fit@hcmus

Software Testing

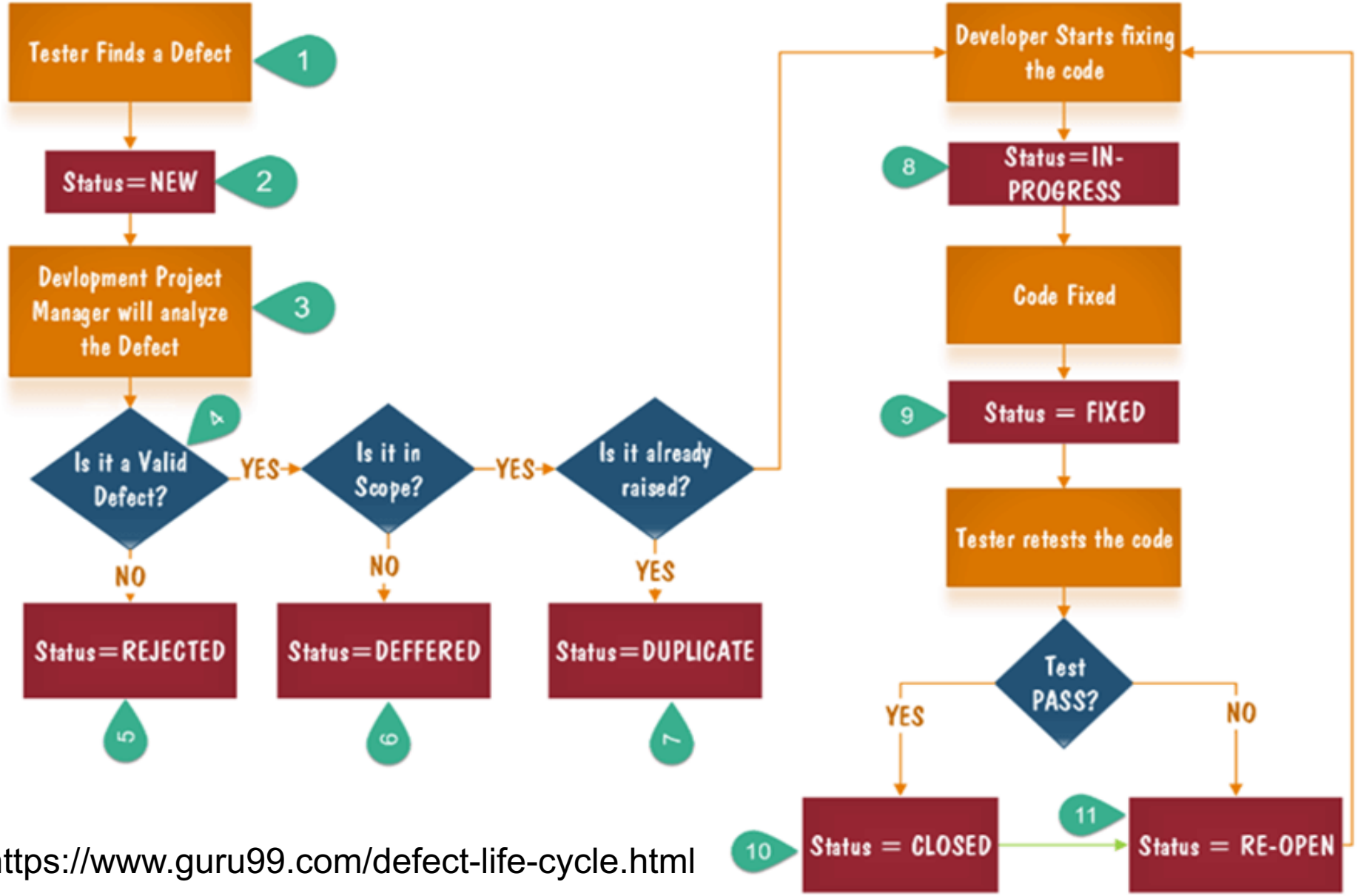
CSC13003

Test Report

Content

- Bug/Defect Life Cycle
- Bug/Defect Report
- Test Summary Report

Bug Life Cycle



https://www.guru99.com/defect-life-cycle.html

Bug Report

- A detailed document about how the bug was found
- "*The point of writing a problem report (bug report) is to get bugs fixed*"
  - By Cem Kaner.

