SE401 – Assignment 2.1

Solve the following questions and submit your answers to LMS.

Homework Tips Checklist for Parents

# Hints

General engineering principles

* Partition: divide and conquer
* Visibility: making information accessible
* Feedback: tuning the development process

Specific principles

* Sensitivity: better to fail every time than sometimes
* Redundancy: making intentions explicit
* Restriction: making the problem easier

# Questions

1. Indicate which principles guided the following choices
   1. Use an externally readable format also for internal files, when possible.
   2. Collect and analyze data about faults revealed and removed from the code.
   3. Separate test and debugging activities: that is, separate the design and execution of test cases to reveal failures (test) from the localization and removal of the corresponding faults (debugging).
   4. Distinguish test case design from execution.
   5. Produce complete fault reports.
   6. Use information from test case design to improve requirements and design specifications.
   7. Provide interfaces for fully inspecting the internal state of a class.
2. Compare and contrast Verification and Validation
3. What is the difference between quality assurance and quality control?