



أكاديمية الحكومة الإلكترونية الفلسطينية

The Palestinian eGovernment Academy

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# Process Integration and Service Oriented Architectures

Introduction & Outline

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## Project Consortium:



Birzeit University, Palestine  
(Coordinator)



Palestine Polytechnic University, Palestine



Palestine Technical University, Palestine



Ministry of Telecom and IT, Palestine



Ministry of Interior, Palestine



Ministry of Local Government, Palestine



University of Trento, Italy



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# Tutorial Map

## Prerequisites: OO, programming Web Services using C#

This tutorial can start after taking Tutorial 1 and sessions 1-4 from tutorial 2

### Intended Learning Objectives

#### A: Knowledge and Understanding

- 3a1: Demonstrate knowledge of the fundamentals of middleware.
- 3a2: Describe the concept behind web service protocols.
- 3a3: Explain the concept of service oriented architecture.
- 3a4: Explain the concept of enterprise service bus.
- 3a5: Understanding WSDL service interfaces in UDDI.

#### B: Intellectual Skills

- 3b1: Design, develop, and deploy applications based on Service Oriented Architecture (SOA).
- 3b2: use Business Process Execution Language (BPEL).
- 3b3: using WSDL to describe web services.

#### C: Professional and Practical Skills

- 3c1: setup, Invoke, and deploy web services using integrated development environment.
- 3c2: construct and use REST and SOAP messages for web services communication.

#### D: General and Transferable Skills

- d1: Working with team.
- d2: Presenting and defending ideas.
- d3: Use of creativity and innovation in problem solving.
- d4: Develop communication skills and logical reasoning abilities.

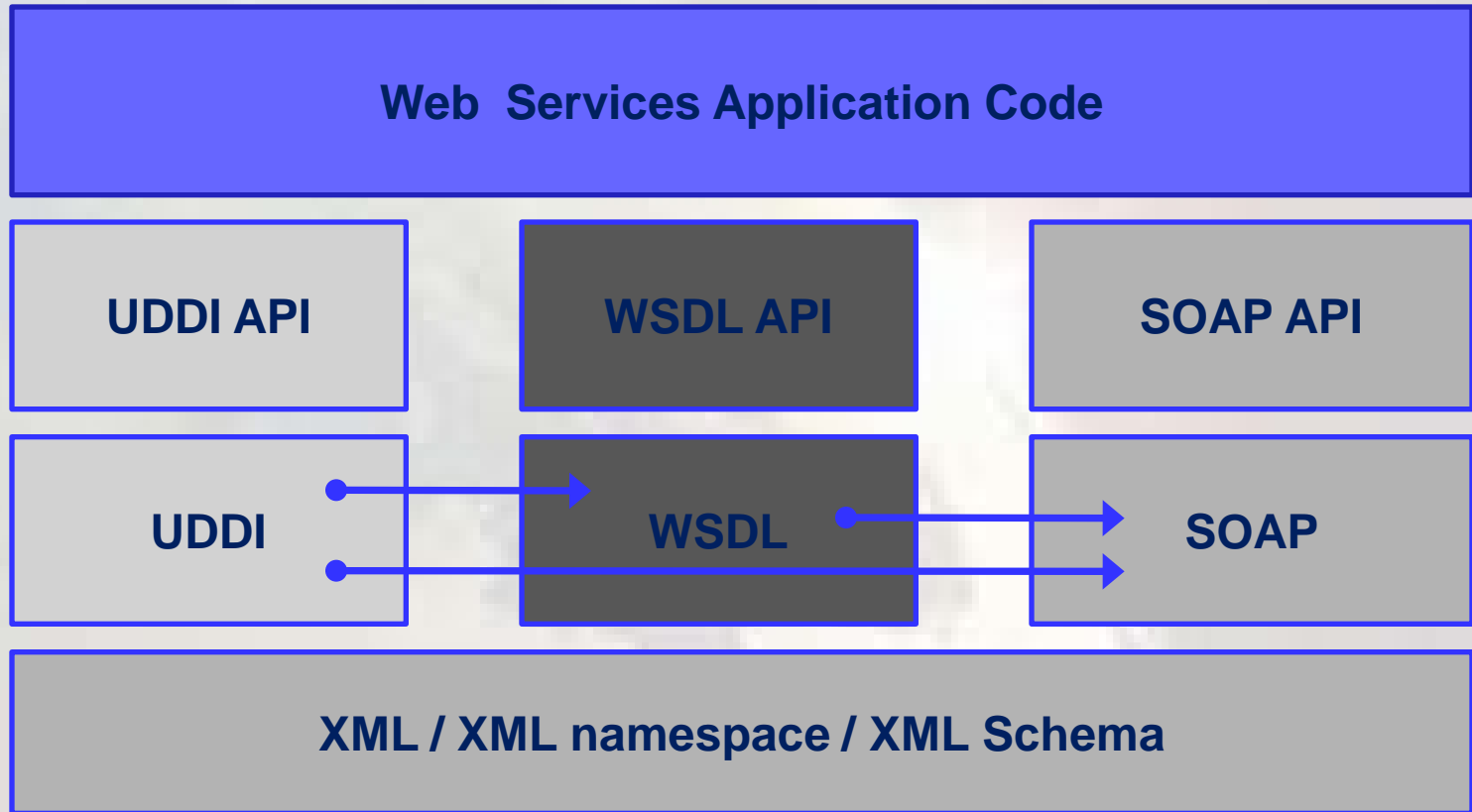
Title	T	Name
Session0: Syllabus and overview	0	Aldasht
Session1: Introduction to SOA	2	Aldasht
Session2: XML namespaces & XML schema	2	Aldasht
Session 3: Xpath & Xquery (Lab 1)	4	Romi
Session4: REST web services	3	M. Melhem
Session5: Lab2: Practice on REST	3	M. Melhem
Session 6: SOAP	2	Aldasht
Session 7: WSDL	3	Aldasht
Session8: Lab 3: WSDL practice	3	Aldasht
Session9: ESB	4	Aldasht
Session10: Lab4: Practice on ESB	4	Aldasht
Session11: integration patterns	4	M. Melhem
Session12: Lab5: integration patterns	4	M. Melhem
Session13: BPEL	3	Aldasht
Session14: Lab6: Practice on BPEL	3	Aldasht
Session15: UDDI	2	Aldasht

# Schedule

Title	T	Name	Run1	Run2
Session0: Syllabus and overview	0	Aldasht	Day1	Day1
Session1: Introduction to SOA	2	Aldasht	Day1	Day1
Session2: XML namespaces & XML schema	2	Aldasht	Day1	Day1
Session 3: Xpath & Xquery (Lab1)	4	Romi	Day1	Day1
Session4: REST web services	3	M. Melhem	Day2	Day2
Session5: Lab2: Practice on REST	3	M. Melhem	Day2	Day2
Session 6: SOAP	2	Aldasht	Day3	Day3
Session 7: WSDL	3	Aldasht	Day3	Day3
Session8: Lab 3: WSDL practice	3	Aldasht	Day3	Day3
Session9: ESB	4	Aldasht	Day4	Day4
Session10: Lab4: Practice on ESB	4	Aldasht	Day4	Day4
Session11: integration patterns	4	M. Melhem	Day5	Day5
Session12: Lab5: integration patterns	4	M. Melhem	Day5	Day5
Session13: BPEL	3	Aldasht	Day6	Day6
Session14: Lab6: Practice on BPEL	3	Aldasht	Day6	Day6
Session15: UDDI	2	Aldasht	Day6	Day6



# Overview



Source, Olaf Zimmermann 2005.

- Microsoft Visual Studio 2010

