EndTerm Assignment

IITK-MAIL

Electrical Engineers Association

** Due: 5th January, 2024 **

Question 1: UDP Chat application

Create a UDP chat application for communicating with your phone using the UDP monitor.

• Install the UDP monitor application on your android phone. Connect your phone and PC such that they are on the same network. This can be done either by

–Connecting them to the same wifi network

–Connecting your PC to phone' s mobile hot-spot, or

–Connecting phone and PC via USB tethering

• Once you ensure phone and PC are on the same network, open the UDP monitor application on the phone.

• The IPv4 address of your phone will be displayed on the top left corner.

Also select the local port on the phone. Use this address while designing your UDP chat application.

• For two way communication give the remote address and port of your PC in the UDP monitor mobile application.

Design a two way chat application with the UDP monitor.

HINT: For parallel two way communication, you may need to use the 'threading' feature in python that implements parallel processes.

UDP Monitor application link: `https://tinyurl.com/udpMonitor`

Question 2: IITK-MAIL

The goal of this question is to create a simple mail client that sends email to any recipient. Your client will need to establish a TCP connection with a mail server (e.g., iitk mail server: mmtp.iitk.ac.in), dialogue with the mail server using the SMTP protocol, send an email message to a recipient (e.g., your friend) via the mail server, and finally close the TCP

connection with the mail server. Your job is to code and test your client by sending email to different user accounts. Incorporate the following features of email in your code: (i) Subject, (ii) cc or bcc, (iii) attachments.

SMTP server settings
smtp-server = 'mmtp.iitk.ac.in'
smtp-port = 25
**Try Different Wifi connections/hotspot if code does not work.

MENTORS:
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