Lorenzo Cavataio

4/13/2024

ITWP-2600

Prof. Wanner

Ch. 9 Exercise #8

Simple Object Access Protocol vs Representational State Transfer

The first approach used for Web services was Simple Object Access Protocol (SOAP), a message protocol that enables the distributed elements of an application to communicate. SOAP was developed as an intermediate language for applications that have different programming languages, enabling these applications to communicate with each other over the internet. SOAP is flexible and dependent, which enables developers to write SOAP application programming interfaces in different languages while also adding features and functionality.

Another approach for Web services is Representational State Transfer, or REST, which is an architectural style for providing standards between computer systems on the web, making it easier for systems to communicate with each other. The REST approach to Web services is thought to be a simpler structure and has become more common in Web services implementations. Some Web services designers who found SOAP to be overly complex for their applications turned to Fielding's REST idea and used it to structure their work. More than half of all Web services today are RESTful applications. REST APIs are also highly scalable. They can handle thousands, millions, or even billions of data simultaneously without affecting performance.

RESTs flexibility, scale, and ease of use are all advantages that help web designers implement their protocols. With RESTful applications accounting for more than half of all Web services today and SOAP applications being a little more complex, REST APIs appear to be a better option than the SOAP APIs.

Sources:

Schneider, G. (2017). Electronic Commerce (12th ed.). Cengage Learning.

https://www.techtarget.com/searchapparchitecture/definition/SOAP-Simple-Object-Access-Protocol

https://www.codecademy.com/article/what-is-rest