**Seven Testing Principles:**

1. **Testing shows presence of defects, not their absence**
2. **Exhaustive testing is impossible**
3. **Early testing saves time and money**
4. **Defects cluster together**
5. **Beware of the pesticide paradox (Same tests repeated over and over again tend to lose   
   their effectiveness)**
6. **Testing is context dependent (Testing is done differently in different contexts )**
7. **Absence of errors is a fallacy**

**Test Scenario**

1. Any **functionality** / **feature** / **story** that can be tested

**Test Cases**

1. **A sequence of actions executed to verify a particular   
   feature or functionality (a particular execution path)**

**What is bug report**

1. Written document **describing a certain bug** found during a concrete phase in the testing process

**What Goes in a Bug Report**

1. **Summary**
2. **Description**
3. Steps to **reproduce**
4. **Expected** behavior
5. **Actual** behavior
6. **References** to external sources
7. **Attachments**
8. Any **additional information** about   
   the configuration
9. **Severity- Degree of impact that a bug has on the operation of the product**
10. **priority** - Defines the **order** in which a bug should be fixed

**Immediate** / **High**

**Next Release** / **Medium**

**On Occasion** / **Low**

**Open**

1. **Bug Lifecycle**

Its purpose is to  
make the bug fixing  
process systematic

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**New**

**Open**

**Assigned**

**Fixed**

**Verified**

**Closed**

If not verified then reopened

1. **Test Levels**
   * **Unit** Testing **First level** of testing done before integration typically by the **developers**

Done in **isolation**

* + **Integration** Testing

After assembling the components, a new fault may occur

**Internal** integration testing

-Expose defects in the interfaces and interaction between integrated components

**External** integration testing

-Testing the integration of systems and packages

-Testing interfaces to external organizations

- **"Integration test in the large"**

* + **System** Testing

Focus on the **whole system**

**System tests** look at the system from the perspective  
of the end user

System testing is done in **functional** and **non-functional** way to ensure working system for the end user

* + **Acceptance** Testing

**Final level,** usuallybefore deployment

Meets the **actual** **system behavior** with the   
**client expectations, before deployment**

1. **Test Types** can be **applied** at (**m**)**any test levels**
   * **Functional** Testing kakvo

Testing the **main functions** of an application

* **Error messages**
* **Basic usability**
* **Accessibility**
  + **Non-Functional** Testing kak

**Objectives of Non-Functional Testing**

Non-functional testing mainly focuses on **increasing**

* **Usability**
* **Efficiency**
* **Maintainability**
* **Portability** **of** **the** **product**