

22 Lecture - CS504

Important Mcqs

Q: What does software architecture refer to? a) The programming languages used in software development. b) The high-level design and organization of a software application. c) The hardware components of a computer system. d) The process of software testing and debugging. **Solution: b) The high-level design and organization of a software application.**

Q: What is the primary goal of software architecture? a) Maximizing the number of features in the software. b) Minimizing the development cost of the software. c) Ensuring scalability, maintainability, and reliability of the software. d) Reducing the size of the software codebase. **Solution: c) Ensuring scalability, maintainability, and reliability of the software.**

Q: Which type of architecture is characterized by dividing the system into smaller, independent components? a) Monolithic architecture b) Microservices architecture c) Client-server architecture d) Peer-to-peer architecture **Solution: b) Microservices architecture**

Q: In a client-server architecture, which component requests services from the server? a) Server b) Client c) Database d) Router **Solution: b) Client**

Q: Which architecture style involves a single, self-contained application? a) Microservices architecture b) Monolithic architecture c) Distributed architecture d) Component-based architecture **Solution: b) Monolithic architecture**

Q: What is the main advantage of using a microservices architecture? a) Reduced development complexity b) Centralized control over all components c) Easier communication between components d) Better scalability and flexibility **Solution: d) Better scalability and flexibility**

Q: What does system architecture refer to? a) The high-level design of a single software application. b) The arrangement of hardware components in a computer system. c) The interaction between different software applications. d) The high-level design and organization of an entire system. **Solution: d) The high-level design and organization of an entire system.**

Q: Which architecture style involves breaking down a system into reusable and interchangeable components? a) Component-based architecture b) Client-server architecture c) Peer-to-peer architecture d) Distributed architecture **Solution: a) Component-based architecture**

Q: What is the purpose of system architecture? a) Optimizing software code for faster execution. b) Ensuring effective communication between hardware components. c) Defining the interactions and structure of the entire system. d) Providing user interface design for software applications. **Solution: c) Defining the interactions and structure of the entire system.**

Q: Which architectural pattern ensures that each component performs a specific function and can be replaced without affecting the entire system? a) Component-based architecture b) Client-server architecture c) Monolithic architecture d) Distributed architecture **Solution: a) Component-based architecture**