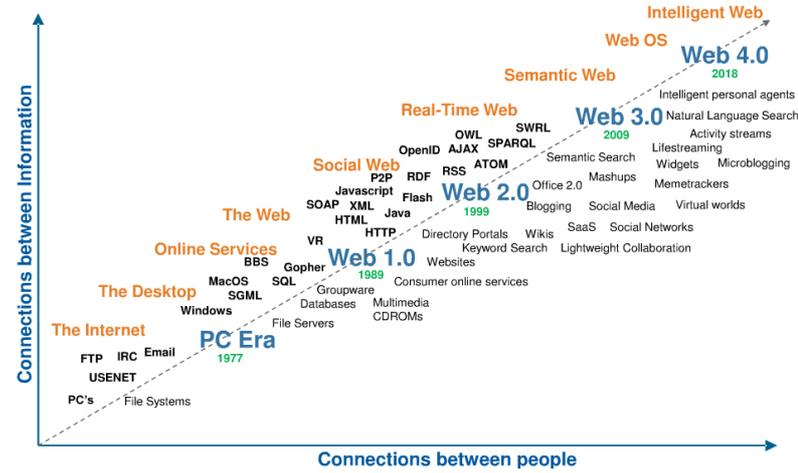




Agents and the Semantic Web

PhD Course of the Computer
Science and Engineering Program,
DIBRIS, University of Genova



(Slide from <http://www.urenio.org/2011/11/17/semantic-web-for-smart-cities/>)

Instructors:

Viviana Mascardi DIBRIS (viviana.mascardi@unige.it)
Laura Papaleo LRI - Université de Paris-Sud (laura.papaleo@lri.fr)

Where and when: DIBRIS – Università degli Studi di Genova - Via Dodecaneso 35, Genova

Length: 18 hours

The course will take place on **June 18, 19 and 20, 2014, in the slots 9-12 and 13-16**. Because of the compressed format, the course may be of interest for PhD students of other universities. The free registration is mandatory and requires sending an email to instructors **before June 10, 2014**.

Short Description:

According to the seminal work of Berners-Lee, Hendler and Lassila (2001) "The Semantic Web is not a separate Web but an extension of the current one, in which information is given well-defined meaning, better enabling computers and people to work in cooperation."

Thanks to Semantic Web technologies, today, the World Wide Web has enabled the creation of a global information space comprising linked documents and data. As the Web becomes ever more enmeshed with our daily lives, there is a growing desire for direct access to raw data not currently available on the Web or bound up in hypertext documents.

Linked Data provides a publishing paradigm in which not only documents, but also data, can be a first class citizen of the Web, thereby enabling the extension of the Web with a global data space based on open standards - the Web of Data.

Thus, Linked Data is "about using the Web to create typed links between data from different sources. These may be as diverse as databases maintained by two organizations in different geographical locations, or simply heterogeneous systems within one organization that, historically, have not easily interoperated at the data level." (Bizer, Heath, Berners-Lee, 2009). The course will survey enabling technologies for the semantic web and for linked data, including languages, tools and infrastructures for knowledge representation and rational agents. Indeed, enabling technologies for the semantic web are now enough established to build intelligent applications that take advantage of the semantics associated with web resources. In particular, research on intelligent software agents (Jennings, Sycara, Wooldridge, 1998) has now reached a great degree of maturity that makes its exploitation feasible for real applications. The Linked Data, needing to exploit semantic technologies to cope with the messiness of "the web of data", can take advantage of intelligent agents as well.

Exam:

Either a small project, or a seminar on the subject of the course.

More information:

<http://www.disi.unige.it/person/MascardiV/Didattica/ASW2014.html>

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