INVESTIGATION OF TECHNOLOGY FOR CREATING LARGE ELECTRONIC COMMERCE SYSTEMS

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Enterprise software applications are designed to facilitate numerous business requirements. Hence, a given software application offers hundreds of functions and all such functions are generally piled into a single monolithic application. ERP, CRM, and other various software systems are good examples – they're built as monoliths with several hundreds of functions. The deployment, troubleshooting, scaling, and upgrading of such software applications are a nightmare.

The foundation of microservice architecture (MSA) is about developing a single application as a suite of small and independent services that are running in their own process, developed and deployed independently [1].

Most definitions of microservice architecture explain it as an architectural concept focused on segregating the services available in the monolith into a set of independent services [2]. This solution has a number of benefits [3]:

– enables the continuous delivery and deployment of large, complex applications;

– improved maintainability – each service is relatively small and so is easier to understand and change;

– better testability – services are smaller and faster to test;

– better deployability – services can be deployed independently;

– it enables you to organize the development effort around multiple, autonomous teams. Each team owns and is responsible for one or more services. Each team can develop, test, deploy and scale their services independently of all of the other teams;

– eliminates any long-term commitment to a technology stack. When developing a new service you can pick a new technology stack. Similarly, when making major changes to an existing service you can rewrite it using a new technology stack.

References:
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