Software Verification & Validation

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Assignment #1

Adapted from work by Peter Heusch

Exercise 1.1: Terminology

For each of the pairs of concepts listed below, explain differences and similarities. When do we use/need one and when the other?

- 1. Software Testing—Debugging
- 2. White Box Testing—Black Box Testing
- 3. Safety—Security
- 4. Defect—Failure in IEEE nomenclature
- 5. Defect—Failure in Zeller's nomenclature

Exercise 1.2: Poor Requirements

The lecture slides list requirements for requirements. For each of the listet properties, give a requirement that violates it. (You may reuse requirements for multiple properties.

Be ready to explain, how the property is violated.