

Implementing in-app Audio Recording

Easy Meeting requires recording of meeting by the host of the meeting and the issue resolved in this research is how to continue recording even by leaving application.

The basic implementation of audio recording using android documentation:

https://developer.android.com/studio/run/?utm_source=android-studio

The documentation includes implementing the basic audio recording which include start and stop functions and it needs the activity to be in foreground to keep on recording

Allowing recording even with leaving the application:

There are lots of application out there which allow out of application recording i.e. the user can leave the recording interface and then also keep on recording the meeting. The aim is to see how they did it and then by staying in the norms of academic integrity we can replicate that.

Implementing GPS Check-In:

So, the application needed a way to determine that the attendance that is marked is from the correct location which indeed means that the person is attending the meeting and then marking the attendance.

To implement this I came up with an approach where when the host create a meeting, it has to enter the location of the place. When that happens our application will note down the coordinates of the location which will be used in future to mark people's attendance.

So, the meeting is here and all the participants are there to attend the meeting. When allowed by the host everyone will start marking their attendance by using the check-in functionality. When an attendee does that, Easy Meeting application records the GPS coordinates.

Now, there will be a backend ajax call which will get the original location coordinates in the database and calculate the difference between the two values and return us the difference in meters. So, if the difference shows up less that 10m of range then the attendee will be allowed to mark the attendance and if not then they will not be allowed.

This makes it compulsory for the attendee to show up at the meeting and takes away the chance of sitting somewhere other than the meeting location and marking attendance.