MTAT.03.306 Requirements Engineering
Mid-Term Test
November 2017

1. What are the typical project types?
   a) Customer-specific
   b) Market-based
   c) Community-based
   d) Hybrid
   e) All a to d are correct
   f) None of a to d is correct

2. Who typically writes requirements specification (i.e., document)?
   a) Procurer
   b) Selected developer
   c) Customer
   d) Bidder
   e) All a to d are correct
   f) None of a to d is correct

3. What are the major questions asked in the goal refinement?
   a) Why – to explore the higher-level goals
   b) Who – to explore the lower-level stakeholders
   c) How – to explore the lower-level goals
   d) How else – to explore alternatives
   e) All a to d are correct
   f) None of a to d is correct

4. What is cognitive bias?
   a) When expert makes accommodations to please the interviewer or some other audience
   b) Limitations on our ability to accurately observe the world
   c) Terms used to describe a problem may affect our understanding of it
   d) Mistakes in use of statistics, estimation, memory, etc.
   e) All a to d are correct
   f) None of a to d is correct

5. What is “engineering”?
   a) Application domain of cost-effective machines to practical problems, through the development of scientific knowledge
   b) Development of cost-effective solutions to scientific knowledge, through the application of practical experience
   c) Development of cost-effective solutions to practical problems, through the application of scientific knowledge
   d) Application domain of cost-effective solutions to practical problems, through the application of scientific knowledge
   e) All a to d are correct
   f) None of a to d is correct
6. What are the facets of system context?
   a) Development facet
   b) Subject facet
   c) Usage facet
   d) IT system facet
   e) All a to d are correct
   f) None of a to d is correct

7. Which observations about the RE are correct?
   a) RE is a sequential process
   g) The problem statement will be imperfect
   h) Perfecting a specification may be cost-effective
   i) Problem statement should never be treated as fixed
   j) All a to d are correct
   k) None of a to d is correct

8. What are the core activities of the RE framework by Pohl (2010)
   a) Specification, Agreement, and Representation
   b) Documentation, Elicitation, and Negotiation
   c) Goals, Scenarios, and Solution-oriented requirements
   d) Documentation, Validation, and Prioritisation
   e) All a to d are correct
   f) None of a to d is correct

9. What is a “requirement”?
   a) Things in the machine domain that are true whether or not we even build the proposed system
   b) Things in the application domain that we wish to be made true by delivering the proposed system
   c) A description of the behaviours that the machine must have in order to meet the domain properties
   d) Things in the application domain that are true whether or not we ever build the proposed system
   e) All a to d are correct
   f) None of a to d is correct

10. What should be included to requirements specification (i.e., document)?
    a) Project development plans
    b) Software system functionality
    c) Product assurance plans
    d) Software system designs
    e) All a to d are correct
    f) None of a to d is correct
11. What are the difficulties of requirements elicitation?

   a) Bias
   b) Thin spread of domain knowledge
   c) Limited observability
   d) Tacit knowledge
   e) All a to d are correct
   f) None of a to d is correct

12. What are the major interests of stakeholders?

   a) Financial interest
   b) Perspective interest
   c) Development interest
   d) Usage interest
   e) All a to d are correct
   f) None of a to d is correct

13. What elicitation techniques are cognitive techniques?

   a) Task analysis
   b) Interviews
   c) Brainstorming
   d) Card sorting
   e) All a to d are correct
   f) None of a to d is correct

14. What are advantages of background reading?

   a) Provides a rich collection of information
   b) Helps the analyst to get an understanding of the organisation before meeting the people who work there
   c) Helps quickly collect information from large number of people
   d) Measures reaction to stimulus material
   e) All a to d are correct
   f) None of a to d is correct

15. Who is the audience of requirements specification (i.e., document)?

   a) Customers
   b) Users
   c) Developers
   d) System analysts
   e) All a to d are correct
   f) None of a to d is correct
16. What is an explanatory scenario?

   a) A scenario used to explain complex system facts
   b) A scenario to understand the process operations, involved agents, triggering events, and other
   c) A scenario to explore and evaluate possible, alternative solutions in order to support the selection of one alternative solution
   d) A scenario, which aims explaining a goal, an alternative solution or a sequence of interactions
   e) All a to d are correct
   f) None of a to d is correct

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17. What are requirements mistakes?

   g) Noise
   h) Dis-ambiguity
   i) Unnecessary invention of terminology
   j) Wishful thinking
   k) All a to d are correct
   l) None of a to d is correct

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18. What is a depender in the dependency relationship

   a) An actor with a concrete, physical manifestation
   b) An actor who is depended upon on a dependency relationship
   c) A depending actor on a dependency relationship
   d) An actor around which a dependency relationship centers
   e) All a to d are correct
   f) None of a to d is correct

Slide 4-14

19. What does the project manager should control?

   a) Resources, Effort, Estimation, and People
   b) Effort, Time, Size, and Errors
   c) Risk, Time, Product, and Resources
   d) Resources, Time, Product, and Risk
   e) All a to d are correct
   f) None of a to d is correct

