



DEPARTMENT OF ELECTRICAL ENGINEERING
FACULTY OF ENGINEERING
UNIVERSITY OF ALEXANDRIA
EGYPT

Final-Year Project, 2008–2009
Design of a Voice over IP Communication System

Prof. Hossam Shalaby, Email: shalaby@ieee.org

Aim

- Developing a software-based IP PBX that replaces traditional proprietary hardware PBX. The software is based on SIP standard and is independent of operating system.

Main Tasks

- Reviewing literature on VoIP.
- Studying VoIP protocols (RTP, RTCP, SIP).
- Advanced study on SIP, RTP, and RTCP.
- Studying some SIP libraries in Java.
- Studying of how to let VoIP goes through NAT/Firewall.