



Definitions



- **Requirement - is a statement that is in principle testable**
- **"The program has an average response time of t seconds" - Testable**
- **Specification - is a statement that in principle is provable**
- **"The program satisfies the predicate $P(x)$ " - Provable**
- **"The program has a good response time " - Vague**
- **Failure - Deviation of a software system from its requirement**
- **Fault - A software defect that can cause a failure**
- **Error - Action by a software developer that results in the introduction of a fault into a software system**
- **Problem - A difficulty in the use or understanding of a software system**
- **Robust - A software system is robust if it is fault-tolerant or failure-tolerant**