

## **LeTour Guide Concept Description**

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### **The Problem**

For large groups, especially in hallways where the tour may be compressed into a long line, it can be difficult for individuals in the back of the tour to hear the tour guide. It is important to LETU that everyone to hear what the guide says. Mishearing the guide can be frustrating for the listener and can result in a more negative experience of the school.

By addressing this problem, the audience can much better understand the guide, which generally improves the comfortability of the individual during the tour. This can lead to an overall positive first impression of LETU. Of course, a more comfortable experience will, in general, bring in more students, which improves the life of the stakeholders, but also brings in more peers to improve the life of the student.

### **Scope**

- Develop client side front-end for audience members and tour guides for mobile devices
- Develop server backend to serve client front-end
- Develop client side back-end to receive and send an audio stream
- Develop server backend to service incoming audio streams and reflect that to audience client devices. This backend needs the ability to send only incoming streams of a particular guide to audience member clients of the same selected tour.

Optionally:

- Develop a system for audience members to send audio stream (a question) which can be heard by members of the audience and the guide of that tour.
- Allow the tour guide to mute or allow questions from audience members.

### **Platform**

In research. Possible frameworks and libraries:

- React JS
- mediasoup
- Janus WebRTC server

### **Deliverable**

Concept prototype and possible demonstration to Admissions department circa late November.

### **Mission**

Using an in-house built tool (as opposed to a paid service) shows the audience the competence of students about their studies at LETU. It shows the community that we don't just study here, but LETU students develop real solutions that work.