

Exam questions Group A w.6

Problem 1:

Proposition: It is a good idea to use simple methods for prioritizing requirements in generally and use more sophisticated methods only for the most critical requirements.

Reason: More sophisticated methods tend to be less cost efficient.

Correct answer: A. When it comes to prioritization requirements need different amount of attention depending on how crucial they are. To not wasted resources on less important requirements, simple methods should be used for prioritizing these since simpler methods tends to be less time consuming than the more sophisticated ones and therefore ensures to make the process more cost efficient.

Reference: PRIO, page 78.

Learning objective: 3, 4, 7

Main responsible: Johan Winér

Problem 2:

Proposition: Stating requirements as tasks & support enables multiple ratings of the same feature.

Reason: A feature may be convenient in one task and inconvenient in another.

Correct answer: B (Both the proposition and the reason are correct statements, but the reason does not explain the proposition.)

Motivation: Stating requirements as tasks & support does enable multiple ratings of the same feature due to the fact that when using tasks & support you focus on tasks put into context instead of separate features. Since different tasks may involve the same feature that feature will be rated multiple times.

The fact that a feature may be convenient in one context and inconvenient in another does not explain why tasks & support enables multiple ratings of a feature. However, the statement is true.

Reference: Lau: 7, p.304-307

Learning objective: 1, 2, 3

Main responsible: Simon Alm Liljevall

Problem 3:

Proposition: A CRUD-matrix can be used to check the correctness of the data requirements in a requirement specification.

Reason: By looking at different parts of the specification and map tasks and entity classes to each other in a CRUD-matrix, flaws in the data requirements can be identified.

Correct answer: D (The proposition is false but the reason is a correct statement)

Motivation: A CRUD-matrix is used to check for missing parts and inconsistencies in the data requirements and does not help to check for correctness in the requirements specification.

Reference: Lau: 9, p.376-379, p.386-388

Learning objective: 1,4

Main responsible: Philip Dahlström

Problem 4:

Proposition:

It is necessary to have a functional system up and running in order to perform a usability test for finding usability problems.

Reason: Usability tests is a demonstration of the system in the end of the development phase where a representative from the development team shows how the system works when it is installed at the users' computers.

Correct answer: E

Motivation: It is not necessary to have the system up and running since the usability tests often can be performed with a mockup of the GUI. Usability tests are performed during the development phase with a "user" who is presented to a mockup of the system, a "facilitator" who observes the user's interaction with the system and a "log keeper" who notes all found usability issues.

Reference: Lau 6, p. 252-253

Learning objective: 1,4

Main responsible: Christoffer Lundgren

Problem 5:

Proposition: When defining response times for a system, an average and a maximum value should always be defined as it prevents future contractual conflicts with the customer.

Reason: When writing quality requirements, it is often hard to know how good performance is needed. To overcome this, the average and maximum response time can be left open for discussion using an open target technique, and leaving it up to the supplier to define the maximum, tolerable response time.

Correct answer: E. Proposition and reason are both false.

Motivation: Open target is often good when defining quality requirements, and especially response times. However, an upper response time limit should never be stated in the requirements specification as this often leads to unnecessary high performance of the system. It is often better to restrain it to a 95 % scenario, as this greatly decreases the demanded performance, but doesn't noticeably reduce the average performance.

Reference: Lau 6, p 228-246

Learning objective: 3, 4, 7

Main responsible: Vilhelm Sjölund

Problem 6:

Proposition: When analyzing the dependencies between two requirements it is recommended to write down all the types of dependencies that can be found (AND, REQUIRES, TEMPORAL...).

Reason: Lack of information regarding the dependencies of the requirements can cause damage to the release plan.

Correct answer: D. Proposition is false but the reason is true.

Motivation: Having too many different types of dependencies at the same time will make it hard to read. The types of dependencies can be internally ordered and prioritized in a way so that most of the information is not lost even if only one of several types of dependencies is listed. E.g. if R1 has both an AND and a REQUIRES dependency to R2. The AND can be seen as them both having REQUIRES dependencies to each other. As such, having only the AND requirements will implicitly include the REQUIRES dependency.

A lack of information regarding the dependencies can cause confusion if the developers try to implement a demand that requires another demand that has not yet been implemented.

Reference: "Selected Readings in Requirements Engineering" - INTDEP

Learning objective: 3, 4

Main responsible: Axel Ulmestig