

1. Teste de Inglês:

Leia o artigo e responda em inglês a pergunta abaixo:

<https://medium.com/geekculture/monolithic-to-microservices-ce043a3be80c>

Quais são as vantagens e desvantagens deste modelo de arquitetura?

In this article two different architectures are presented, Monolithic Architecture and Microservices Architecture. The monolithic architecture is present in applications that work with only one executable unit for the entire application, its packaging is normally a WAR or EAR file. The microservices architecture is present in applications that have a collection of independent services with unique responsibilities. Both architectures have their advantages and disadvantages.

In relation to the monolithic architecture, the main advantages of its use that can be highlighted are: Simple development process, due to the relationship between the components; Simple integration test, because the components are already connected; It's easy to monitor as you can see the exact paths and dependencies. Regarding the disadvantages of its use, the following can be pointed out: It is an architecture that is difficult to implement, as it needs to ensure that everything is packaged correctly, such as components, applications and dependencies; It has a certain degree of difficulty in understanding and changing, due to no one knowing the entire application from end to end; Updates are not possible or are delayed due to dependency on other components; It has less scalability; Less reusability; And the long time for the application goes offline due to the deployment.

On the other hand, in relation to the microservices architecture, its main advantages of its use, are: Easier to understand the code; Fixing bugs, maintenance and adding new features are easier; Better scalability; Support for the mixed technology stack; And high availability. Regarding the disadvantages of its use, can be scored: The complex integration test; The difficulty of managing dependencies between components; And the complexity to understand the whole application overview;