

# BCS 3263 SOFTWARE QUALITY ASSURANCE

Chapter Two
Quality Dimensions

FSKKP @ump.edu.my



#### **Chapter Description**

- Aims
  - Identify the Four Dimensions of Quality
- Expected Outcomes
  - Inquire a knowledge of main software quality assurance activities, their tasks, work products and their models
- 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



# **Quality Dimensions**





# **Specification Quality**



#### Functionality Aspects



**Capacity Aspects** 



**Intended Use Aspects** 



Reliability Aspects

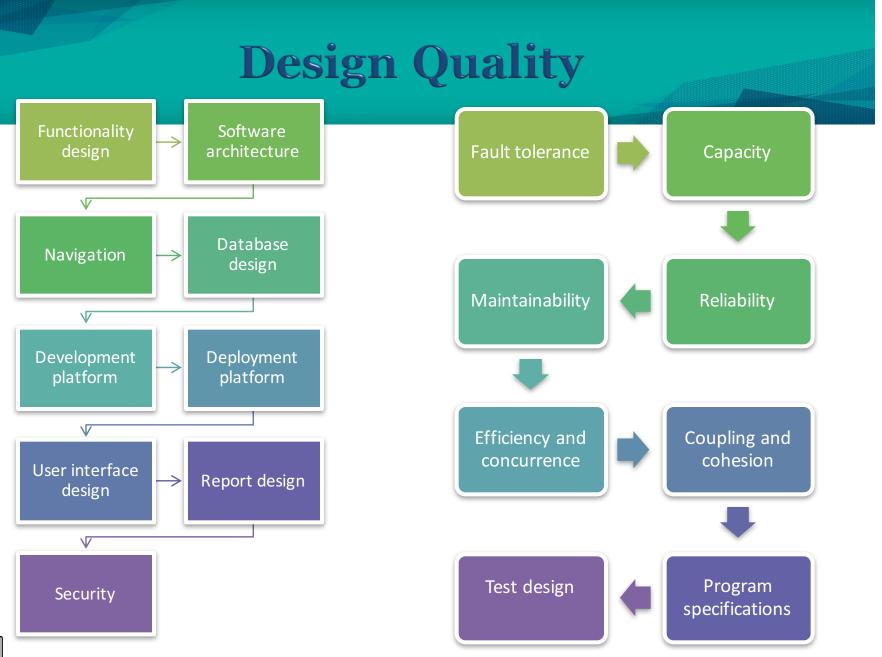


Safety Aspects



**Security Aspects** 







# **Development Quality**

Develop unit test plans.

Develop associated process routines.

Adhering to the coding guidelines of the PL:

Naming agreements,

Code formatting,

Efficiency guidelines, and

Defect prevention guidelines.



Forcing developers to write reliable and defect-free code



## **Conformance Quality**

### Ensures quality

Uncover defects

### Examines quality.. Then:

- Process documentation
- Standards and guidelines, formats, and templates
- Checklists



### Conclusion of The Chapter

- Conclusion #1
  - Specification Quality
- Conclusion #2
  - Design Quality
- Conclusion #3
  - Development Quality
- Conclusion #4
  - Conformance Quality





