

Testing Techniques

Classification System

All testing involves 5 dimensions:

- ◆ Testers „Who does the testing“
- ◆ Coverage „What gets tested“
- ◆ Potential problems „Why you're testing“ (for what risks)
- ◆ Activities „How you test“
- ◆ Evaluation „How to tell wheater the test passed or failed“

→ Techniques may leave dimensions open

Techniques and classification

◆ Tester

User testing, Alpha testing, Beta testing, Subject-matter expert testing, ...

◆ Coverage

Function Testing, Feature or function integration testing, Domain testing, State based testing, Specification based testing

◆ Problems based

Input constraints, Output constraints, Computation constraints, Storage constraints

◆ Activities

Regression testing, Scripted testing, Scenario testing, Installation testing

◆ Evaluation

Self verifying data, Comparison with saved results, Comparison with specification

Automating Testing

Automating Testing (1)

- ◆ Why not make software test software?
- ◆ Save time, speed development, make testing more effective
- ◆ Design your tests first, before deciding which to automate
- ◆ The greatest value is that automated tests can be run at any time and by any one
- ◆ Don't mandate 100 percent automation
- ◆ A test tool is not a strategy. Don't automate a mess.

Automating Testing (2)

- ◆ The problem with bad automation is that no one may notice
- ◆ Test automation is a significant investment
- ◆ Select tools based on compatibility, familiarity and service
- ◆ Capture and replay scripts are too tightly tied to the minor details of the UI and configuration
- ◆ Encourage the development of unit test suites
- ◆ Use logging and diagnostics

Bug Reports

- ◆ Als ein Qualitätskriterium für die Arbeit des Testers
- ◆ Der Ton macht die Musik
- ◆ Als Verkaufsinstrument
- ◆ Die Rolle des Testers
- ◆ Unterscheidung von Schwere und Dringlichkeit

Bug Reports

- ◆ Wer schreibt Bug Reports?
- ◆ Missbrauch von Bug Reports
- ◆ Nicht reproduzierbare Fehler
- ◆ Mehrfach berichtete Fehler