



Software Quality Assurance & Testing

TOPIC2: LECTURE 4

C) Test implementation and execution

- ▶ Developing, implementing and prioritizing **test cases**.
- ▶ Developing and prioritizing test procedures, **creating test data** and, optionally, preparing **test harnesses** and writing automated **test scripts**.
- ▶ Creating **test suites** from the test procedures for efficient test execution.
- ▶ Verifying that **the test environment** has been set up correctly.
- ▶ Executing test procedures either **manually** or by using test **execution tools**, according to the planned sequence.
- ▶ **Logging the outcome** of test execution and recording the identities and versions of the software under test, test tools and testware.
- ▶ **Comparing** actual results with expected results.
- ▶ **Reporting discrepancies as incidents** and analyzing them in order to **establish their cause**
- ▶ Repeating **test activities** as a result of action taken for each discrepancy.
Example: confirmation testing, regression testing

d) Evaluating exit criteria and reporting

- ▶ Checking test logs against the exit criteria specified in test planning.
- ▶ Assessing if more tests are needed or if the exit criteria specified should be changed.
- ▶ Writing a test summary report for stakeholders.

e) Test closure activities

- ▶ Checking which planned **deliverables** have been delivered, the closure of incident reports and the documentation of the acceptance of the system.
- ▶ Finalizing and archiving testware, the **test environment** and the test **infrastructure** for later reuse.
- ▶ Handover of testware to the maintenance organization.
- ▶ Analyzing lessons learned for future releases and projects, and the improvement of test **maturity**.