Agile Processes
In-Class Assessment II
2019-2020

Please read the following rules before answering the questions.
- All questions are compulsory.
- Please read the questions properly -- they may be either descriptive answers questions or multiple-choice questions.
- There may be multiple correct options for the multiple-choice questions. You need to identify the exact correct options to be awarded the full marks. Otherwise, you will be awarded zero (0) for that particular question
- Marks for each question are written towards the end of each question.
- This is an open-book assessment, and you are allowed to consult your notes during the assessment.
- Please compose your answers in any software, and save them as .PDF file.
- The .PDF file should be uploaded in the CS moodle before 18th November 2019, 9:35AM Beijing time.

Q1: Why does this course warn against using tests as a replacement for specifications? *(10 marks)*

Q2: Which of the following statements about agile methods are true? Check all that apply. *(6 marks)*
 (a) According to the XP method, documentation and code should be of primary importance.
 (b) According to the XP method, programmers and code should be of primary importance.
 (c) According to the Lean Software method, software projects are better off if they manage to get rid of "waste" (such as detailed documentation) and concentrate on things that get actually delivered to customers (e.g. code).
 (d) The Lean Software method was first applied in the construction industry.

Q3: Which of the following sentences about agile methods is true? Check all that apply. *(6 marks)*
 (a) The Crystal method tries to combine the best of Agile methods and traditional, process-oriented methods.
 (b) Kent Beck, one of the proponents of XP, suggests that contracts for software development should fix time, cost, quality, and precise scope in advance.
 (c) Scrum is the method that most organizations building software using agile methodologies have adopted.
 (d) Most of Scrum's practices are about how to write high-quality code.

Q4: Which of the following sentences reflect issues with the formulation of the agile principles? Check all that apply. *(6 marks)*

(a) Some principles are actually practices.

(b) There is some redundancy when discussing software delivery.

(c) Software testing is discussed in just one principle.

(d) Some principles are actually assertions.

Q5: What is a user story according to Scrum? *(6 marks)*

(a) A specification of what does a user wants and why.

(b) Something a user wants.

(c) A collection of pictures expressing the customer's needs.

(d) An informal chat between the customer and the developers about what the system should do.

Q6: The XP approach suggests to recognize that software is developed by people. What should the developers be offered in their working environment according to XP? Check all that apply. *(6 marks)*

(a) Safety.

(b) Belonging.

(c) An accelerated career path for those who wish to work more, especially on week-ends.

(d) Accomplishment.

Q7: What is the multiple design approach suggested by the Lean method about? *(6 marks)*

(a) Assigning the same problem to different teams, sequentially.

(b) Assigning the same problem to different teams, in parallel.

(c) Assigning different problems to different teams, sequentially.

(d) Assigning different problems to different teams, in parallel.

Q8: Which among the following are manager responsibilities in the agile approach? Check all that apply. *(6 marks)*

(a) Decide which developer should do what.

(b) Make sure team spirit is high.

(c) Encourage progress.

(d) Remove impediments.

Q9: What does XP mean by "Maintain a single code base"? *(6 marks)*
  (a) The code base should be stored on a single server.
  (b) Allow branching and merging only at predefined milestones in the project.
  (c) Avoid merging, even if permitted by the configuration management system.
  (d) Avoid branching, even if permitted by the configuration management system.

Q10: What does XP methodology mean by "continuous integration"? *(6 marks)*

  (a) Integrate the latest code and tests several times a month.
  (b) Integrate the latest code and tests several times a day.
  (c) Integrate the latest tests several times a day, the latest code several times a week.
  (d) Integrate the latest code and tests once a week.

Q11: Ideally, how long should release cycles be according to XP (Kent Beck)? *(6 marks)*
  (a) Weekly.
  (b) Biweekly.
  (c) Daily.
  (d) Monthly.

Q12 Which of the following statements appear in the twelve principles presented in the Agile Manifesto? Check all that apply. *(6 marks)*
  (a) The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
  (b) Developers and business people should work separately and have planned weekly interactions.
  (c) The most efficient and effective method of conveying information to and within a development team is to use email.
  (d) Welcome changing requirements, even late in development.

Q13 Which of the following statements appear in the twelve principles represented in the Agile Manifesto? Check all that apply. *(6 marks)*

    (a) Build projects around motivated individuals.

    (b) Customer satisfaction is the primary measure of progress.

    (c) Deliver working software frequently, from a couple of weeks to a couple of months.

    (d) Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Q14: Which of the following are typical responsibilities of the product owner according to Scrum? Check all that apply. *(6 marks)*

    (a) Product profitability.

    (b) Decide on release date and content.

    (c) Demo work results to customer.

    (d) Define product features and their priority.

Q15: Which of the following are typical responsibilities of the Scrum Master according to Scrum? Check all that apply. *(6 marks)*

    (a) Ensure that the team is productive.

    (b) Decide on release date and content.

    (c) Enforce process, including daily meeting, planning, and review meetings.

    (d) Define product features and their priority.

Q16: Which of the following are examples of "impediments" that the Scrum Master is supposed to remove? Check all that apply. *(6 marks)*

    (a) Hardware limitations.

    (b) Missing requirements.

    (c) Management interferences.

    (d) Bureaucratic delays.

    (e) Too many features in an iteration.

    (f) Missing supporting software.

    (g) Regression tests failures.