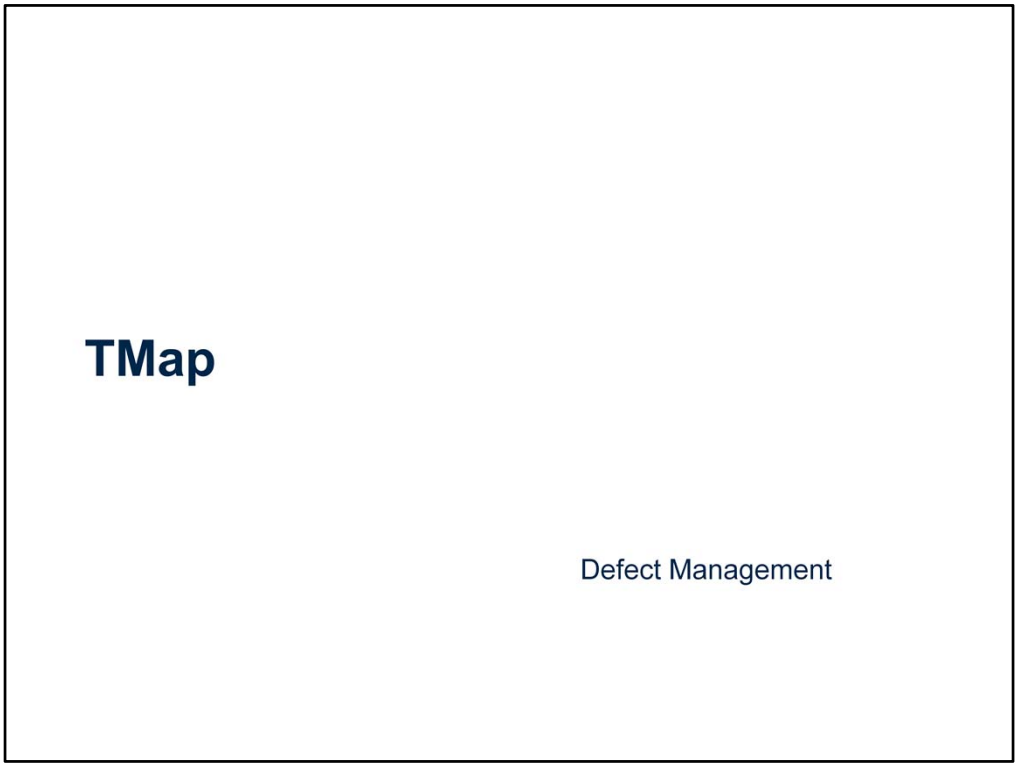
TMap
Defect Management

Lesson Objectives

- Introduction
- Defect Life Cycle
- Defect Documentation
- Mandatory Defect Test
- Non Mandatory Defect Test

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 2

16.1 Introduction

- A defect is an observed difference between the expectation or prediction and the actual outcome of a test.
- Many people see the finding of defects as the purpose of testing. While it would be clear that the purpose of testing is much more, ie ; the provision of information and advice concerning risks and quality, the fact remains that finding defects is one of the most important activities of testing.

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 3

16.1 Introduction

- A defect is also termed as ‘fault’. Confusions sometimes arises concerning the various terms, such as errors, faults and failures. The below given definitions for each would identify the difference:
  - Error: Human Mistake – this action takes place prior to any faults and/or failures
  - Fault: Results from an error. Fault is the view from inside the system. Fault is the state where mistake of error exists. Developers will see the fault
  - Failures: When the system is performing differently from the required behavior, from a viewpoint outside the system.

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 4

16.1 Introduction

Purpose of Defect Management

- The purpose of defect management may vary.
- The purpose of defect management for your project or organization can be:
  - Operational support for solving and retesting defects
  - Give input for status and progress reports
  - Give input for the release advice
  - Each defect can also be the trigger for development process improvement - what was the reason that the defect occurred and can we prevent the defect from occurring in the future

