

24 Lecture - CS504

Important Mcqs

Q: What do architectural models represent in software engineering? a) Software code details. b) The physical hardware configuration. c) The structure and behavior of a software system. d) The project management plan. **Solution: c) The structure and behavior of a software system.**

Q: What is the primary purpose of using architectural models in software development? a) To optimize software performance. b) To visualize hardware components. c) To facilitate communication among stakeholders. d) To generate automated test cases. **Solution: c) To facilitate communication among stakeholders.**

Q: Which architectural model focuses on the system's structure and organization of components? a) Functional model. b) Structural model. c) Behavioral model. d) Deployment model. **Solution: b) Structural model.**

Q: What does the behavioral model in architectural modeling depict? a) System components and their relationships. b) The physical arrangement of components on hardware nodes. c) The dynamic interactions and behavior of system components. d) The system's functionalities and use cases. **Solution: c) The dynamic interactions and behavior of system components.**

Q: In architectural modeling, what does the deployment model focus on? a) The distribution of software components across hardware nodes. b) The static structure of the system. c) The interactions between system components. d) The functionalities and services provided by the system. **Solution: a) The distribution of software components across hardware nodes.**

Q: What benefit does the use of architectural models bring to software development teams? a) Automated code generation. b) Reduced development time. c) Clear understanding of system structure and behavior. d) Improved hardware performance. **Solution: c) Clear understanding of system structure and behavior.**

Q: Which architectural model represents the flow of data and control between system components? a) Structural model. b) Behavioral model. c) Deployment model. d) Functional model. **Solution: b) Behavioral model.**

Q: How does the functional model differ from the structural model in architectural modeling? a) The functional model focuses on hardware components, while the structural model focuses on system functionalities. b) The functional model illustrates the interactions between system components, while the structural model defines the system's organization. c) The functional model emphasizes the system's functionalities and use cases, while the structural model represents component relationships. d) The functional model deals with system performance, while the structural model deals with scalability. **Solution: c) The functional model emphasizes the system's functionalities and use cases, while the structural model represents component relationships.**

Q: What is the primary objective of the behavioral model in architectural modeling? a) To define system components and their relationships. b) To address non-functional requirements. c) To visualize the system's physical deployment. d) To depict the dynamic interactions and behavior of system components. **Solution: d) To depict the dynamic interactions and behavior of system components.**

Q: Which architectural model is particularly useful in addressing scalability and performance concerns? a) Behavioral model. b) Deployment model. c) Structural model. d) Functional model. **Solution: b) Deployment model.**