Name: _____
Score: _____ / _____

3rd hourly

This hourly contains a total of 65 questions. All questions are MCQs or True and False. There is no negative marking. You have about 1 minute 10 seconds for each question. You can submit only ONCE!

Part 1

_____ is concerned with the practicalities of developing and delivering useful software.

- A. Computer Science
- B. Computer Engineering
- C. Requirements Engineering
- D. Software Engineering

_____ is defined as a structured set of activities required for the development of a software system

- A. Software Engineering
- B. Software process
- C. Software Modelling
- D. Requirements Engineering

In waterfall process, planning is incremental and it is easier to change the process to reflect changing customer requirements

- True
- False

The main drawback of the waterfall model is the difficulty of accommodating change after the process is underway.

- True
- False

In the Incremental model it is not easy to get customer feedback on the development work that has been done.

- True
- False

In Incremental model more rapid delivery and deployment of useful software to the customer is possible.

- True
- False

In incremental development, the process is not visible to the managers

- True
- False

As you add more increments, the system structure does not degrade in an incremental model.

- True
- False

In Scrum, once the first sprint is planned, we can easily throw away the project backlog.

- True
- False

Another name of the Scrum Master is Project Manager

- True
- False

Which one of these is not a stakeholder type?

- A. End user
- B. System managers
- C. System owners
- D. External Stakeholders
- E. System Developers

The Scrum term _____ means the estimate of how much product backlog effort that a team can cover in a single sprint.

- A. Speed
- B. Velocity
- C. Progress
- D. Update

A use case in UML is drawn as _____with a name that describes the interaction that it represents

- A. A rectangle
- B. A rounded rectangle
- C. A circle
- D. An oval

Use-cases are supposed to explain all the steps that must be taken in order to fulfill a requirement

- True
- False

The straight lines in use cases exhibit data transfer between the actor and the use case

- True
- False

In a use-case diagram, the actors must be placed inside the system’s boundary

- True
- False

The <<extend>> relationship shows that a use-case is a type of another use-case.

- True
- False

Use cases define a system's functional and non-functional requirements

- True
- False

The speed with which an answer should be found by an algorithm is considered to be a functional requirement

- True
- False

The straight line that connects an actor with a use case is called a _____

- A. data line
- B. communication line
- C. relationship line
- D. connection line

The _____ relationship declares that the use case at the head of the dotted arrow completely reuses all of the steps from the use case being included

- A. include
- B. extend
- C. inheritance

While using _____ requirements compromises are inevitable and this may lead to a system that does not meet the real needs of users

- A. waterfall model
- B. incremental model
- C. reuse oriented software development

During _____ An estimate is made of whether the identified user needs may be satisfied using current software and hardware technologies.

- A. designing
- B. requirements elicitation
- C. feasibility study
- D. prototyping

During incremental development, the aim is to create throwable prototypes continuously till the customer is satisfied as to what kind of software he/she wants

- True
- False

Agile methodology emphasizes creation of well structured documentation.

- True
- False

which of the following diagrams is time oriented

- A. Use case diagram
- B. Class diagram
- C. Activity diagram
- D. Sequence Diagram

Which of the following diagrams represents the interaction of the user with the software but tells nothing about the internal working of the software?

- A. Use case diagrams
- B. Activity diagrams
- C. Sequence Diagrams
- D. Class diagrams

<<extend>> relationship shows that one use case is a special type of another use case

- True
- False

A communication line in a Use case diagram is shown by a _____

- A. dotted line
- B. straight line
- C. arrow
- D. dotted arrow

Time runs from left to right in a sequence diagram

- True
- False

How many views of software can be represented through the Unified Modeling Language (UML)?

- A. 3
- B. 4
- C. 5
- D. 6

A UML diagram that facilitates requirements gathering and interacts between system and external users, is called as

- A. Activity Diagram
- B. Class Diagram
- C. Use Case Diagram
- D. Sequence Diagram

While defining a class, discarding irrelevant details within a given context is called _____

- A. Encapsulation
- B. Abstraction
- C. Realization
- D. Generalization

_____ enables a class to hide the inner details of how it works from the outside world

- A. Encapsulation
- B. Abstraction
- C. Realization
- D. Generalization

While designing software, it is preferable to use composition over generalization

- True
- False

During generalization, the private attributes of the base class are not inherited by the child class

- True
- False

During generalization, the protected attributes of the base class are not inherited by the child class

- True
- False

If a base class's reference is pointing towards a child class's object, then it can call the functions defined in the child class

- True
- False

in a class diagram there are _____ ways to define a class

- A. 2
- B. 3
- C. 4
- D. 5

attributes and operations having package visibility are specified using the _____ symbol

- A. #
- B. ~
- C. +
- D. -

A static attribute in UML is always _____

- A. Bold
- B. Italicized
- C. Underlined

Aggregation is a stronger class relationship than composition

- True
- False

Always use vector graphics for your icons. It’s the easiest way to ensure your icons will look sharp in any device or resolution

- True
- False

In an activity diagram, a decision should always end up at a join

- True
- False

The activity final node, drawn as a filled circle, marks the end of the activity

- True
- False

while testing, a successful test is a test that makes the system perform correctly thus verifying that all the bugs were fixed.

- True
- False

Verification means: "Are we building the right product”.

Validation means: "Are we building the product right”.

- True
- False

A software can only be inspected once we have a working prototype

- True
- False

Inspections and testing are opposing verification techniques

- True
- False

Inspections cannot check non-functional characteristics such as performance, usability, etc.

- True
- False

In component testing individual program units or object classes are tested

- True
- False

Inheritance makes it more difficult to design object class tests as the information to be tested is not localised.

- True
- False

Unit tests should always be done manually because automated tests may have errors in themselves

- True
- False

In _____ testing, where you identify groups of inputs that have common characteristics and should be processed in the same way

- A. Unit
- B. Partition
- C. Component
- D. System

System testing checks that units are compatible, interact correctly and transfer the right data at the right time across their interfaces

- True
- False

Test-driven development (TDD) is an approach to program development in which you write tests once a feature has been coded properly.

- True
- False

Regression testing is testing the system to check that changes have not ‘broken’ previously working code.

- True
- False

Release testing is a form of _____ testing

- A. system
- B. component
- C. unit
- D. regression

User testing is not essential when comprehensive system and release testing have been carried out

- True
- False

The three types of user testing are alpha, beta and gamma testing

- True
- False

In Agile methods there is no separate acceptance testing process.

- True
- False

In Scrum, _____ is a big chunk of work which can be divided into smaller user stories

- A. Epic
- B. Eulogy
- C. Mega
- D. Meta

In Extreme programming increments are delivered every ____ weeks

- A. 2
- B. 3
- C. 4
- D. 5

In Scrum, developers work in pairs, checking each other’s work and providing the support to always do a good job

- True
- False

In XP, large amounts of overtime is acceptable as the developers are always short on time

- True
- False