



CUI Abbottabad

Department of Computer Science

SOFTWARE TESTING

Lecture 13

Test suite, Software testing Principles and Tester Characteristics

CONTENT...

- ❑ Test Suites
- ❑ Software testing Principles
- ❑ Tester Characteristics

TEST SUITES

Test suite is a list of related **test cases**. **Suite** may contain common initialization and cleanup routines specific to the **cases** included.

5 C'S FOR GOOD TEST ENGINEER

- ❑ **Controlled:** A test engineer must be organized, disciplined, and methodical in his or her work.
- ❑ **Comprehensive:** A test engineer must be very attentive to the details
- ❑ **Considerate:** A test engineer must have good interpersonal skills such as the ability to handle aggressive behavior, not to be easily offended, to be malleable, and, finally, to bring situations to a win–win closure.
- ❑ **Critical:** A test engineer must be very good in analysis and assertiveness. Assertiveness typically consists of being persistent, using multiple methods of reflective listening to determine exactly what is being communicated.
- ❑ **Competent:** A test engineer must be aware of test techniques, tools, technology, and domain knowledge that can be used in order to carry out the job efficiently.

SOFTWARE TESTING PRINCIPLES

Principle Number	Principle
1	A necessary part of a test case is a definition of the expected output or result.
2	A programmer should avoid attempting to test his or her own program.
3	A programming organization should not test its own programs.
4	Thoroughly inspect the results of each test.
5	Test cases must be written for input conditions that are invalid and unexpected, as well as for those that are valid and expected.
6	Examining a program to see if it does not do what it is supposed to do is only half the battle; the other half is seeing whether the program does what it is not supposed to do.
7	Avoid throwaway test cases unless the program is truly a throwaway program.

SOFTWARE TESTING PRINCIPLES

8	Do not plan a testing effort under the tacit assumption that no errors will be found.
9	The probability of the existence of more errors in a section of a program is proportional to the number of errors already found in that section.
10	Testing is an extremely creative and intellectually challenging task.

REFERENCES

Book:

Software testing and quality assurance by Kashira Sagar Naik and Priyadarshi Tripathy