

CPRE 329 Software Project Management

Final Exam- Answer Key, Summer I 2017

Instructor: Lotfi ben Othmane

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Student name:

University ID:

Directions

- This exam is open-book, open-note and open-laptop. Internet access is not prohibited.
- Your answers need to be precise and clear.
- The exam is worth 80 points.

Question 1 (5 pts): The architecture of software is often used in time estimation. How does it contribute to accurate scheduling of projects? (ABET K)

Dependency

ASR

Quality Attributes

WBS

Technical risk

Need for training

Assignment based on developers experience

Question 2 (10 pts): Development teams do retrospective meetings differently. Some development groups tend to ignore (1) discussing feeling when it comes to reporting and (2) analyzing action points when it comes to relating and reasoning reflection levels. Give 2 negative impacts of these 2 practices on the control of project execution. (ABET K)

(1) discussing feeling when it comes to reporting

- Do not address relationship problems, negatively impacts the control of project executions by removing a major chunk of the feedback loop on the project.
- Team dynamics are affected.

(2) analyzing action points when it comes to relating and reasoning reflection levels.

- It inhibits a team's ability to make informed decisions on how to proceed in the next cycle.
- No guarantee that the problem was solved—they may have failed to address the problem
- Persisting problems are overlooked.

Question 3 (15 pts): Mismanagement of project scope leads to project failure. Name and discuss 3 techniques that you would use to manage project scope efficiently and avoid project failure. (ABET K)

Expert Judgement

Measurable objectives

Realistic goals

Do not add unnecessary features

Agreement among the stakeholders

Question 4 (15 pts): Development teams change often. Name and discuss 3 techniques that project managers employ to smooth the changes. (ABET K)

Documentation and reasons for decision

Comment code

Training

Transition -- Departing member finishes task and new member starts with easy tasks.

Communication plan

Architecture
Introduction meeting

Question 5 (10 pts): There is believe that quality of a software is the result of employing quality assurance and control processes. (a) Discuss how you employ quality assurance and control processes to deliver quality software and (b) provide your position on the statement—support your arguments with examples.

Open answer

Question 6 (10 pts): The software engineering community produced for the last 6 decades or more several techniques to estimate time for project development, including the expert judgment, three-point and parametric estimation methods. Why software developers apply the group decision-making techniques instead of these methods? Give 3 reasons or more. (ABET K)

Includes their own experience--specific to the team

Multiple perspectives

Better understanding of tasks

There is no historical data and strong experience with used technology in innovative project

Easy to practice

Existing methods are not accurate

Ownership and commitment