**Agile Software Development – Lab #1**

Agile QUIZ – 1

Q1. What is now often the most important requirement for software systems ?

Ans. Rapid development and delivery

Q2. What process steps are inter-leaved ?

Ans. Specification, design and implementation are interleaved

Q3. How are stakeholders involved in the process ?

Ans. They evaluate the system of which was developed as series of versions

Q4. What tools are used to develop User interfaces ?

Ans. User interfaces are often developed using an IDE and graphical toolset

Q5. What did dissatisfaction with the overheads involved in software design methods of the 1980s and 1990s lead to the creation of ?

Ans. Agile Methods

Q6. List the 2 key aims of Agile methods

Ans. reduce overheads in the software process & be able to respond quickly to changing requirements without excessive rework

Agile QUIZ – 2

Q1. Identify which Agile Principles the follow definitions refer to ?

A: The skills of the development team should be recognized and exploited. Team members should be left to develop their own ways of working without prescriptive processes.

B: The software is developed in increments with the customer specifying the requirements to be included in each increment.

C: Focus on simplicity in both the software being developed and in the development process. Wherever possible, actively work to eliminate complexity from the system.

D: Expect the system requirements to change and so design the system to accommodate these changes.

Ans. A: People not process B: Incremental delivery C: Maintain simplicity D: Embrace system

Agile QUIZ – 3

Q1. TRUE OR FALSE

– Agile methods may be used for product development where a software company is developing a small or medium-sized product for sale

– Custom system development within an organization, where there is NO clear commitment from the customer to become involved in the development process

– There are NO problems in scaling agile methods to large systems

Ans. T F F

Agile QUIZ – 4

Q1. Most organizations spend more on maintaining existing software than they do on new software development. So, if agile methods are to be successful, they have to support maintenance as well as original development

1) Explain what the Two key issues are in this process:

2) Why is it a problem if teams cannot be consistantly maintained ?

Ans.

1. Are systems that are developed using an agile approach maintainable, given the emphasis in the development process of minimizing formal documentation?
2. Can agile methods be used effectively for evolving a system in response to customer change requests?

Agile QUIZ – 5

Q1. Explain the essential difference between Plan-driven and Agile development.

Ans. A plan-driven approach divides the development process into steps and set the outcome of these steps in advance.

Q2. Do ALL projects include elements of plan-driven and agile processes ? Give 2 reasons for your answer

Ans. Yes, they do. First of all, before starting on any project, the developers have to elicit and analysis the requirement. Second of all, every project has to be designed and implemented in spite of the method we use.

Q3. Which type of development is best suited to small team sizes ?

Ans. Agile method.

Q4. Which system is preferred when rapid feedback from the client is required ?

Ans. Agile method.

Agile QUIZ – 6

Q1. What is the best-known and most widely used agile method ?

Ans. Extreme Programming(XP)

Q2. What are the commonly accepted 6 cycle steps of this method ? Draw a diagram to explain your answer.

Ans. Select user stories for this release, Break down stories to tasks, Plan release, Develop/integrate/test software, Release software, Evaluate system

Agile QUIZ – 7

Q1. Explain what is meant by the following XP practices

– Refactoring

– Collective Ownership

Ans. Refactoring: All developers are expected to refactor the code continuously as soon as possible code improvements are found. This keeps the code simple and maintainable.Collective Ownership: The pairs of developers work on all areas of the system, so that no islands of expertise develop and all the developers take responsibility for all of the code. Anyone can change anything.

Q2. How does the XP approach impact the requirements for Change and Maintaining simplicity ?

Ans. In XP, a customer or user is part of the XP team and isresponsible for making decisions on requirements. User requirements are expressed as scenarios or user stories. These are written on cards and the development teambreak them down into implementation tasks. These tasksare the basis of schedule and cost estimates. The customer chooses the stories for inclusion in thenext release based on their priorities and the schedule estimates.