Bug Report Essentials

1. Bug ID
2. Function name
3. Problem summary
4. How to reproduce it
5. Reported by
6. Date
7. Assign to
8. Status
9. Priority
10. Severity

1. Bug ID

- Unique identification number for the bug
- Bug ID is different from Test case ID

2. Function name

- The function in which the bug was found
- Example:
  - Login
  - Logout
  - Account list
  - Add account
  - Delete account

3. Problem summary

- Summary about the problem
  - **Test Objective + Actual result (vs. Expected result)**
- Example:
  - There is no error message when account exists
  - The room price is wrong when check-in date is equal to check-out date

4. How to reproduce it

- Detailed steps along with screenshots with which the developer can reproduce the defects
  - **Test steps + Expected result + Actual result**
- Example:

Description

Environment: iPhone 6s / Chrome Web Browser version 52.0

Steps to Reproduce:
1. Open Chrome
2. Navigate to "https://www.google.com"
3. In the top right, click Gmail
4. In the top right, click Sign In

Expected Behavior: User is directed to the Sign In screen
Actual Behavior: User receives a 521 error (screenshot attached)

5. Reported by
   - Name/ID of the tester who report the defect
6. Date
   - Date when the defect is reported
7. Assign to
   - Name/ID of the developer who will fix the defect
8. Status
   - New/ Closed / Reopened
   - Rejected/ Deffered/ Duplicate / In-progress/ Fixed

9. Priority

- Priority is related to defect fixing urgency

Defect Priority	Description
Immediate (Critical)	The defect need to be fixed **immediately** or in **01 day** because it may cause great damage to the product
High	The defect should be fixed within **02-04 days** because it impacts the product's **main features**
Medium	The defect should be fixed within **05-08 days** because it causes **minimal** deviation from the product requirement
Low	The defect will be fixed later because it has very **minor** affect the product operation

10. Severity

- Describe the impact of the defect on the application

Defect Severity	Mô tả
Fatal	The defect cause **great damage** to the product. Ex: system crash, lost data
Serious	The defect impacts the product's **main features** Ex: User can delete comment without login
Medium	The defect causes **minimal** deviation from the product requirement Ex: The GUI of the website does not display correctly on mobile devices
Cosmetic	The defect has very **minor** affect the product operation Ex: Incorrect tab order, no default focus, missing short key…

Bug Report Characteristics

- Written
- Numbered
- Simple
- Understandable
- Reproducible
- Legible
- Non-judgmental

How to reproduce the defect

- Record all test steps
  - Keyboards and mouse activities
  - Screen capture

Bad Bug Report

- Isn’t filed at all
- Is filed via email
- Contains no specific information
  - **”It does not work!”**

    ➔ "Error 404: Access denied"
- Just reports the symptom
  - **"I just clicked and it crashes**”

  ➔ “Error 404: Page not found when clicking the Export button”

Bad Bug Report (cont.)

- Unknown or unclear environment/platform
  - “**Windows**”

  ➔”Windows 7, Google Chrome 20.0.1132.47m”
- Uses adjectives instead of numbers
  - "**System is really slow**”
  - ➔ “System does not response after 3s but 5m
- Uses judgment
  - “**Error message is stupid**”

  ➔ “Error message is unclear”

Test summary report

- Summarize test activities and results
  - Summary
  - Test Case result report
  - Defect Report
  - Open point

Test summary report

- Statistics bug/defect by functions

TEST REPORT

Project name	<Project name>	**Reviewer**	<Reviwer>
Creator	<Creator>	**Approver**	<Approver>
Note			

Test Coverage: **46%**
Successful Test Coverage: **33%**

Date: <yyyy/mm/dd>

No	Items	Tested	Passed	Failed	Blocked	Skipped	Not Yet Tested	Total	Tested Coverage
1	Function 1	23	15	5	3	7	18	48	48%
2	Function 2	26	20	4	2	10	22	58	45%
3									
4									
5									
	Total	**49**	**35**	**9**	**5**	**17**	**40**	**106**	

Test summary report

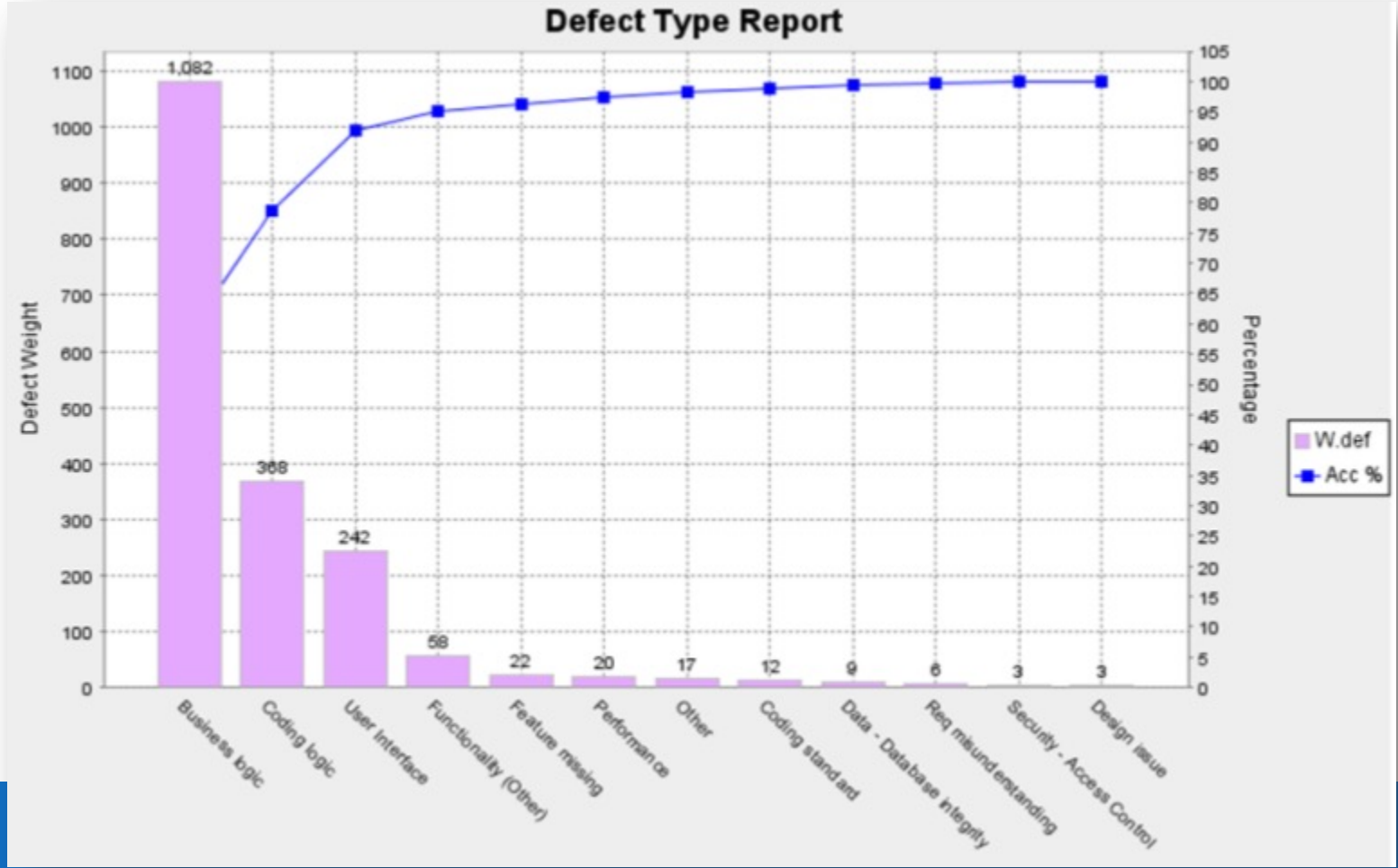
- Statistics by Defect Type

Defect Type	Fatal	Serious	Medium	Cosmetic	Total (W.def)	%
Business logic	1	9	332	31	1082	58.7
Coding logic	1	2	112			
Coding standard			4			
Data - Database integrity			3			
Design issue			1			
Feature missing						
Functionality (Other)			18			
Other			5	2	17	0.9
Performance		2	3	1	20	1.1
Req misunderstanding			2		6	0.3
Security - Access Control			1		3	0.2
User Interface			30	152	242	13.1
Total	**2**	**13**	**517**	**206**	**1842**	**100**

