

Meeting one 12/04/03

Review of topics discussed researched.

UDDI:

Universal Description, Discovery and integration registry.

Name of a group of web-based registers that expose information about a business or other entity and it's technical interfaces (API).

Comment:

Not very important but a basic knowledge of this topic should be aquired.

WSDL:

Web services description langage

-written in XML

-An XML document

-Used to describe web services

-used to locate web services

-not yet a w3c standard

-Describes web services.

Comment:

A sound knowlrdge of wsdl should be aquired.

SOAP:

Simple Object Access Protocol.

SOAP provides a simple and lightweight mechanism for exchanging structured and typed information between peers in a decentralized, distributed environment using XML.

Defines a simple mechanism for expressing application semantics by providing a modular packaging model and encoding mechanisms for encoding data within modules. This allows SOAP to be used in a large variety of systems ranging from messaging systems to RPC.

SOAP consists of three parts:

The SOAP envelope construct defines an overall framework for expressing what is in a message; who should deal with it, and whether it is optional or mandatory.

The SOAP encoding rules defines a serialization mechanism that can be used to exchange instances of application-defined datatypes.

The SOAP RPC representation defines a convention that can be used to represent remote procedure calls and responses.

Although these parts are described together as part of SOAP, they are functionally orthogonal. In particular, the envelope and the encoding rules are defined in different namespaces in order to promote simplicity through modularity.

In addition to the SOAP envelope, the SOAP encoding rules and the SOAP RPC conventions, this specification defines two protocol bindings that describe how a SOAP message can be carried in HTTP messages either with or without the HTTP Extension Framework.

Comment:

Very important to have a good understanding of SOAP fundamental to the entire project.

XML-ebXML

XML stands for EXtensible Markup Language

XML is a markup language much like HTML

XML was designed to describe data

XML tags are not predefined in XML. You must define your own tags

XML uses a Document Type Definition (DTD) or an XML Schema to describe the data

XML with a DTD or XML Schema is designed to be self-descriptive

Also looked into associated features such as DTD,

SAX- Simple API for XML processing

DOM-Document Object Model

XSLT-Xml style sheet language transformations

JAXP-Allows you to use any xml compliant parser

JAXB-Java Architecture for XML binding.

Also note electronic business mark up language.

Xerces Parser

Other tasks performed in the last week were

The installing of JBuilder8

Research into Twiki

Twiki is a Web-based collaboration platform

A Twiki site is an easy-to-use, full-featured open communications environment:

people anywhere on the Web or on an intranet can meet

rich Web text, images, and online multimedia are easily shared

documents and other files can be uploaded and downloaded

all you need is a Web browser and any available network connexion

NEXT Phase:

Research and install

TOMCAT

AXIS

SOAP within axis

Concept of a standalone applet

Client server web services

Client java library

More work needed on web service concepts.

Also research

CORBA

IDL

Find out what exists as current librarys

Basic problem definition.

Contexte :

Le CDS (Centre de Données astronomiques de Strasbourg) développe actuellement des services basés sur l'utilisation des technologies liées aux " WebServices " .

Sujet :

L'implémentation de ce type de service peut être effectuée à partir d'un fichier descriptif de type WSDL (Web Service Description Language) mais nécessite au niveau du client la présence des bibliothèques adéquates afin de pouvoir effectuer les requêtes avec la prise en charge transparente de la communication via le protocole SOAP (Simple Object Access Protocol).

Le but de ce stage est de créer une API minimale permettant d'envelopper des requêtes suivant le format SOAP et d'être capable d'interpréter le résultat, également au format SOAP sans l'utilisation de ces bibliothèques.

Le stagiaire pourra dans un premier temps réaliser un travail préliminaire permettant d'interroger les services déjà opérationnels au CDS mais il devra ensuite rendre l'API plus générique afin de pouvoir prendre en compte facilement de nouveaux services.

English Translation.

The implementation of this type of service can be carried out by a WSDL descriptive file but needs at the client end the presence of adequate libraries in order to be able to carry out these requests following the soap protocol.

The student can in the initial stages research the services already in operation at the CDS but should then make the API more generic in order to be able to adapt to new services.

Mercredi 15/04/03

Spent all day trying to create atwiki application sucessfull, but was unable need assistance tomorrow from supervisor. Gained a great deal of experience about UNIX.