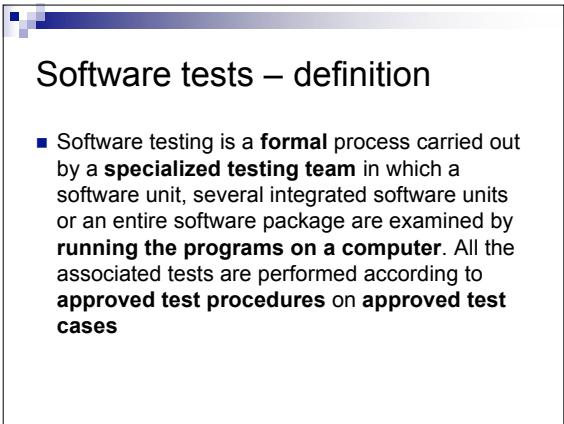
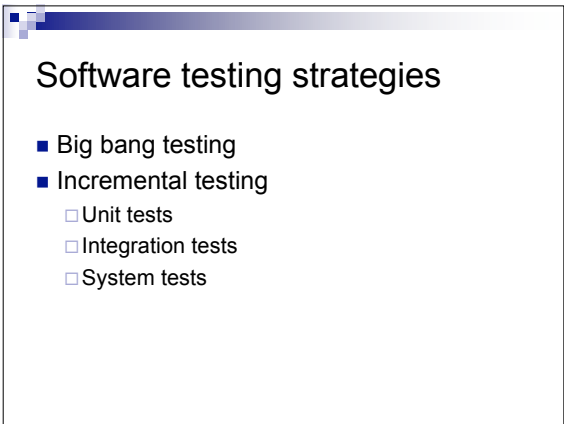


Software testing - strategies



Software tests – definition

- Software testing is a **formal** process carried out by a **specialized testing team** in which a software unit, several integrated software units or an entire software package are examined by **running the programs on a computer**. All the associated tests are performed according to **approved test procedures** on **approved test cases**



Software testing strategies

- Big bang testing
- Incremental testing
 - Unit tests
 - Integration tests
 - System tests

Incremental Testing

- Bottom-up
- Top-down

Incremental Testing

- Stub
 - Replaces an unavailable lower level module
- Driver
 - Is a substitute module but of the upper level module that activates the module tested

Software Test Classifications

- Black box testing
 - Called functionality testing
 - Tests outputs, if they are correct the test passes
- White box testing
 - Called structural testing
 - Also called glass box testing
 - Examines internal calculation paths

White box testing

- Requires verification of every program statement and comment
 - Path coverage
 - Line coverage

Black box testing

- Equivalence classes
- Documentation tests
- Availability tests
- Reliability tests
- Stress tests
- Software system security tests
- Training usability tests
- Operational usability tests
