

1) What do you understand by the term microservice Architecture?

Microservice Architecture is an approach where a large application is built as a collection of small independent services, each responsible for a specific function.

2) What are the typical characteristics of microservice architecture?

Scalability

Loosely coupled

Small independent service

3) What is monolithic Architecture?

Traditional approach entire application is built as a single unified codebase.

4) Key difference between microservices and monolithic Architecture?

Microservices are small independent service

5) Difference between msa and soa ?
msa has smaller, more focused services,
soa often has larger, reusable services

6) What is an api, and how does it help
microservices communicate ?
Api allows microservices to communicate by
defining how request and responses are
structured between services

7) What do you understand about presentation
Layer, Logical Layer and Data layer?
Presentation layer

User Interface of the application

Logical layer

Handles the business logic

Data layer

manages data storage and retrieval

8) Which protocol is commonly used to communicate between microservices?

Http / Rest or gRPC

9) In what do you understand by the term Decentralized Data management in microservices Architecture?
This means each microservice manages its own database, reducing inter-service dependencies.

10) How do microservices typically communicate with each other?

Microservices communicate via API, using protocol like Http Rest or messaging queues.

11) How do microservices handle data consistency across different services?

This is using eventual consistency and distributed transactions.

12) What is Docker and how does it relate to microservice architecture?

Docker is a containerization platform that

~~Proxies~~ packages microservices and their dependencies making them easy to deploy

14) How do microservices handle security (such as authentication and authorization)?

Using technique like JWT and API gateway for authentication and authorization

15) What happens if one microservice fails in microservice architecture?

Other services remain functional the system

Can use fallback strategies like retries or

16) How can microservices be deployed independently of each other?

Using containers, orchestration tools like Kubernetes client libraries

17) Can you give an example of a real-world component that uses microservices?

Netflix uses microservices to scale

and handle million of users

10) What are the benefits of microservice architecture

- Scalability
- flexibility
- Easier debugging

14) What are the disadvantages of microservice architecture

- complexity
- ~~communication~~ overhead
- complexity
- communication overhead

20) What is the design principle of microservice architecture?

~~Scalability~~ Scalability

Independence

~~Micro~~