

QUIZ 2

1. In the iteration planning of XP planning, which statement below is true?
- a. The iteration size is chosen by the developer, rather than customer.
 - b. Customer can still change the stories in the iteration once it has begun.
 - c. Customers prioritise user stories in the first iteration, regardless of the velocity.
 - d. **The iteration ends on the specified date, even if all the stories aren't done**

2. **High Quality is enforced in XP projects through use of:**
- a. pair-programming and test-driven development
 - b. simple design and refactoring of code
 - c. preventing change of requirements at the end of iteration
 - d. all of the above
 - e. **a and b**

3. **A conversation between two developers:**

1: *I am really worried*

2: *What happened?*

3: *Whenever I fix a bug in the system, some other functionality brakes which I have not touched at all*

The above scenario illustrates what kind of design smell in the system software?

- a. Immobility
- b. Opacity
- c. **Fragility**
- d. Software viscosity
- e. Rigidity

4. **Choose the in-correct statement**

```
class Graphic:
def draw_to_scale(self, shape, ratio):
    if isinstance(shape, Rectangle):
        shape._length *= ratio
        shape._width *= ratio
        # include code to draw a rectangle
    elif isinstance(shape, Circle):
        shape.radius *= ratio
        # include code to draw a square
    else: print("shape not defined")
```

- a. The class Graphic does not conform to OCP as the method draw_to_scale must be changed each time a new type of shape is introduced

- b. The class Graphic should be decoupled from the responsibilities of calculating the scale, and delegate the responsibility of calculating the scale to the respective shape classes
- c. The above design does not conform to DIP as it is dependent on the low-level modules and requires knowledge of the type of shape to invoke the appropriate methods
- d. The above design does not conform to SRP as the class Graphic has too many responsibilities such as drawing a square, drawing a rectangle

5. Which of the following is true about software design?

- a. Coupling is defined as the the degree to which all elements of a component or class work together as a functional unit
- b. Good software design aims for building a system with high coupling, low cohesiveness
- c. Low coupling leads to eventual software rot
- d. High cohesive classes are easier to maintain
- e. Low coupling occurs when one module A depends on the internal workings of another module B and is affected by internal changes to module B

6. Which of the following statement(s) are not true about the XP Planning Game?

- a. During iteration planning, customers choose user stories for the iteration from the release plan but must fit the current project velocity
- b. During task planning, user stories are broken down into programming tasks and order of implementation of user stories within the iteration is determined
- c. Initial exploration involves conversations between customer and developer team to identify epic stories, breaking down epics into user-stories and user-stories are estimated
- d. During release planning, customers and developers negotiate a release date (6 or 12 or 24 months in the future) and customers specify which user stories are needed and the order for the planned date (business decisions)
- e. During task-planning, developers are always assigned specific tasks and are not free to choose any kind of task

7. Which statement is not true about user story?

- a. User-stories have a much smaller scope than use-cases
- b. A mnemonic token of an ongoing conversation about a requirement
- c. A requirement is not a user-story. A requirement is defined by a user-story, acceptance criteria and additional supporting information
- d. A user-story represents a description of a feature from the perspective of the developer.
- e. A user-story serves as a planning tool to schedule the implementation of a requirement

8. In an iPod, once the battery dies, you might as well buy a new iPod, as the battery is soldered fixed and won't come loose, thus making replacing very expensive. This is an example of:
- a. Low coupling
 - b. Tight coupling
 - c. High cohesion
 - d. Low cohesion