

Name

Class

Date

1.

Architecture Quiz

2. Which of the following statements is true?

- a) Architectural drift results in unnecessarily complex architectures.
- b) Prescriptive architecture and descriptive architecture are typically the same.
- c) The best way to improve a degraded architecture, is to keep fixing the code until the system starts looking and behaving as expected
- d) Architectural erosion is less problematic than architectural drift.

3. Which architectural pattern is best suited for developing a video streaming platform, where various independent services handle distinct functionalities such as content recommendation and user authentication?

- a) Layered Architecture
- b) Microkernel
- c) Serverless
- d) Microservices

4. What architectural style is most appropriate for an e-commerce platform where multiple events occur simultaneously (e.g., item search, cart modification, order placement) and the system must react in real-time?
- a) Layered
 - b) 3-Tier
 - c) Event Driven
 - d) Microkernel
5. Which of the following best describes the concept of "cruft" in software architecture?
- a) Temporary files generated by the system during execution.
 - b) Code elements that make it difficult for developers to understand and modify the software.
 - c) Clean and well-organized code that is easy to maintain.
 - d) Documentation that is outdated and irrelevant to the current system design.
6. Which of the following best describes the role of AI in software architecture management and design?
- a) AI tools replace developers in designing architectures from scratch.
 - b) AI helps with manual code refactoring and improves code readability over time.
 - c) AI can automatically generate architectural diagrams from code and suggest refactoring to improve maintainability.
 - d) AI primarily supports architectural decision-making without real-time monitoring.
7. Which architecture style would you recommend for building a function-based application like a photo-sharing platform where backend services scale automatically and respond to events such as file uploads?
- a) Microkernel
 - b) Serverless
 - c) Event Driven
 - d) Peer-to-Peer
8. Which of the following best describes a microkernel architecture?
- a) A core system that is extended with plug-ins to handle additional functionality.
 - b) An architecture that processes data as a series of transformations.
 - c) A system where all processing happens in a centralized server.
 - d) An architecture where services are split into small, independent modules.

Answer Keys

1. n/a
2. a) Architectural drift results in unnecessarily complex architectures.
3. d) Microservices
4. c) Event Driven
5. b) Code elements that make it difficult for developers to understand and modify the software.
6. c) AI can automatically generate architectural diagrams from code and suggest refactoring to improve maintainability.
7. b) Serverless
8. a) A core system that is extended with plug-ins to handle additional functionality.

