Answers to Guide 11

* Software Quality
  + How would you define software quality? Does your definition match either of those notions listed in the introduction?
  + Be familiar with Garvin’s five perspectives on quality.
  + How are software quality and testing related?
  + Do you have any affinity with DiMarco’s alternate definition of software quality?
* Software Testing
  + What is the primary purpose of software testing?
  + Be able to compare and contrast the definitions of the following sets of testing terms:
    - Concepts:
      * Software fault:
      * Programmer error:
      * Defect:
      * Failure:
    - Methods:
      * Static testing:
      * Dynamic testing:
      * White testing:
      * Black-box testing:
    - Levels:
      * Unit testing:
      * Integration testing:
      * System testing:
      * Acceptance testing:
    - Types:
      * Regression testing vs. acceptance testing:
      * Alpha testing:
      * Beta testing:
      * Functional testing:
      * Non-functional testing:
      * A/B testing:
  + According to McConnel (the cost vs. time table and references 11), how costly is a defect introduced in the requirements phase and not found until the system testing phase?
  + Software quality folk often use the phrase “V & V”. What does it mean?
* Project Management Tools & Practices
  + Familiarize with GitHub’s pull request feature.
  + Familiarize with guidelines in Google Java Style
    - Where do they put the first curly brace for general control structures, on the line or on a new line?
    - How wide can columns be?
    - As a minimum, where should Javadoc comments be used?
  + Familiarize with GitHub’s issue tracking feature.
    - For what are issue trackers commonly used?
    - How would you integrate Git issue tracking with Trello?