### Web Services Theme: Overview

Ioannis G. Baltopoulos

Department of Computer Science Imperial College London

CERN School of Computing, 2005 Geneva, Switzerland



## Content Map What will be covered

#### Overview

Web Services & Review of Distributed Computing

#### **Related Technologies**



#### **Developing Web Services**



#### **Advanced Issues**



#### Summary

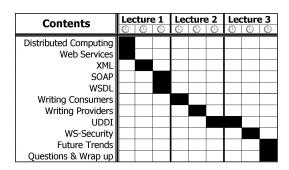
Future Trends

The subjects covered are grouped in Lectures as follows:

- Introduction to Web Services
- Consuming, Providing & Publishing WS
- Advanced Issues & Future Trends

## Scheduling

- The theme takes place on Friday, the 24th of February 2005.
- First lecture starts at 9:00am and last one finishes at 12:25pm.
- Lectures last for 50mins.
- Some might take a bit more time, others less.
- All depends on your interests, participation & caffeine levels.



## **Objectives**

#### What we should be aiming for

Upon completion of this theme you should be able to:

- Understand and create an XML document.
- Understand the Simple Object Access Protocol (SOAP).
- Be able to describe a Web Service using a WSDL file.
- Write a Web Services Consumer using the Apache Axis toolkit.
- Provide a Web Service using Tomcat and Axis.
- Know where to look details of more advanced topics.
- Understand the future technological trends emerging from the use of Web Services.



# Prerequisites Stating the assumptions

The whole theme builds from the ground up so there are no special knowledge requirements.

Nevertheless you'd benefit the most if

- you have programmed in an Object Oriented Language, especially Java, and
- have attended the Advanced Software Development & Engineering lectures.

### The Lecturer

#### **Academic Qualifications**

- A First class BSc Graduate in Computer Science from the University of Kent at Canterbury.
- A postgraduate student on the Advanced Computing Master's course offered by Imperial College in London.
- A prospective PhD student at the Computing Laboratory in Cambridge, starting in October 2005.

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#### Work Experience

- Worked for Sun Microsystems in California member of the Advanced Development Group.
- At CERN during the summer of 2004, member of ATLAS Online Software Group.
- Various smaller jobs in the UK, Greece and Cyprus.

### Contacting me

### During the iCSC

- I'll try to make myself available during the three days; if you want to ask something just come and talk.
- Out of hours I will be regularly checking email so for anything urgent send me an email at the following address

 ${\tt ioannis.baltopoulos@gmail.com}$ 

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#### After the iCSC

- Again the best way would be to send me an email at the address above.
- For other ways of communication ask me directly or check my personal website when it's online (more information to come).



### Materials

#### Lecture Slides

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- contain extra slides for transition effects, section dividers and global navigation.

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#### Web Services Template Project

Towards the end of the iCSC I'll be publishing a Web Services template project for Eclipse. It will contain a basic automation script for use with ant, as well as other helpful hatch files and examples

Soooo...lets play a game!

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- How many people know how to describe a Web Service using WSDL?
- How many people have used Axis before for creating a provider or a consumer?
- How many people consider themselves well versed in Web Services?

