

MTAT.03.295 – Agile Software Development

Resit Exam – 22 January 2020

Part 1

Notes:

- This part of the exam is closed book.
- You are not allowed to communicate with anyone during the exam in any way (except with the lecturer).
- If you find that some information is inaccurate and that you need to make some additional assumptions, please write them down.
- Once you finish this part of the exam, please let me know so you can continue with the second part of the exam.

PART I: Q1-Q10 Multiple-choice questions (12 points total)

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: 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

Q2: A user story is...

- ☐ A series of interactions by the user (Actor) with the system and the response of the system
- ☐ A narrative text(s) that describe an interaction of the user with the value of from the system
- ☐ A narrative text(s) that describe an interaction of the user and the system, focusing on the value a user gains from the system
- ☐ A series of interactions by the user (Actor) with the the co-actor of the system

Q3: 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

Q4: 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

Q5: 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, ...)

Q6: 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

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: How should work be allocated to the team in an Agile project?

- ☐ The Project Leader should give tasks to individuals to create challenges for them
- ☐ Tasks should be randomly allocated using Planning Poker
- ☐ Team members should self-select tasks
- ☐ The biggest tasks should be done by the Project Leader themselves

Q9: Where are the customer requirements stored?

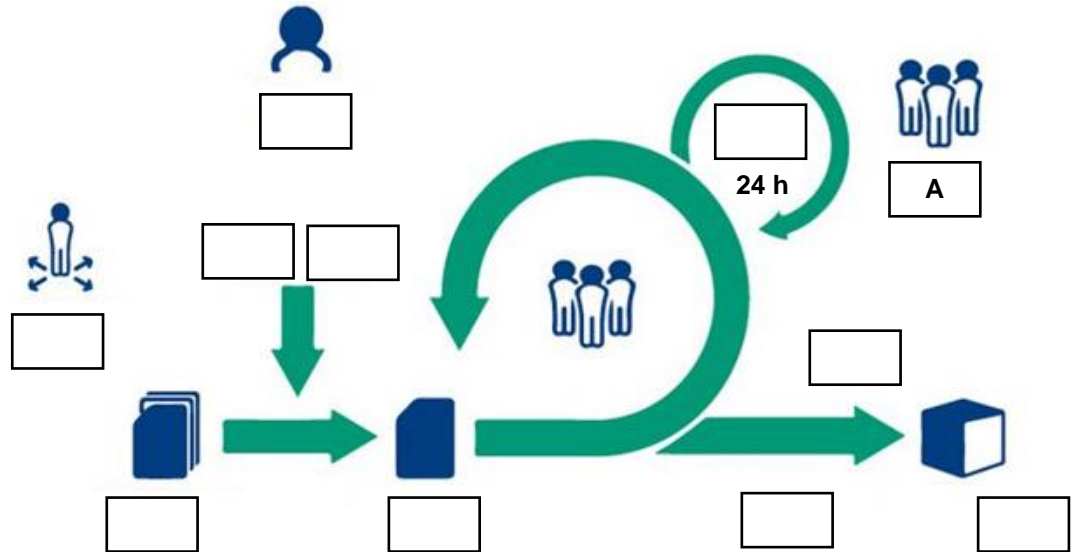
- ☐ In the Product Backlog
- ☐ In the Sprint Backlog
- ☐ In a Scrum Product Requirement Specification
- ☐ Nowhere. The Product Owner knows them

Q10: Which of the following is true of test-driven development?

- ☐ Test cases are written instead of functional code
- ☐ Test cases and working code are written by a pair of programmers, one writing tests while the other works on the functionality
- ☐ Test cases are written before writing the code for some new functionality
- ☐ Code is first written then tested thoroughly in very small units

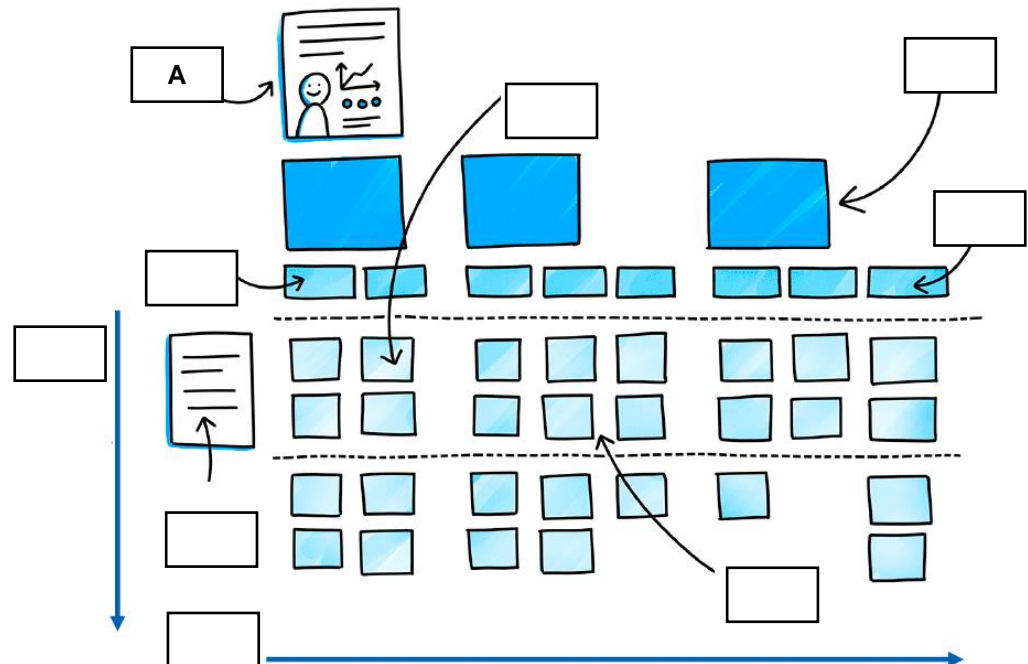
Q11: Figure 1 depicts the roles, artefacts, and practices typically included in Scrum. Use the items in the following list to complete the white boxes in Figure 1. The first item (A) of the list is given as an example. **Hint:** There are two items that should not be used. (4 points)

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



Q12: Figure 2 depicts the typical board that is created when story mapping is used, as it was studied in the lectures. Use the items in the following list to complete the white boxes in Figure 2. The first item (A) of the list is given as an example. **Hint:** There are two items that should not be used. (4 points)

- A. User
- B. User Task
- C. Backbone
- D. Details
- E. User Story
- F. Priority
- G. Time
- H. Story Point
- I. Narrative Flow
- J. Activity
- K. Release Slice



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