

COMP311 Assignment 1

Questions based on Chapter 1 of *Software Testing* by Ron Patton

Instructions

Work in teams of maximum two students. Read the sample chapter handed out. Then discuss and answer the following questions together.

Marks

This assignment is marked out of 10 and count toward about 2% of your final mark.

Team

Print the names of both team members below.

1 _____ Student number _____

2 _____ Student number _____

Questions

1. Which phase in a software development process is cause of main cause for most bugs?
(1)

2. The sample chapter gives five rules for determining what is considered to be a bug in a software product. Which of the following is **not** one of those five? (1)

Hint: the wording is changed to make you think.

- a. The product does not perform some functionality required by the specification.
- b. The product offers functionality beyond what is required by the specification.
- c. The product functions in a way that is different from what is described in the specification.
- d. The product specification does not reflect the end-users needs or does not solve the problem that motivated the development of the product.
- e. The product fails to meet non-functional expectations such as performance, learnability or usability.

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3. Which one of the five rules is left out of the list of options for the previous question? (1)

4. Philip Crosby, one of the pioneers of quality assurance coined the phrase *Quality is free*. Clearly applying QA is not literally “free” because the company must pay salaries of QA professionals and testers and cover the costs of following QA and test processes.

What did Crosby mean by claiming that quality is free? (2)

5. In the example of the Y2K bug, do you think that the hypothetical programmer Dave took the wrong approach in storing years as only two-digits. If your group has divided opinions, say so. (2)

Hint: Give a brief justification that shows deeper analysis than:

“Dave was wrong because two-digit years caused the Y2K bug.”

6. Can you give other example of famous product recalls or notorious software bugs that you learned about from the news or experienced personally? DO NOT RECYCLE examples from the chapter! Present in class.

Hint: You may search the Web if you give the URL of your main reference below.

Briefly describe the problem and the impact it had on the company that produced the product and on users. If possible, apply the wisdom of hindsight to suggest how company could have prevented or reduced the impact of the problem? (3)

URL: _____