

كلية الاتصالات والمعلومات بالرياض قسم الحاسب والمعلومات مقرر هندسة البرمجيات Chapter1 Homework

الفصل التدريبي الثاني للعام 1442هـ

الرقم الأكاديمي:	الاسم:

#### Q1: What is software?

Computer programs and associated documentation. Software products may be developed for a particular customer or may be developed for a general market.

#### Q2: What are the attributes of good software?

functionality performance maintainable, dependable usable.

# Q3: What is software engineering?

all aspects of software production.

#### Q4: What are the fundamental software engineering activities?

specification, development, validation evolution.

# Q5: What are the best software engineering techniques and methods?

With all software projects

# Q6: What are the software products? and who is responsible for their specification?

Generic products

**Customized products** 

the client is responsible for their specification

#### Q7: What are the Essential attributes of a good software?

Maintainability
Dependability and security
Efficiency
Acceptability

# Q8: What are the application types? support your answer with examples.

+ Stand-alone applications

Such as a PC

+ Interactive transaction-based applications + Embedded control systems such as e-commerce applications.

- + Entertainment systems
- · These are systems that are primarily for personal use and which are intended to entertain the user.
- +Embedded control systems
- · These are software control systems that control and manage hardware devices. Numerically, there are probably more embedded systems than any other type of system.
- + Batch processing systems
- These are business systems that are designed to process data in large batches.
- + Systems for modelling and simulation
- · These are systems that are developed by scientists and engineers to model physical processes or situations,
- + Data collection systems
- · These are systems that collect data from their environment using a set of sensors and send that data to other systems for processing.
- \* Systems of systems

These are systems that are composed of a number of other software systems.

Q9: When should we reuse software that has already been developed rather than write new software?

Where appropriate, you should reuse software that has already been developed rather than write new software.

# Q10: What are the good attributes of Web software engineering?

- + Service-oriented systems
- + Rich interfaces.
  - + Software reuse
- + Incremental and agile development