

Lab 2

We have our first quiz this week! This lab will reinforce some core concepts that we learned from Chapters 3 and Chapter 4. For this lab, please try to answer the questions to the best of your ability **without** using the slides or outside help. This will help prep you for the quiz! Our questions will be a mixture of True/False, short answer, and multiple choice.

1. (True/False) Prerequisites are not that important. A high quality, high risk project can be created while ignoring prerequisites.
 - a. Answer
2. What is the overarching goal of using prerequisites?
 - a. Spending more time on work
 - b. Risk Reduction
 - c. Remaking code from previous projects
 - i.
3. What are some common risks in software development?
 - a. Answer
4. What is a benefit of being able to find defects or errors in our code earlier on?
 - a. Answer
5. (True/False) There is not that much variation in software projects.
 - a. Answer
6. Please describe the differences between an iterative approach and a sequential approach to software development. Please list out some scenarios where one approach might be better to use than the other.
 - a. Answer
7. Please describe in your own words what a problem definition prerequisite is.

- a. Answer
- 8. In a problem-definition, do you specify the solution to your problem? Why or why not?
 - a. Answer
- 9. Please describe in your own words what requirement prerequisites are.
 - a. Answer
- 10. We saw that official requirements can be beneficial in this chapter, what are some benefits of having official requirements?
 - a. Answer
- 11. (True/False) When working on a project, you should assume that the requirements will never change.
 - a. Answer
- 12. Please describe in your own words what Architecture Prerequisites are
 - a. Answer
- 13. In your own words, what is the difference between coding **in** a language and coding **into** a language.
 - a. Answer
- 14. (True/False) Java is the best language to code in
 - a. Answer
- 15. Can you list out some examples of Major Construction practices we saw in Chapter 4?
 - a. Answer
- 16. What is the first stage of starting when starting a software development project?
 - a. Construction
 - b. System Testing
 - c. Requirements
 - d. Problem Definition

i.

17. If we focus on using high-quality practices at the **start** of our project, what type of practices will we be emphasized?

- a. System testing
- b. Defining a problem, determining the solution, and designing that solution
- c. Construction and coding practices

i.

18. (True/False) Fixing a defect in our project during the architecture phase costs roughly the same amount as during the construction phase.

- a. Answer

19. Which of the following is **not** a general category that software projects fall under?

- a. Simplistic Systems
- b. Business Systems
- c. Embedded Life-Critical Systems
- d. Mission-Critical Systems

i.

20. In the architectural components we saw that Buy vs. Build decisions should be laid out in the architectural blueprints of a software project. Please describe in your own words what buy vs. build decisions are?

- a. Answer