

BCS 3263 SOFTWARE QUALITY ASSURANCE

Chapter Five Software Verification

by FSKKP @ump.edu.my



Chapter Description

- Aims
 - The Verification Process
- Expected Outcomes
 - Develop a Quality Assurance plan for a software project using international standards.
- Other related Information
 - Introduces students to the concept of Software Quality Assurance (SQA) including principles, component, process, models, standards and certification of SQA.
- References
 - Mastering software quality assurance: best practices, tools and techniques for software developers / Murali Chemuturi Chemuturi, Murali, J. Ross Pub. QA76.76.Q35 C44 2011



Inspections

Ensure components ready for the next stage

Inspection
Report status
results either
pass or fail

If passed can proceed to the next step.

If failed, rectification needs to be carried.



Best practices:

1. Conducting inspections at least before system testing and acceptance testing and before delivering the software product to the customer.

2. Staffing the QA department with specialist inspectors to carry out inspections. Why!!



Audits

Audits are document verification systems in which project documents and records are compared with the organization's standards or defined processes.



They ensure that a project is being executed in conformance with the organization's defined processes and that it is ready for the next phase of execution.



Audits consist of *auditors* (the people who conduct the audit) and *auditees* (the people whose project is being audited).



Audits

Audits are conducted for the purpose of uncovering nonconformance's (NCs), if any, in a project.

If *project documents* or records show *deviations* from the process described in the *organization's defined processes*, these deviations are *treated as NCs* and project execution is considered as not conforming to the organization's defined processes.

The *output* of an audit is a *nonconformance report (NCR)*. An NCR lists all NCs uncovered during an audit.



Best practices:

AVOID "you scratch my back, and I'll scratch yours"



Conclusion of The Chapter

- Conclusion #1
 - Inspection
- Conclusion #2
 - Audit









