Q1. Tell one advantage and challenges faced while using Microservices.

Ans. Microservices is technologically diverse. It can be mixed with other libraries, [databases](https://www.simplilearn.com/what-is-database-management-article) and frameworks. As microservices rely on each other, there is a need for communication between them which poses a challenge.

Microservices has gained much popularity since its inception in 2011 because of its ability to develop large scale applications. Its adoption is on the rise, and the market is expected to boom by 2024. If you are looking for a career in Microservices, this is the right time. To help you in your path, we have curated a set of frequently asked microservices interview questions. Let us begin!

## **Top Microservices Interview Questions**

Here are the top 15 microservices interview questions picked by certified experts:

### Q1. Tell one advantage and challenges faced while using Microservices.

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### Q2. Which features of Microservices make it adaptable?

Ans. Microservices offer decentralized [data management](https://www.simplilearn.com/what-is-data-management-article), DevOps implementation, technical independence, service distribution based on business capabilities, hidden component complexity, and multiple, individually deployable components.

### Q3. Explain Microservices in layman terms.

Ans. Microservices or Microservices Architecture structures an application as small autonomous services modelled around a business domain as a honeycomb. The initial start is with a small section that builds a large structure that holds together a particular section; here, that is the business domain. Each cell is independent but correlated with the other cells. So damage to one cell does not impact the whole structure.

### Q4: One of the most frequent microservices interview questions is - what is meant by a Spring Cloud?

Ans. Spring Cloud is a system in Microservices that integrates external systems. It builds an application in a fast manner as it is a short-lived framework. It plays a vital role in the architecture of Microservices as it is associated with a finite amount of data processing.

### Q5. Tell about some embedded containers supported by Spring Boot.

Ans. Spring Boot contains the following embedded servers:

1. Tomcat- Apache Tomcat, an open-source JavaServer Pages implementation
2. Undertow- A central and flexible web server that develops a web server using small single handlers.
3. Jetty-  Eclipse Jetty can be embedded in application servers, tools, framework, and clusters in a vast number of projects

### Q6. Tell us about Service Registration and Discovery in Spring Cloud.

Ans. As the number of developed and deployed services increases, adding and modifying configurations becomes more complex. The manual changing of these can create issues such as services going down. All such issues can be handled with the help of Eureka Service Registration and Discovery.

### Q7. What is a ‘dumb pipe’ in Microservices?

Ans. Dumb pipes mean that no further actions can be taken place in this communication means. It just carries the data across a channel,

**1. What are microservices?**

Answer: Microservice Architecture is an architectural style that structures an application

as a collection of small autonomous services, modeled around a business domain.

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Answer: Monolithic Architecture is similar to a big container wherein all the software

components of an application are assembled together and tightly packaged.

Monolithic architecture is a traditional way of making software, in which all of an application’s

parts and functions are tightly tied together and packaged as a single unit.

Key characteristics of a Monolithic Architecture:

Single Codebase:

The entire application is developed and maintained within a single code repository.

Tight Coupling :

Components and modules within the application are tightly interconnected, making it difficult

to modify or replace individual parts without impacting the entire system.

Scalability Challenges :

Scaling a monolithic application can be challenging as all components need to be scaled together,

even if only a specific part requires more resources.

Monolithic Deployment :

The application is deployed as a whole, which can lead to longer deployment cycles and increased

downtime during updates.

Technology Stack :

Monolithic applications