

Liveness: Examples

- **Liveness** = guarantee that something **good** will happen, **eventually**
 - Eventually == does not imply a time bound, but if you let the system run long enough, then ...
- **Examples in Real World**
 - Guarantee that “at least one of the athletes in the 100m final will win gold” is liveness
 - A criminal will eventually be jailed
- **Examples in a Distributed System**
 - Distributed computation: Guarantee that it will terminate
 - “Completeness” in failure detectors: every failure is eventually detected by some non-faulty process
 - In Consensus: All processes eventually decide on a value