

# Quiz 09: FDD

**Due** Apr 6 at 10pm**Points** 50**Questions** 11**Time Limit** None

## Instructions

You **may** use the slides from the lecture and other sources to answer these questions. Please be sure to cite any references but be sure to answer the following questions in your own words. Do NOT simply cut and paste the information from the slides. You will receive a score of 0 if you copy the prose from the slides.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	10,174 minutes	0 out of 50 *

\* Some questions not yet graded

Score for this quiz: **0** out of 50 \*

Submitted Apr 7 at 5:07pm

This attempt took 10,174 minutes.

### Question 1

Not yet graded / 5 pts

Describe one advantage and one disadvantage of individual class ownership.

Your Answer:

Advantage: the person who developed the class, can easily make the changes because he knows everything because he developed the class himself.

Disadvantage: If in case the class owner leaves the company, then in future they will not be able to make any changes in class because the class owner has left the company.

Advantages: Owner maintains conceptual integrity of class, Each class has an expert associated with it, Owner can implement changes faster than anyone else, Owners can take pride in their classes

Disadvantages: Dependencies between classes (owner A needs owner B to make changes to their classes), Risk of loss of owners during development

## Question 2

Not yet graded / 5 pts

Choose one of the quotations from the Palmer paper and explain how it relates to Software Engineering or Agile Methods.

Your Answer:

"Kanban is the science of not trying to do too much at once"

Kanban helps the team to prioritize work. It optimize process by identifying and avoiding wastes. Waste is anything that slows the software delivery pipeline or does not add direct value to the customer. By doing things like prioritizing, limiting the work in progress and eliminating the waste. Kanban helps a team not to do so much at a time and focus only on the quality of the most relevant features. In this way this quotation "Kanban is the science of not trying to do too much at once" is related to Agile methods.

Ex: "Human brain capacity is more or less fixed, but software complexity grows at least as fast as the square of the size of the program." Gerald M. Weinberg, Quality Software Management: Volume 1 Systems Thinking, 1992

This quote is related to Agile Methodology, since it points out the problem with planning out too much at one time. The human brain is unable to think that far in advance, when it comes to software advancements, and since software advances so quickly, this proves that planning in small iterative bursts is best. This also implies that the more software that is designed in one period of time, the more and more complex it becomes, so working in iterative bursts also reduces the complexity of the software system, keeping it maintainable.

### Question 3

Not yet graded / 5 pts

Describe FDD's Process 5: build by feature. Who's involved? What's the goal? What are the outcomes?

Your Answer:

Build by feature comes into account after the "design by feature" process is finished. In "**build by feature**" process the class owners have to implement the methods and classes according to the design. After this the feature team conducts inspection and unit testing is performed by class owner.

Members involved in this process are Feature team, Chief Programmer and Class owner.

Goal of this process is to have the feature implemented.

There are several outcomes of this process testing and inspection is done for features and also after the process finishes the team is disbanded.

Implement classes and methods (class owner). Code inspection (feature team). Unit test (class owner). Promote to the build (class owner with Chief Programmer). Disband the team. The goal is to complete the feature.

#### Question 4

Not yet graded / 5 pts

Explain how FDD addresses Glenford Myers' quotation, "We try to solve the problem by rushing through the design process so that enough time is left at the end of the project to uncover the errors that were made because we rushed through the design process"

Your Answer:

FDD address to Glenn Ford Myers' quotation by introducing a little bit of structure and documentation to the iterative approach. FDD separates limitedof time for making the general design during first stage. While it additionally ensure that the clients are included normally in the work done by developers. The features are broken in little tasks which should be possible in little cycles while additionally leaving the point by point implementation decisions to the developers. FDD expects us to exercise the elevated level implementation before starting the iterative phases. This encourages us apply light-footed standards to bigger projects.

FDD's view on the Agile Manifesto is Responding to change over following a plan doesn't mean you shouldn't plan. Instead, planning is important but you must be willing to change the plan

**Question 5****Not yet graded / 5 pts**

Describe three items that FDD suggests be kept under configuration management.

Your Answer:

3 items that FDD suggests to be kept under configuration management are:

Code : For example , code should be kept on Github so that everyone can easily access the code from that repository and the consistency of the code will maintained as well as the conflicts can be easily solved.

Documentation: It should be kept because it becomes easier for everybody to refer the documents very easily and we can keep track of that documents.

Test cases: everyone can use the test cases if it is kept in configuration management

Code to to manage conflicts and maintain consistency.  
Requirements documents. Analysis and design artifacts. Test cases, test harnesses and scripts and even test results. Version of the process you are using, any changes and adjustments that may be made during the construction and maintenance of the system which is useful for audits and measuring process effectiveness

**Question 6****Not yet graded / 5 pts**

Describe FDD's Process 4: design by feature. Who's involved? What's the goal? What are the outcomes?

