About SOAP

In the lesson, we will learn about the SOAP Web Service.

We'll cover the following ⌃

- What is SOAP?
- Advantages

What is SOAP?

`SOAP` (Simple Object Access Protocol) is an XML-based protocol for accessing web services over HTTP and few other protocols. It has some specifications which can be used across all applications and platforms.

`SOAP` follows a strict messaging structure, a set of encoding rules, and a convention for providing rendering requests and responses.

Advantages

- `SOAP` communicates over `HTTP`, `HTTPS`, `TCP`, `SMTP`, `FTP`, `XMPP`, and more, unlike `REST` which communicates over `HTTP` and `HTTPS` only.

- `SOAP` can have its own implementation of security SOAP `WS-Security` that allows it to encrypt messages and have authentication data in the message header.

- `SOAP` is **ACID**-compliant (*Atomicity*, *Consistency*, *Isolation*, and *Durability*).

In this lesson, we learned about the SOAP web service and its advantages. In the next lesson, we will learn about the building blocks of SOAP messages and Web Service Definition Language (WSDL).