
Telematics A

Finalità

To illustrate basic architecture of principal networked applications, particularly highlighting communications protocols aspects in the Internet context. To give hands-on knowledge of some of the protocols and applications..

Programma

A refresher on OSI, ISDN and Internet protocol models. Transport Protocols and client/server paradigm in the TCP/IP protocol suite. Internet standards: RFCs. Coding of written text, coded character sets, Unicode. The Domain Name System. Fundamental application protocols in Internet: TELNET, FTP, SMTP, POP. Email standards: RFC2821, MIME, international versions.

The WorldwideWeb and its standards. http, connection control in http, http method, authentication, security, https and the certification mechanism.

Voice services based on TCP/IP: Voip and related protocols, SIP.

Attività d'esercitazione

Using standard utilities for protocol testing. Configuration of a Web server.

Modalità d'esame

Two intermediate tests plus a software project to be developed along the course duration. At request a final oral exam can be taken.

Propedeuticità

Recommended: Reti di Calcolatori A; Reti di Telecomunicazioni A

Testi consigliati

D. Gourley and B. Totty: HTTP-The definitive guide, O'REILLY; W. Stevens: TCP/IP Illustrated, vol. 3, Addison-Wesley