Objectives

To know of different types of static test methods with emphasis on code inspection methods.

Key Points

1. Static test methods are tests which do not involve executing the program code.
2. Static methods include inspections, walk throughs, checklists, semantic analysis and code metrics.
3. Dynamic test methods are tests which do involve executing the program code.
4. Dynamic methods include equivalence class testing, path testing and conformance testing.
5. A Code Inspection is a formal process for examining program code and finding faults. Code inspections are very effective at finding faults.
6. A code walk-through is an informal code inspection, based around a meeting in which the programmer guides a review team through her/his code.
7. Checklists can be used to simulate critical questions about the correctness of code. Also used to enforce good coding practice. See JavaInspectionCheckList example.

Core reading

Bruegge & Dutuoit, 11.4.1 Component Inspection

Sommerville (7th ed) 22 static verification; 22.2 Software Inspections


Java Code Inspection Checklist adapted from C. Fox 1998