Assignment Quiz Guide

This is a list of the topics that will be covered on the six Assignment Quizzes.

We've also provided **recordings in the Media Gallery to previous Reading Discussions** covering some of the topics more in-depth.

Reading Discussion #1 [relevant to Quizzes #1 & #2] 04Sep2019 & 15Jan2020

Quiz 1: Honor Code, Plagiarism and Collaboration Awareness

The questions are based on:

- The Course Syllabus
- Office of Student Integrity (OSI) Faculty Conference Resolution http://osi.gatech.edu/content/faculty-conference-resolution (Links to an external site.)
- Honor Code http://osi.gatech.edu/content/honor-code (Links to an external site.)
- Academic Misconduct https://policylibrary.gatech.edu/student-life/student-code-conduct (Links to an external site.) (Links to an external site.)

Quiz 2: SWEBOK Software Design
The questions are based on software architecture and design-related topics drawn from the Software Engineering Body of Knowledge (SWEBOK).

SWEBOKv3.pdf

Reading Discussion #2 [relevant to Quiz #3] 25Sep2019 & 29Jan2020

Quiz 3: Unified Modeling Language (UML)
The questions are based on various aspects of the Unified Modeling Language (UML) as described in Craig Larman's text Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development, Third Edition (2005 version). The text can be accessed at O'Reilly's Safari Books Online website via the Georgia Tech Library.

https://www.library.gatech.edu/

You can also search for "Craig Larman UML" from the main GT Library site

[https://gatech-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01GALI_GIT_ALMA51312623890002947&context=L&vid=01GALI_GIT&search_scope=default_scope&tab=default_tab&lang=en_US]

The main chapters of the Larman text that will be covered are:
6.17, 6.18, 9.14, 9.16, 13.5, 15, 16, 28, 29, 31

UML_Specification_Chapter_1.pdf

Reading Discussion #3 [relevant to Quiz #4] 16Oct2019 & 19Feb2020

Quiz 4: Architectural Styles & Models
Most of the questions have been drawn from the Garlan & Shaw paper "Introduction to Software Architectures": Chapters 1, 2 and 3 (pages 1 - 17) and Chapter 5 (pages 36 - 37).

Garlan_Shaw_Paper_Intro_SW_Arch.pdf

Some questions have been drawn from the Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development, Third Edition (2005 version) text by Craig Larman. He really focuses on Object-Oriented architectural issues, and doesn't give really give the "wider breadth" coverage that Garlan and Shaw do, so we'll only focus on a few chapters of relevance:

- 13. Logical Architecture and UML Package Diagrams
- 33. Architectural Analysis
- 39. Documenting Architecture: UML and the N+1 View Model

Note that Chapter 39 does mention the Kruchten paper "The 4+1 View Model of Architecture" as one of its sources. You're should review that paper for an overview of the concepts, as I might draw a few high-level conceptual questions separately from the Kruchten paper.

Kruchten_Paper_4_Plus_1_Views.pdf

Reading Discussion #4 [relevant to Quizzes #5 & #6] 06Nov2019 & 11Mar2020

Quiz 5: Design Patterns & Related Issues

Gamma, Helm, Johnson, Vlissides
Paper - Design Patterns: Abstraction and Reuse of Object-Oriented Design
[21 pages - all fair game]

Gamma_Helm_Paper_Design_Patterns.pdf

Martin_Paper_Software_Principles.pdf

Larman [Each chapter - all pages fair game]

- Chapter 17. GRASP: Designing Objects with Responsibilities
- Chapter 25. GRASP: More Objects with Responsibilities
- Chapter 26. Applying GoF Design Patterns
- Chapter 33. Architectural Analysis
- Chapter 35. Package Design
- Chapter 36. More Object Design with GoF Patterns

I've included the GRASP chapters because Larman makes strong references to the GRASP principles in helping to understand the GoF and related design patterns on a deeper level, as opposed to just memorizing them by rote.

Quiz 6: Software Design Principles

Emphasis will be on the general principles of Iterative Development and Agile Design, especially as expressed by Larman as the Unified Process.

Larman [Each chapter - all pages fair game as needed]

- Chapter 1. Object-Oriented Analysis and Design
- Chapter 2. Iterative, Evolutionary, and Agile
- Chapter 4. Inception is Not the Requirements Phase
- Chapter 5. Evolutionary Requirements
- Chapter 8. Iteration 1 — Basics
- Chapter 12. Requirements to Design — Iteratively
- Chapter 21. Test-Driven Development and Refactoring
- Chapter 40. More on Iterative Development and Agile Project Management