Your Answer:

This process starts with forming a feature team , then after they all start working together. Then the domain walk-through for this particular feature is performed and reference documents are referred. In the next step, Sequence diagrams are developed by the team and the object model is refined by the team. After all the developers come into picture and they develop class and write prologue methods. The last step is the design inspection which is done by team.

Members involved in this process are Chief programmer, domain expert, feature team and developers.

Goal of this process is the create a design for each feature.

Outcome of this process: we will get to know that how the feature is going to be implemented.

Form feature team (Chief Programmer, developers). Dynamic team, formed for this feature. Domain walk-through (domain expert). Study the referenced documents (team) Develop the UML sequence diagrams (team). Scribe records notes. Refine the object model (Chief Programmer). Write class and method prologues (developers). Design inspection (team). The goal is to add more detail to the features.

## Question 7

Not yet graded / 5 pts

Describe FDD's Process 1: develop an overall model. Who's involved? What's the goal? What are the outcomes?

Your Answer:

This process is initiated by forming a modeling team which is being led by the Chief architect. In this phase the team members work together and a

model is developed for the domain area. In this process some relevant documents are also studied and they also write the model notes.

Members involved in this process are : Chief Architect, Domain Expert , Chief programmers.

Goal of this process is to develop a model and also let us know that how the system is going to be built according to the model.

Outcome of this process is: It gives us the detailed outline of making the system.

This process involves the domain experts the chief programmers, and the chief architect. In this process, the team tries its best to understand the background on the proposed product and the problem that it is trying to solve by reading resources and getting information about the customer from the domain expert. A basic outline for the system is then modeled by this team, led by the chief architect. This model is refined and documented, and an assessment of internal and external resources is made. The goal of this step is to get an understanding of why this system needs to be built, and how. The outcome is a better understanding of the domain and a non-detailed model of the system that will be built.

## Question 8

Not yet graded / 5 pts

Describe three of the six roles in FDD

Your Answer:

Chief architect: Chief architect is the person who is in charge of the system. He has the knowledge of modeling and designing. Also, organizes the workshops which are attended by the stakeholders and other members will all discuss about the model and design of the system.

Chief Programmer: Chief Programmer is one who leads the team in designing the features. He also provides guidance to all members of the team.

in implementing different features of the project.

Project manager: He is administrative head of the team and looks up to the reporting, resources, space in the budget allocation.

One of the roles in FDD is the domain expert. The domain expert is the champion of the customer. They speak on the customers behalf because they not only have direct access to the customer, they are also experts in the domain the software is being built.

Another role is the feature teams. Feature teams are groups of developers created to implement certain features in the system. These teams only last as long as it takes to finish the defined feature, and then they are broken apart. The teams are self reliant and formed based on what classes are needed for what features and who owns them. This means developers can be on multiple teams at one time.

A third role is the class owner. The class owner is a developer who take ownership of a certain class that will be implemented in the system. The class owners are the experts in their class, and are responsible for maintaining them and helping others integrate them.

Also Project Manager (DeLuca) –administrative lead, Chief Architect (Coad) –responsible for overall design, Development Manager (Palmer) –team management, Chief Programmers–lead teams in design of features

## Question 9

Not yet graded / 5 pts

Explain how FDD addresses Jim Highsmith's quotation, "Agile software development is about iteration not oscillation"



Your Answer:

FDD addresses Jim Highsmith's quotation by saying that Agile methodology should always use iterations. Iterative method always give a clear flow and everything gets developed at time intervals at each iterations. If iterative method is used then it will not create conflicts while working on a project.

A simple, but well-defined process works best. Process steps should be logical and their worth immediately obvious to each team member. "Process pride" can keep the real work from happening, hence the oscillation of moving side to side and never forwards. Good processes move to the background so team members can focus on results. Short, iterative, feature-driven life cycles are best.

### Question 10

Not yet graded / 5 pts

Describe two things that FDD shares with other agile methods.

Your Answer:

**Time boxed iterations:** It means that each iteration should follow a specific time interval so that it gives a smooth flow in the project. Time boxed iterations follows is very important factor in Agile software development.

**Customer participation in planning :** This is also very important because customer participation is must so that it can give a clear understanding of the requirements and we can develop accordingly with the requirements. Customer participation expedites the process.

Short, time-boxed iterations, Lightweight process, Requirements described as features, Customer participation in planning (but not as often, and at a higher level)

**Question 11****0 / 0 pts**

“I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination. I further pledge that I have not copied any material from a book, article, the Internet or any other source except where I have expressly cited the source.”

**Correct!**☒ True☐ False**Quiz Score: 0 out of 50**