (or Component) Name	
 Version (Build) Identifier	
 H/W & S/W Configuration(s)	
 Report Type	 Coding Error
	 Design Issue
	 Documentation Issue
	 Suggestion, Change Request
 Is the Bug Reproducible?	
 Severity	
 Priority	
 Problem Description 	 1 Describe the problem first
	 2 List step by step path to failure
	 Number the steps
	 Highlight failure points
	 3 Explain what should have happened
 4 List the environmental variables that are not covered in the bug reporting form.	 Any specific pre-conditions
	 Add Additional Conditions
  Suggested Fix	
 Customer Impact	
 Status	
 Comments	
 Anticipated Loss	