Slide 1-18

20. For the requirements specification to be semantically complete:

   a) everything that the software is supposed to do is included
   b) every requirement represent something required of the system to be built
   c) there exist more than one system design and implementation that correctly implements all requirements stated in the requirements specification
   d) no sections are marked "To be determined".
   e) All a to d are correct
   f) None of a to d is correct

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21. What are the structure parts of the IEEE 830-1998 standard for requirements engineering?

   a) Purpose, scope, definitions, reference model and overview
   b) Product perspective, product functions, user characteristics, constraints, assumptions and dependencies
   c) Specific requirements, appendices and index
   d) Software domain description, security requirements, domain properties, and obvious conflicts
   e) All a to d are correct
   f) None of a to d is correct

22. What are goals?

   a) Intentions with regard to objectives, properties, use of the system
   b) Documented sequences of interactions in which the system satisfies or fails to some objectives
   c) Requirements at the required level of detail, the desired properties and features of the system to be
   d) Measures of the stakeholder unhappiness if the requirements are not in the final product
   e) All a to d are correct
   f) None of a to d is correct

23. What are properties of the semantic quality?

   a) Understandability
   b) Organisation
   c) Tool support
   d) Conciseness
   e) All a to d are correct
   f) None of a to d is correct

24. What is a softgoal

   a) A goal that describes functions
   b) A goal that cannot be fully satisfied
   c) A goal that describe achieve and cease objectives
   d) A goal satisfied the tasks, which is using resources
   e) All a to d are correct
   f) None of a to d is correct

25. “Quality = Fitness for Purpose”, what following statements are correct?

   a) Software is designed for a purpose
   b) Purpose is designed for software
   c) Human activities are found in the purpose
   d) The purpose is found in human activities
   e) All a to d are correct
   f) None of a to d is correct
26. What is resource dependency?

   g) the depender depends on the dependee to bring about a certain state of affairs in the world
   h) the depender depends on the dependee to carry out an activity
   i) **the depender depends on the dependee for the availability of an entity**
   j) a depender depends on the dependee to perform some task that meets a softgoal
   k) All a to d are correct
   l) None of a to d is correct

27. What does a use case contain?

   a) **Context information**
   b) **Main scenario**
   c) **Alternative scenario**
   d) **Exceptional scenario**
   e) All a to d are correct
   f) None of a to d is correct

28. What is “subject facet”?

   a) **Objects and events that are relevant for the system**
   b) Aspects concerning the usage of the system by people and other systems
   c) **It describes how the system must store or process information about the objects**
   d) Aspects that influence the development of the system
   e) All a to d are correct
   f) None of a to d is correct

29. What is a means-ends relationship?

   a) **A relationship between an end, and a means for attaining it**
   b) A relationship used to decompose the tasks
   c) A relationship, which explains how actors depend one on another
   d) A relationship use to show how other actors contribute to the softgoal
   e) All a to d are correct
   f) None of a to d is correct

30. What are disadvantages of the group elicitation techniques?

   g) More natural interaction between people than formal interview
   h) **May create unnatural groups (uncomfortable for participants)**
   i) Requires a highly trained facilitator
   j) Nobody prepares an agenda and distributes it well in advance
   k) All a to d are correct
   l) None of a to d is correct
31. What is purposive sampling?

a) When choosing the parts (which you think are relevant) without worrying about statistical issues
b) When choosing every kth element
c) When identifying strata and sample each
d) When choosing a representative subpopulation and sampling it
e) All a to d are correct
f) None of a to d is correct

32. What is a negative scenario?

g) A desired sequence of interactions leading to the satisfaction of a set of goals associated with the scenario
h) An allowed sequence of interactions that fail to satisfy a goal or set of goals associated with the scenario
i) A forbidden sequence of interactions that fail to satisfy a goal or set of goals associated with the scenario
j) A scenario used to document the current system usage.
k) All a to d are correct
l) None of a to d is correct

33. What are the typical reasons for initiating a software system development project?

a) Competition, crisis, and etc.
b) New needs, growth, changes in business or environment, and etc.
c) Exploit of a new technology
d) Part of a previous plan, unfinished work and etc.
e) All a to d are correct
f) None of a to d is correct

34. What is an exceptional scenario?

a) A scenario, which support decision making
b) A normally executed scenario to satisfy specific set of goals
c) A scenario, which results in the satisfaction of the goals that are associated with the main scenario
d) A scenario where some goals of the main scenario cannot be satisfied because of the occurrence of the exceptional events
e) All a to d are correct
f) None of a to d is correct

35. How actors in use cases are identified?

a) Look for the users who directly use the system
b) Look for the users who need service from the system
c) Look for the hardware devices, which are needed by the system
d) Look for the users who maintain, administrate, and keep the system working
e) All a to d are correct
f) None of a to d is correct
36. In use case, what is a post condition?

a) : a person or other entity external to the software system being specified
b) the reason for and outcome of this use case
c) : the event that initiates the use case
d) list any activities that must take place, or any conditions that must be true, before the use case can be started
e) All a to d are correct
f) **None of a to d is correct**