SSW 555 Agile Methods for Software Development

Quiz 9: FDD

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1. Who participates in the Overall Modeling process of FDD? What do they do?

* The domain experts, the Chief Programmers and the development team participate in the Overall Modelling process.
* In this process, the Domain Experts present an abstract level domain walkthrough.
* The domain experts and the development team produce a rough design of the system, under the guidance of the Chief Architect.
* As the domain experts go through the details, the team refines the product design and writes design notes for reference.

2. Who participates in the Design by Feature process of FDD? What do they do?

* The Chief Programmer, developers, domain experts all take part in the Design by Feature process as and when needed. In other words, the Feature teams are formed dynamically as needed.
* The Chief Programmer selects a small group of features to develop and then identifies the classes and forms feature team of the class owners.
* The Chief programmer then selects features to be built over next few days.
* Then the domain experts domain walkthrough and with the development team study referenced documents and develop sequence diagrams.
* Under the guidance of the Chief Programmer the object model is refined.
* The class owners write the classes and method prologue. After that the whole team does the design inspection.

3. Describe 1 advantage and 1 disadvantage of individual class ownership.

* In FDD, there is individual class ownership, which is each class is owned by one developer.
* Advantage: Each class has an expert associated with it. For anything related to that class there is only one person to be contacted and he is expert in that. This individual ownership also maintains integrity of that class.
* Disadvantage: If that owner leaves, there is a lot of risk associated with it as no one knows anything about the class he owned.

4. How can regular builds be enhanced to improve product quality?

* Regular builds are created at different intervals by the team, some do it daily, some weekly.
* Regular builds can be enhanced by:
  + Generating documentation.
  + Running automated regression tests.
  + Construct new build and provide documentation associated with it with respect to defects fixed, features added.

5. Describe 2 things besides code that should be kept under configuration management.

The things besides code that should be kept under configuration management are:

* Requirement specification documents.
* Documents related with design and analysis of the system.
* Testing documentation – test cases, test scripts and test results.
* Versions of the processes that are being used with their details.

6. Describe 2 things that FDD shares with other agile methods.

* In FDD and Scrum, emphasis is on producing quality components. Success can be tracked in both the methods. In Scrum it can be tracked by burndown charts and Sprint backlog. In FDD, it can be tracked by features being completed within a given time limit.
* Both of the methods emphasize on producing developed and tested features in short iterations.

7. Describe 2 things about FDD that are different from other agile methods.

* In Scrum, the Product owner designs the Product Backlog. There are no guidelines for the Product Owner to achieve that. In FDD however, the Chief Programmer has some guidelines to follow during the modelling and feature listing activities.
* In FDD, there is clear distribution of work with respect to classes. Class owners are responsible for classes they write. (Individual Ownership concept). In Scrum and XP, there is no such individual ownership concept, instead in these they focus on pair programming or other shared code ownership methods to reduce risk.