Service-Oriented Architecture

UNIVERSITY OF ALBERTA

Course Glossary

We have attempted to identify the most important terms in the course here. Look here if you encounter a term without a definition in context. If you need further explanation, you may have to return to the lesson where we first introduced the term, or do some independent study.

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aggregation - putting objects or other components together

binding (1) - the act of programming a service requester to interact with a service provider. Can be done programmatically or manually by using the WSDL description.

binding (2) - in WSDL, the bindings section gives detail about the protocols and standards that are mapped to the interaction.

BPEL/WS-BPEL - a design language for composing web services. Stands for Business Process Execution Language.

Composing Object principle - a form of aggregation in OO in which the desired behaviour is obtained by combining objects

composition - creating a new service by combining other services

coordination - using two or more services in conjunction

DOCTYPE - is the first line in any HTML file.It is what denotes to the browser that the file is HTML

eXtensible Markup Language or **XML** - is a markup language that was meant to store and transport data.

GET method - retrieves the resource given by URI provided in the request-line

HTML DOM: when you load a web page in your web browser the HTML document becomes a document object. This object can be used to obtain and modify content on the web page.

HTTP request methods: indicate to the web server the intent of your request.

hypertext: a document embedded with hyperlinks**,** which when clicked, will take you to the intended document or resource.

HyperText Markup Language or **HTML** - a markup language that is used to display data, it is used to create websites. HTML does not handle the styling of data though.

HyperText Transfer Protocol or **HTTP** -: a web protocol that allows your web browser to interact with a remote web server.

hyperlinks: link together multimedia resources such as images, videos, gifs, text and audio, or documents containing any combination of these.

interface - in WSDL, the interfaces section describes abstractly the potential interactions as a series of input and output operations

interpreted language - as opposed to a compiled language, interpreted languages are interpreted into machine code on running.

Javascript - a programming language that is one of the foundational standards for content on the World Wide Web.

JavaScript Object Notation or **JSON** - a format that can be used to store and transport data.

markup languages - Markup languages are designed to define, present and process text in a machine and human readable way.

services - in WSDL, the services section is the final step to describing the concrete implementation of a service and its location

POST method: used to add or modify the resource located in the message body of the request, on the host specified in the URI of the request.

PUT method: takes the object provided in the message body of the request and creates or updates the object at the location specified in the URI of the request.

SOAP - a standard for the invocation of first-generation web services that is based on XML Schema. Can be document-style or RPC-style.

tags - Markup languages use them to define how certain pieces of text are interpreted

TCP (Transmission Control Protocol): TCP allows for reliable, ordered, connection oriented communication. HTTP relies on TCP.

types - in WSDL, the types section defines abstract data types in XML to facilitate information exchange

UDDI (Universal Description, Discovery, and Integration) - a standard based on XML Schema for describing web service providers and web services, and for discovering them and binding to them.

URI (Universal Resource Identifiers): address used to identify a resource.

URL (Universal Resource Locators): used to identify the resource and tell the protocol how locate and access the resource.

WSDL (Web Service Description Language) - a standard for describing web services based on XML Schema. Can describe any web service, but typically used for WS*-style.