Distributed Algorithms

Assignment 05

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1 Mutual Exclusion

2 Distributed Garbage Collection

- JAVA RMI: RMI uses a fairly straightforward mechanism for garbage collection, which is explained in detail in [1]. Any program which has a reference to an object must obtain a "lease" for the object.The lease, which is literally represented by a Lease object, entitles the program to use the object for a certain period of time.
- Microsoft DCOM: DCOM differentiates between interfaces and objects. Each has its own type of garbage collection support.
  - Interfaces: Garbage collection of interfaces is handled through a manual reference counting mechanism.To reduce the overhead by "multiplexing references", a single reference can actually stand for many references within a single program.
  - Objects: Garbage collection of Objects send keepalive messages periodically to objects as a way of pinging the objects to let them know they are still needed.

References

References