

Black Box Software Testing

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PART 8 -- FUNCTION TESTING

by

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Function Testing

- Tag lines
 - “Black box unit testing.”
 - "Test what it can do"
- Fundamental question or goal
 - Test each function thoroughly, one at a time.
- Paradigmatic case(s)
 - Spreadsheet, test each item in isolation.
 - Database, test each report in isolation
- Strengths
 - Best for assessing capability rather than reliability
 - If used as a dominant technique, thorough analysis of each item tested
- Blind spots
 - Misses interactions, misses exploration of the benefits offered by the program.

Some Function Testing Tasks

- A function is something the product can do
 - Functions may be called features / commands or they may be identified only by what they do (usually, some of each)
- Identify each function and sub-function
 - From specifications or the draft user manual
 - From walking through the user interface
 - From trying commands at the command line
 - From searching the program or resource files for command names
- Determine how you would know if the function worked.
- Identify variables used by the functions and test their boundaries.
- Identify environmental variables that may constrain the function under test.
- Check that each function does what it's supposed to do and does not do what it's not supposed to do.