

MTAT.03.295 – Agile Software Development

Written exam #1

PART 1: Multiple-Choice Questionnaire (12 marks)

PART 2: Fill-in-the-blank exercises (8 marks)

PART 1: Multiple-Choice Questionnaire (12 marks)

Important: The following questions (**Q1 to Q10**) have exactly one correct answer; thus, you must check exactly one answer box. If you think that more than one answer is correct, choose the one answer that seems to be most correct/suitable/relevant.

Q1: Which of the following approaches are promoted by Agile Software Development?

- ☐ Get something quick and dirty thrown together to save time
- ☐ Get something simple up and working as quickly as possible
- ☐ Get something business-valuable delivered as quickly as possible
- ☐ Get something delivered once it has been fully documented

Q2: What should we do when the customer is not available during the elicitation of requirements?

- ☐ Make assumptions about the customer's needs
- ☐ Find a proxy of the customer
- ☐ Re-schedule the requirements elicitation meeting
- ☐ Include more team-representatives (testers, designers, ...)

Q3: What is the suggested way to write a non-functional requirement when using user stories?

- ☐ as a note on the user story
- ☐ as a task attached to the user story
- ☐ as a new user story
- ☐ as a separate document

Q4: The main propose of refactoring is...

- ☐ to decrease the number of bugs
- ☐ to decrease the lines of code
- ☐ to increase the maintainability of the code
- ☐ to increase the design quality

Q5: Which of the following is **NOT** part of the Manifesto for ASD?

- ☐ Teams and interactions over processes and tools
- ☐ Working software over comprehensive documentation
- ☐ Customer collaboration over contract negotiation
- ☐ Responding to change over following a plan

Q6: Writing User Stories is a technique to...

- ☐ Elicit requirements
- ☐ Trigger the discussion of requirements
- ☐ Document requirement
- ☐ Specify a requirement

Q7: What is the unit of measurement that is used to measure the size of a user story for an Agile project?

- ☐ Function points
- ☐ Story points
- ☐ Work breakdown points
- ☐ Velocity points

Q8: What is NOT a characteristic of a good user story?

- ☐ Value
- ☐ Negotiable
- ☐ Estimatable
- ☐ Dependant

Q9: What is the effect of having large visible project plan on a wall?

- ☐ It is a fire risk and a health hazard
- ☐ It communicates progress to the team and other stakeholders
- ☐ It is dangerous, as management will misinterpret what the team is doing
- ☐ It is useless, as it does not allow the team to innovate

Q10: Which statement best describes Scrum?

- ☐ A complete methodology that defines how to develop software
- ☐ A cookbook that defines best practices for software development
- ☐ A framework within which complex products in complex environments are developed
- ☐ A defined and predictive process that conforms to the principles of Scientific Management

PART 2: Fill-in-the-blank exercises

Q11: Figure 1 depicts the roles, artefacts, and practices typically included in Scrum. Use the items in the following list to complete the white boxes in Figure 1. The first item (A) of the list is given as an example.

Hint: There are two items that should not be used. (4 marks)

List of possible answers:

A. Scrum Team	E. Refactoring	H. Daily Scrum Meeting	K. Sprint review
B. Scrum Master	F. Sprint Planning	I. Poker planning	L. Product Backlog
C. Sprint Retrospective	G. Sprint Backlog	J. Kanban Board	M. Value Increment
D. Product Owner			

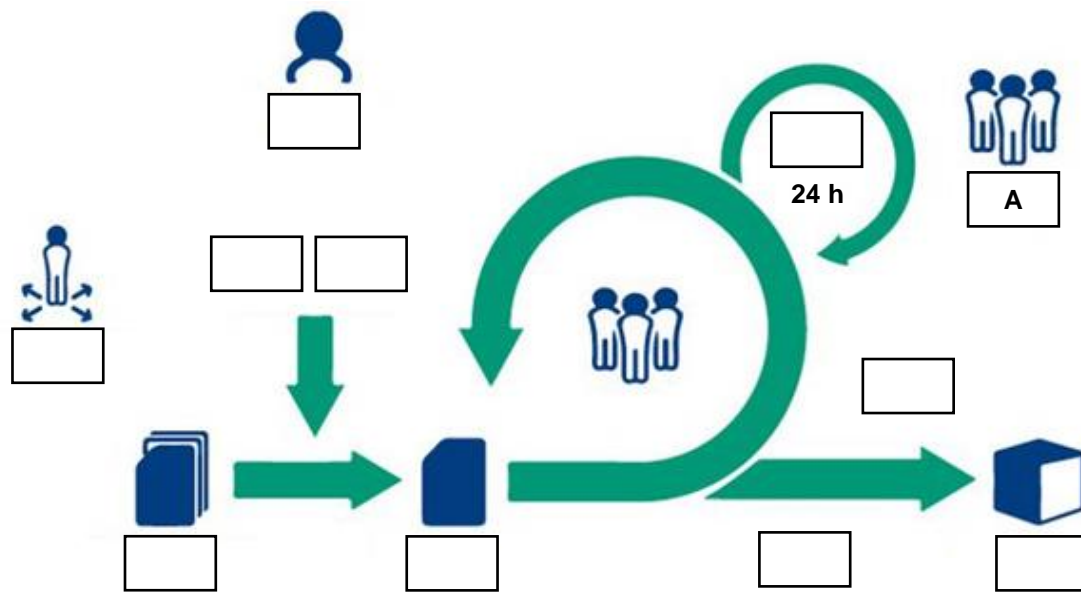


Figure 1 - Typical Scrum illustration.

Q12: For each characteristic in the following list, indicate with an "X" whether the characteristic corresponds to the **User Story Mapping** or **Kanban Board** technique. If you consider the characteristic does not correspond to any of those two, use the box "NA". Each characteristic has only one correct option. (4 marks)

Characteristic	User Story Mapping	Kanban Board	NA
A – Code refactoring			X
B – Backbone identification			
C – Ease the identification of user stories that must be split			
D – Dependencies among tasks can be easily visualized			
E – Work in Progress (WIP)			
F – The columns TO DO, IN PROGRESS, DONE are commonly present			
G – Can be used during the release planning			
H – Visualizes the workflow			
I – Ease the estimation of the size of user stories			