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|  | **SOFTWARE ENGINEERING**  **SWD392 – Progress Test 2** | |
| **Testing date**:…………………… **Duration**: 45’  **Full Name:** ……………………………………….  **Account:** ………………………………………… | **Testing score (/10):**………. |
| **CODE: SWD392.PT2.02** |

# Testing notes

* Fill your answers into the ANS column.
* You are allowed to use any communicating devices (laptop, mobile phone, etc…) during the test.
* You are not allowed to discuss with classmates.

# Testing questions & answers

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| **#** | **Question & Answer Group** | **ANS** |
| 1 | What is software modeling?  (a) Developing models of software.  (b) Designing software applications before coding.  (c) Developing software diagrams.  (d) Developing software prototypes. | B |
| 2 | What is the Unified Modeling Language?  (a) A programming language for describing object-oriented models.  (b) A diagramming tool for drawing object-oriented models.  (c) A graphical language for describing object-oriented models.  (d) A standardized graphical language and notation for describing object-oriented models. | D |
| 3 | What is a software architecture?  (a) The software inside a building.  (b) The structure of a client/server system.  (c) The overall structure of a software system.  (d) The software classes and their relationships. | C |
| 4 | What is a software design method?  (a) A systematic approach for producing a design.  (b) Guidelines used to help in structuring a software system into its components.  (c) An overall plan for developing a design.  (d) A graphical or textual description of the software. | A |

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| 5 | What is a software life cycle?  (a) The life of the software  (b) A cyclic approach to developing software  (c) A phased approach to developing software  (d) The life of software developed in cycles | C |
| 6 | What is carried out during requirements modeling? (a) Functional requirements of the system are described in terms of functions, inputs, and outputs. (b) Functional requirements of the system are described in terms of actors and use cases. (c) Functional requirements of the system are described textually. (d) Functional requirements of the system are determined by interviewing users. | B |
| 7 | What is carried out during analysis modeling? (a) Developing use case models (b) Developing data flow and entity relationship diagrams (c) Developing static and dynamic models (d) Developing software architectures | C |
| 8 | What is carried out during design modeling? (a) Developing use case models (b) Developing data flow and entity relationship diagrams (c) Developing static and dynamic models (d) Developing software architectures | D |
| 9 | What for is a Use Case diagram? *(Multi-choice)*  (a) Representing the goals of system-user interactions.  (b) Represent sequence of interactions.  (c) Specifying the context and requirements of a system.  (d) Emphasize transactions in a system. | A, C |
| 10 | Which of the followings are true about the Block diagram? *(Multi-choice)*  (a) Block diagram represent full direction of elements in system.  (b) Block diagram represents main features in overview style.  (c) Block diagram includes only rectangles for features.  (d) Block diagram represents main features simply so that engineer can understand idea without read deep description. | B, D |
| 11 | Which of the followings are true about the Communication diagram? *(Multi-choice)*  (a) Communication diagram represents messages exchanged between objects in system.  (b) Communication diagram represents order of events in system.  (c) Communication diagram is another alternative of the Use Case diagram.  (d) Communication diagram is a behavioral diagram. | A, D |
| 12 | Which of the followings are true about the State diagram? *(Multi-choice)*  (a) Other names are State Machine diagram, State-Chart diagram.  (b) State diagram is used for architecture modeling.  (c) State diagram doesn’t have concept about sub-state.  (d) State diagram represents conditions of system or part of system and triggers to change conditions. | A, D |
| 13 | Which of the followings are true about the Activity diagram? *(Multi-choice)*  (a) Activity diagram illustrates workflow of activities and actions in a system or a process.  (b) Activity diagram has 2 types which are normal and swimlanes.  (c) Activity diagram is same as Communication diagram.  (d) Activity diagram is a structural diagram. | A, B |
| 14 | What can an Activity diagram be used for in use case modeling?  (a) To depict the sequence of activities executed by all the use cases in the system.  (b) To depict the sequence of external activities that the use case interacts with.  (c) To depict the sequence of active objects in a use case.  (d) To depict the activities in the main and alternative sequences of a use case. | D |
| 15 | What does the Sequence diagram depict?  (a) The sequence of external objects communicating with each other.  (b) Classes and their relationships.  (c) Software objects and the sequence of their interactions.  (d) The external objects communicating with the system. | C |

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| 16 | Which of the followings are true when compare Communication diagram with Sequence diagram?  (a) Both diagrams represent interactions between objects and actors.  (b) Both diagrams are used for architecture modeling.  (c) Sequence diagram emphasizes order of events, Communication diagram emphasizes messages exchanged between objects.  (d) Sequence diagram emphasizes messages exchanged between objects, Communication diagram emphasizes order of events. | A, C |
| 17 | Which of the followings are true about the Class diagram? *(Multi-choice)*  (a) Class diagram includes classes.  (b) Class diagram is template to create objects.  (c) Class diagram represents structure of classes and relationships between them.  (d) Class diagram is a structural diagram. | A, B, C, D |
| 18 | Which of the following is not an object-oriented concept? *(Multi-choice)*  (a) Information hiding.  (b) Class.  (c) Subclass.  (d) Subroutine. | D |
| 19 | Which of the followings are true about the Flowchart? *(Multi-choice)*  (a) Flowchart represents steps in flow of algorithms.  (b) Flowchart is designed by only the software architect.  (c) Flowchart includes terminator symbols, boxes (for operations), diamonds (for decision), and arrows (for flow).  (d) Flowchart should be showed to customer for confirmation. | A, C, D |
| 20 | When designing an entity class as a relational table, which of the following is not true?  (a) The relational table has multiple primary keys.  (b) The relational table has multiple foreign keys.  (c) The relational table has a primary key.  (d) The relational table has a concatenated primary key. | A |

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| 21 | Which of the followings are true about the Deployment diagram? *(Multi-choice)*  (a) Deployment diagram includes actor as the starting point.  (b) Deployment diagram represents configuration of processing nodes and components on them.  (c) Deployment diagrams is a structural diagram.  (d) Deployment diagrams is a behavioral diagram. | B, C |
| 22 | During application deployment:  (a) The application is executed.  (b) Component instances are executed.  (c) Component instances are assigned to hardware nodes.  (d) Component instances are instantiated. | C |
| 23 | What software does the following Use Case diagram represent?    (a) Utility tool.  (b) Human management.  (c) Online shopping.  (d) School library management. | C |

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| 24 | Which diagram is the following?    (a) Communication diagram.  (b) State diagram.  (c) Activity diagram.  (d) Sequence diagram. | B |
| 25 | Which diagram is the following?    (a) Communication diagram.  (b) State diagram.  (c) Activity diagram.  (d) Sequence diagram. | D |

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| 26 | Which diagram is the following?    (a) Communication diagram.  (b) State diagram.  (c) Activity diagram.  (d) Sequence diagram. | C |
| 27 | What are the symbols with label “Process A” and “Process B” in the following flowchart?    (a) “Process A” is On-page symbol, “Process B” is Off-page symbol.  (b) “Process A” is Off-page symbol, “Process B” is On-page symbol.  (c) “Process A” is an assignment operator, “Process B” is storing symbol.  (d) “Process A” is a function call, “Process B” is storing symbol. | A |

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| 28 | What does the software architecture describe? (a) The software inside a building (b) The structure of a client/server system (c) The overall structure of a software system (d) The software classes and their relationships | C |
| 29 | What is a structural view of a software architecture? (a) A view in terms of a module hierarchy (b) A view in terms of components and connectors (c) A view of the physical configuration in terms of nodes and interconnections (d) A view in terms of objects and messages | B |
| 30 | What is a dynamic view of a software architecture? (a) A view in terms of a module hierarchy (b) A view in terms of components and connectors (c) A view of the physical configuration in terms of nodes and interconnections (d) A view in terms of objects and messages | D |

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