Course: CSE601 Distributed Systems

Final Examination 2022 Syllabus

Chapter	Covered Topics
Chapter 1: Introduction and Fundamentals of Distributed Systems	What is a distributed system? Characteristics of distributed system (Heterogeneity, Openness, Security, Concurrency, Scalability, Failure Handling, Distribution Transparency) Types of Distribution Transparency Advantages of Distributed System Parallel computing, Grid Computing, Cloud Computing (IaaS, SaaS, PaaS)
Chapter 2: Architectures	Architectural styles - Layered architectures - Object-based architectures - Resource-centered architectures - Event-based architectures Middleware and it's organization (Wrapper) System architecture - Simple client-server - Multitiered Architectures
Chapter 3: Process	Threads, Virtualization, Types of virtualizations, Containerization, Orchestration Code migration
Chapter 4: Communication	Types of Communication Remote procedure call
Chapter 5: Naming	Names, identifiers, and addresses Flat naming (Broadcasting, Forwarding pointers, Home-based approaches) Structured naming (Name spaces, Name resolution)
Others	System Design