



Evaluation of Speak



Project 2b

Due November 4th



Overview

- Experiments to evaluate performance of your VoIP application (Project 2)
- Focus not only on how your software performs, but also
 - design, implementation of experiments
 - analysis
 - writeup



Details

- Two parts
 - in-depth user study with friend (called "group")
 - More forgiving users, less objective
 - brief user study outside group
- For both parts, evaluate by user perception
 - Brief, 1-2 minute conversation
 - Record user opinions (1-10, or similar)
 - Pencil and paper, software, ...



In Group

- Baseline case: 0% loss, UDP, no speech detection, 40ms
- Compare versus:
 - Loss: 0%, 1%, 5%, 10%, 20%
 - Latency (by increasing the sample interval): 40ms, 100ms, 250ms, 500ms, 1000ms
 - Connection type: TCP, UDP
 - Speech detection: on, off
- Pick (and justify) Perceptual Quality measure

Outside Group

- 1-3 people outside of your group
- Record some basic information
 - age, gender, profession, VoIP use...
- Loss rates of 0%, 5%, 20%
- Latencies of 40ms, 500ms, 1000ms
- Record
 - Quality score (scale 1-10, or similar)
 - Subjective comments ("sounded good", "was hard to talk", etc).
 - Ask to compare with land-line phone call

Report

- Introduction (brief)
 - Motivation and Hypotheses
- Background on your software (as needed)
- Design of your experiments (brief, since given)
 - Details on above
- Analysis (detailed)
- Conclusions (brief)
 - Summarize findings
- Abstract
 - 1 paragraph
 - Write last, goes first