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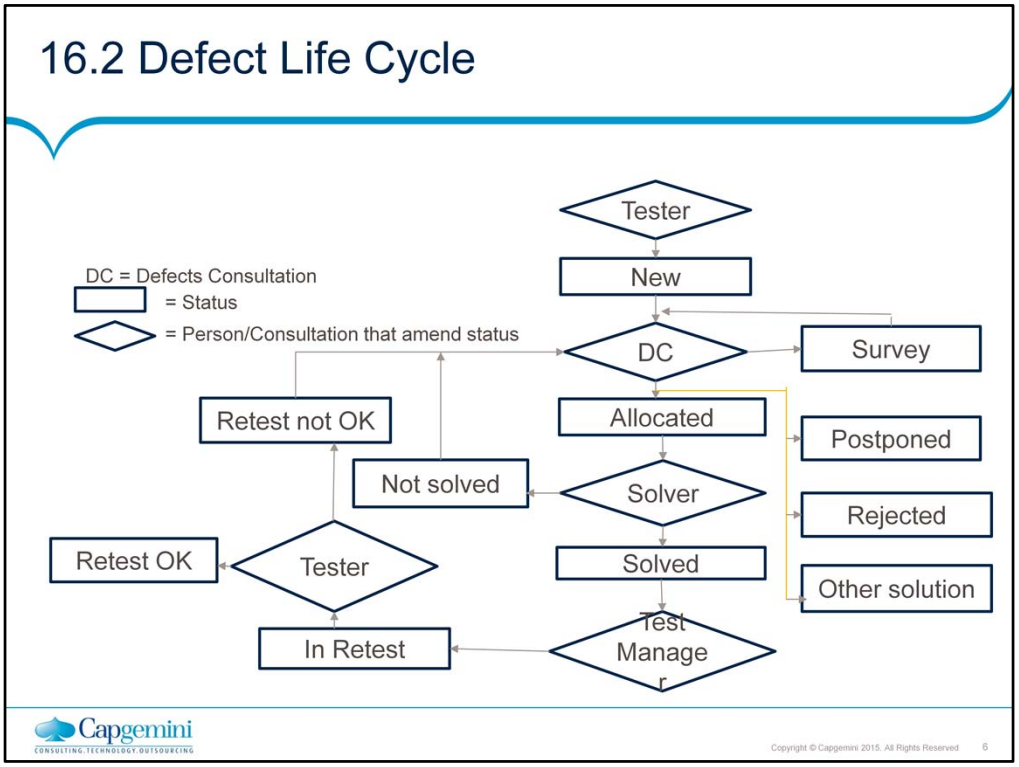
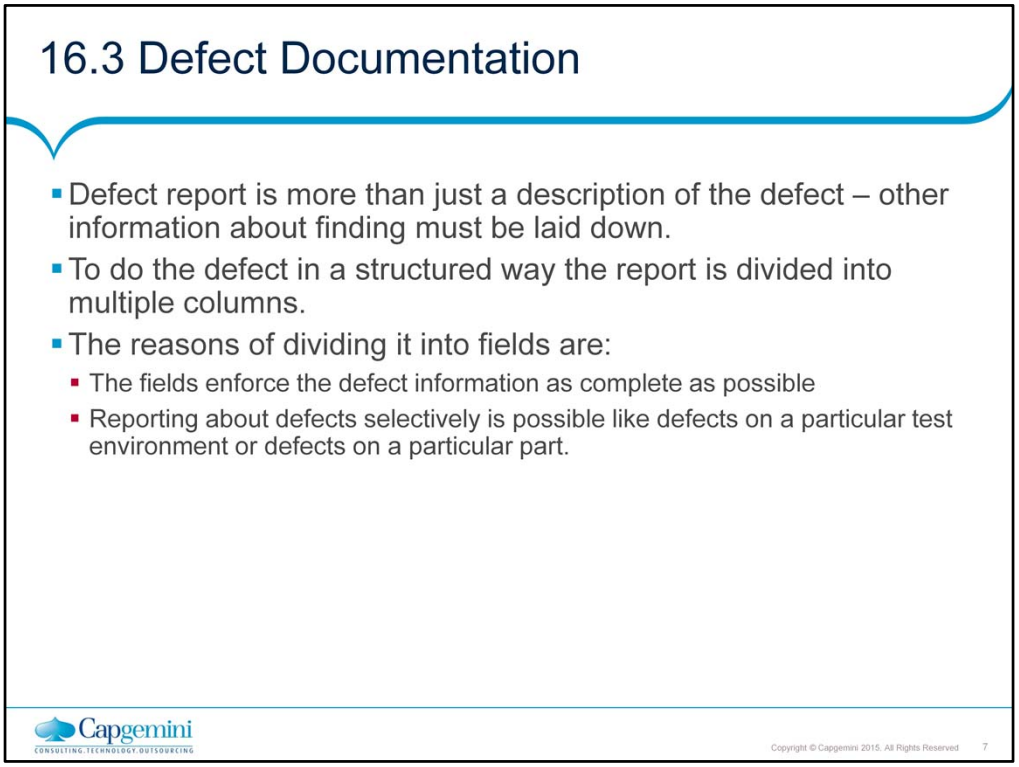
 5



The rectangle shows the status of defect.
The diamonds refer to the actors.
The line in yellow(dotted line in usual cases) from “postponed” to “allocated” means that the defect is postponed in the current release, but should be solved in future release

Status Definition
New: Potential defect that is raised and yet to be validated.
Assigned/Allocated: Assigned against a development team to address it but not yet resolved
Rejected: A defect can be rejected for any of the 3 reasons; duplicate defect, not a defect, Non Reproducible
Postponed: If the defect is of not high priority it is kept for solving in the next release
Other Solution: To check if there is a work around to the existing defect
Defect Consultation: This is where the validity of the defect is determined. The process consist of a survey of the previous defects and similar defects of the system and a status is assigned.



Defect Reports are maintained with excel sheet , database packages or there are various freeware or commercial tools available.

16.4 Mandatory Fields

- Project: The name of the project
- Unique Identification: An ID is given to identify defects uniquely. Usually in the form of a number of the commission report
- Short Description: Describe the defect in a limited number of words
- Complainant: The name of the person who has submitted the defect
- Identification Phase/ Test Species: During which phase the defect was found like – design, development, developer test etc.,
- Severity: The category of severity of the defect proposed by tester. Severity indicates the damage to business.

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16.4 Mandatory Fields

- Priority: The priority of the defect is given i.e., how fast the defect should be solved
- Cause: The cause of the defect(according to tester) is indicated.
- Identification of Test Object: The defects test part should be mentioned in this field like – Function, Screen etc., Its optional to add more details to this field. This field can also be split to multiple fields to provide more information.
- Test Specification: a reference to the test case where the defect was identified.
- Description finding: The finding is determined according to certain set of guidelines is described as best as possible
- Attachments: if clarification or evidence is necessary

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 9

16.4 Mandatory Fields

- Solver: The name of the person who solved the defect.
- Explanation Solution: The solver gives explanation(reason for rejection) on finding the solution
- Solved Product: The product identification number including the version number is mentioned.
- Status + date: The status of the defect on a given date should ne mentioned

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 10

16.5 Non Mandatory Fields

- Test Environment Identification: The test environment identification with the output
- Identification of test basis: Name of the test basis document, including version number
- Preliminary Gravity: the severity category proposed by tester
- Provisional Priority: The priorities proposed by dissolution tester.
- Preliminary Cause: The cause of the defect found by tester.
- Quality Attributes: The quality attribute to which the defect is related as given by the tester.

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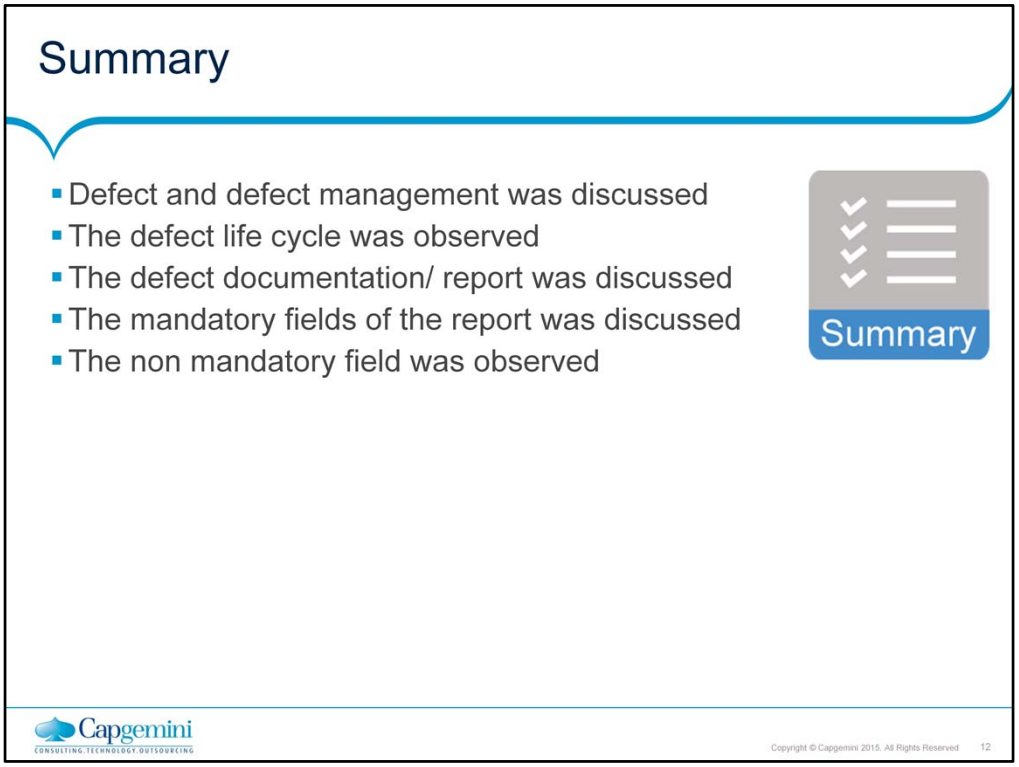
 11



Add the notes here.

Review Question

- The various terms used for defects
  - Fault
  - Error
  - Failure
  - None of the above
- The data fields can be subdivided further to give more information
  - True/False

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 13

Add the notes here.

References

- Book
  - Please Read from pg 553 – pg 566 in TMap Next

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 14