Distributed System

Last Assignment

Chapter1
1. Explain different types of Distributed System.
2. What is distributed transparency ? Explain types of transparency.

Chapter2
1. Explain three tier architecture with diagram.
2. Explain Content Addressable Network (CAN).
3. Explain decentralized architecture with example.
4. What is hybrid architecture? Explain with example.
   (Edge server system is an example)

Chapter3
1. Explain the role of virtualization in Distributed System.
2. Explain X window system.
3. Explain general organization of cluster server with diagram.
4. Explain code migration in distributed system with diagram.
5. List the architecture of multi threaded server.
6. Compare process and thread.
7. Discuss about thread in Distributed System.

Chapter4
1. Explain the RPC in detail.
2. Explain the design of message passing interface .
3. Discuss the following :
        UDP datagram communication.
        TCP Stream communication.

4. What is Marshalling ?
5. Explain the RPC mechanism with various functional components.
6. Define multicast communication.
7. Describe Java RMI.
8. Explain about the group communication.
9. Explain about the client-server communication.

Chapter5
Distributed Naming .

1. 1.What is name resolution ?Explain two ways to implement name resolution.(Iteractive and Recerssive)
2. 2.Define name space.
3. What is LDAP?
4. Explain in detail about name services.
5. Discuss in detail about domain name services.

Chapter6
1. What christian's algorithm of physical clock synchronization.
2. Explain logical clock in detail.
3. Explain Recart-Agrawala algorithm of distributed mutual exclusion.
4. Explain Bully algorithm of leader election.
5. Explain ring based election algorithm .
6. Define External and internal synchronization .
7. Explain about the logical time and logical clocks

Chapter 7
1. Explain client-based consistency model.
2. Explain Data centric consistency model.

Chapter8
1. What is meant by arbitrary failure ? (Byzantine failure.)
2. Explain the two phase commit protocol with an example.

Chapter9
1. What are the three components of security?
2. What is meant by cryptography? What is use of cryptography?
3. Explain different types of cryptographic algorithm.

Note: Also refer book along with this assignment questions for short answer type questions.