

MIT 850 Theory assignment 3

Hand-out date: 27 September 2016

Due date: 11 October 2016

Marks: 40

Your submission should be a pdf file which does not exceed 5 pages including the assignment cover page. You are allowed to have a 6th page for references. You should use a font size of at least 12pt.

Question 1

[20 marks]

Refer to the lecture that was presented by the guest speaker on software project management.

a. Discuss how the Scrum framework supports the four areas/aspects of software project governance: (16 marks)

- (1) Organisation: project plan, change management.
- (2) Resources: people management, time management, cost management.
- (3) Project variables: quality management, scope management, risk management, issue management.
- (4) Communication: project kick-off, project status reporting, communication management, stakeholder management.

b. The three roles of Scrum do not mention a project manager. Conduct research to answer the question: Who is the project manager in Scrum? (4 marks)

Your discussion for question 1 should not exceed **two** A-4 typed pages.

Question 2:

[10 marks]

In the paper: Augustine et al. (2005), the following six Agile Project Management practices have been identified: (1) organic teams (2) guiding vision (3) simple rules (4) free and open access to information (5) light touch management style (6) adaptive leadership.

Refer to the four areas of project governance (organisation, resources, project variables, communication) that were discussed by the guest lecturer. For each Agile project management practice listed above, identify the area(s) of governance addressed by the practice. Give reasons for your answers.

Question 3

[10 marks]

Refer to the papers: Brooks (1975), Verner et. al (1999) and Charette (2005) and do the following:

- a. For each paper, generate a list of the software project management problems (discussed in the paper) that can lead to project failures. (3 marks)
- b. Generate a list of the problems that are common to all three lists you have generated for part a (i.e. problems that persisted from 1975 until 2005). (3 marks)
- c. Select any two of the problems you have listed in part b, that you consider to still persist today and give reasons why they continue to persist. (4 marks)

Additional references:

- 1. Brooks, F.P. (1975) *The Mythical man-month: Essays on Software Engineering*, 20th Anniversary Edition, MA: Addison-Wesley. (from lecture 1)
- 2. Charette, R.N. (2005) Why software fails, *IEEE Spectrum*, Vol. 42, Issue 9, Sept. 2005, pp. 42-49. (from lecture 1)
- 3. Verner, J.M. & McCain, K.W. (1999) In 25 years since the mystical man-month what have we learned about project management? *Information and Software Technology* 41, pp1021 – 1026, Elsevier.