In-class Exercises
Criteria & Subsumption

Software Testing & Maintenance

SWE 437

http://go.gmu.edu/swe437

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(Dr. B for short)

In-class Exercise #1: Test Criteria

Today we discussed criteria-based test design.

In your group, **discuss and document** the following:
What four structures do we use for test criteria?
What usually prevents our tests from achieving 100% coverage?

A few software organizations use test criteria and report great success.
However, **most organizations do not currently use test criteria**.
Based on your knowledge and experience, *why do you think test criteria are not used more?*

In-class Exercise #2: Subsumption

Suppose that coverage **criterion C1 subsumes coverage criterion C2**.

Further suppose that **test set T1 satisfies C1 on program P and test set T2 satisfies C2**, also on P..

Does T1 necessarily satisfy C2? Explain.
Does T2 necessarily satisfy C1? Explain.
If P contains a fault, and T2 reveals the fault, T1 does not necessarily also reveal the fault. Explain.