# Reporting and Analyzing Bugs

Chapter 5 - TCS

#### Point of View

- The point of writing Problem Reports is to get Bugs fixed
- ☐ Effective report:
  - Explain how to reproduce the problem
  - Analyse the error so you can describe it in a minimum number of steps
  - Complete, easy to understand, nonantagonistic (đối lập, tương phản)

## Key idea

- Write problem reports immediately
  - As soon as you run into a problem in the software, fill out a Problem Report form

## Content of the Problem Report

- ☐ TCS Book page 66
- ☐ Tools:
  - Bug tracking
  - Teamtrack

PROGRAM	RELEASE	VERSION
REPORT TYPE (1-6)	SEVERITY (1-3)	ATTACHMENTS (Y/N)
1 - Coding error 4 - Documentation 2 - Design issue 5 - Hardware	1 - Fatal	If yes, describe:
2 - Design issue 3 - Haraware		
3 - Suggestion 6 - Query	3 - Minor	
PROBLEM SUMMARY		
CAN YOU REPRODUCE THE PROBL	EM? ( <i>Y/N</i> )	
PROBLEM AND HOW TO REPRODU	CEIT	
	Old 1.1	
14		
SUGGESTED FIX (optional)		
- Coptionary		
REPORTED BY		D. 180
CLI OKTED B1		DATE//_
ITEMS BELOW ARE FOR	USE ONLY BY THE DEVELOPMENT TE	IAM
FUNCTIONAL AREA	ASSIGNED TO_	
COMMENTS		
COMMENTS		(b)
		19
COMMENTS		35)
		16.
STATUS (1-2) 1 - Open 2 - Closed RESOLUTION (1-9)	RESOLUTI	PRIORITY (1-5)
STATUS (1-2) 1 - Open 2 - Closed RESOLUTION (1-9)	RESOLUTI	
STATUS (1-2) 1 - Open	RESOLUTI 7 - Withdrawn by reporter 8 - Need more info	PRIORITY (1-5)
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STATUS (1-2) 1 - Open 2 - Closed  RESOLUTION (1-9) 1 - Pending 4 - Deferred 2 - Fixed 5 - As designed 3 - Irreproducible 6 - Can't be fixed	RESOLUTI 7 - Withdrawn by reporter 8 - Need more info	PRIORITY (1-5)
STATUS (1-2) 1 - Open 2 - Closed  RESOLUTION (1-9) 1 - Pending 4 - Deferred 2 - Fixed 5 - As designed 3 - Irreproducible 6 - Can't be fixed	RESOLUTI 7 - Withdrawn by reporter 8 - Need more info	PRIORITY (1-5)
STATUS (1-2) 1 - Open	RESOLUTI 7 - Withdrawn by reporter 8 - Need more info 9 - Disagree with suggestion	PRIORITY (1-5)
STATUS (1-2)  1 - Open	RESOLUTI 7 - Withdrawn by reporter 8 - Need more info 9 - Disagree with suggestion	PRIORITY (1-5) ON VERSION DATE _/_/_

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REPORTING &
ANALYZING BUG

#### Content

- Problem report number
- Program
- Version identification: Release and Version
- Report type
- Severity (độ nghiêm trọng)
- Attachments
- Problem summary
- Can you reproduce the problem

## Content (cont.)

- Problem and how to reproduce it
- Suggested fix
- Reported by
- Date
- Functional Area
- Assigned to
- Comments
- Status
- Priotity
- Resolution or Resolution Version
- Signatures
- Treat as deferred

## Characteristics of the problem report

- ☐ Written (viết ra)
- Numbered (đánh số)
- ☐ Simple (đơn giản)
- □ Understandable (dễ hiểu)
- □ Reproducible (có thể tái hiện)
- ☐ Legible (rõ ràng)
- Non-Judgmental (không phán quyết)

## Analysis of reproducible bug

- To make your report more effective in the future
  - Find the most serious consequences
  - Finding the simplest and most general conditions
  - Finding alternate paths to the same problem
  - Finding related problems