كلية الاتصالات والمعلومات بالرياض

قسم الحاسب والمعلومات

مقرر هندسة البرمجيات

Chapter1 Homework   الفصل التدريبي الثاني للعام 1442هـ

الاسم: ....عبدالله محمد الربيعان.. الرقم الأكاديمي: 441219721

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.

3

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

+ Service-oriented systems

+ Rich interfaces.

+ Software reuse

+ Incremental and agile development