Testing Report
Coursierge
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Screen-Sharing Test:

Stream Publishing/Stream Subscribing Test:

First we required a test for Publishing, as we cannot subscribe to a stream without publishing one first.

This was tested by using Toasts and by instrumentation testing. To move into the streaming activity, it is required to create and connect to a tokbox session. Otherwise, the activity would generate an error Toast and remain on the Professor activity. Once on the activity, we prompt for permissions for camera and audio. If those pass and the camera/microphone are activated, then we are streaming properly.

Next, we need to test the Subscribing. To view a stream in the subscribing activity, it is required to create and connect to the session id generated by the published stream. Otherwise, the activity would generate a error Toast and remain on the Student activity. Once of the activity, the stream should generate a live stream of the published stream. This is checked by seeing if the frame layout is populated and audio is being produced.

Our main test was using a real android phone to publish the stream and the emulator view the stream. This allowed us to get a real world feel for how the app could be used and any bugs/crashes we could find.

Audio-Only Mode Test:

File: ProfSession.java
Method: onClickToggleVideo(View view)

Using the instrumentation testing, we could see if the video could be toggled by using the emulator. Once streaming, if the button cut the video and retained audio responses then we moved on to subscribing to said stream. This allowed us to test whether the viewer saw the video cut and could still hear the audio. If these two passed, then the method was functional.

Professor/Student Question Functions Test: