

# Software Dependability

CIS 376

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# Dependability

- The extent to which a critical system is trusted by its users
- Dependability is usually the most important system property of a critical system
- A system does not have to be trusted to be useful
- Dependability reflects the extent of the user's confidence that it will not fail in normal operation

# Dimensions of Dependability

- **Availability**
  - ability of the system to deliver services when requested
- **Reliability**
  - ability of the system to deliver services specified
- **Safety**
  - ability of system to operate without catastrophic failure
- **Security**
  - ability of system to defend itself against intrusion