

## C\$544 Assignment #3

- 1. What is/are the difference between end-to-end delay and packet jitter? What are the causes of packet jitter?
- 2. Why is a packet that is received after its scheduled play-out time considered lost?
- 3. What is the role of a SIP registrar? How is the role of an SIP registrar different from that of a home agent in Mobile IP?
- 4. Consider a DASH system for which there are N video versions (at N different rates and qualities) and N audio versions (at N different rates and versions). Suppose we want to allow the player to choose at any time any of the N video versions and any of the N audio versions.
  - A. If we create files so that the audio is mixed in with the video, so server sends only one media stream at given time, how many files will the server need to store (each a different URL)?
  - B. If the server instead sends the audio and video streams separately and has the client synchronized the stream, how many files will the server need to store?

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Filename format: CS544_hw#_sec#_lastname_firstname.doc (or pdf)
e.g.) CS544_hw2_sec01_Jordan_Michael.doc // main campus section 01
CS544_hw2_sec02_Woods_Tiger.pdf // online section 02
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Due date: 2/28/17 23:59 US Chicago Time