- Requirement workshop
- Review code
- Prototype designer
- Coding convention

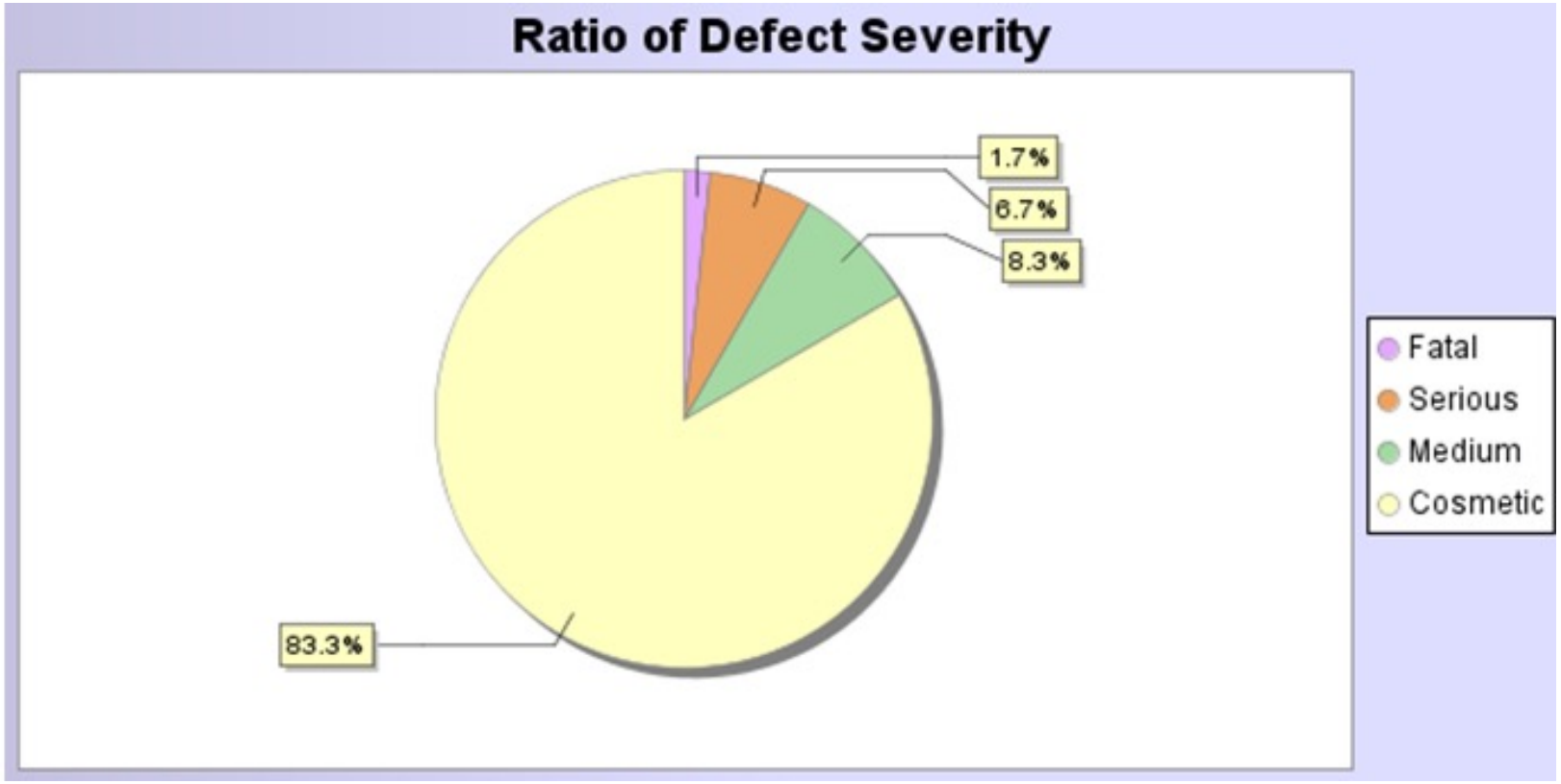
Test summary report

- Statistics by Defect Type



Test summary report

- Statistics by Defect Severity



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