PROBLEM
Instructors currently face difficulty in manually tracking participation and viewing insightful and accurate statistics from their participation data. Teachers who calculate grades based on participation have difficulty accurately keeping track of who speaks up during class. Tracking participants on paper during class is distracting, and entering data into a spreadsheet after class based on the teacher's memory is both monotonous and potentially inaccurate.

The problem we want to solve is tracking participation in a small classroom setting. Throughout the semester, we have began to develop an application that automates an instructor's participation tracking tasks and generates useful statistics for the teacher to better understand who is participating.

TARGET USERS
Instructors who...
• Teach in a small-classroom setting
• Use participation as a part of students' grades
• Strive to better understand any patterns in classroom participation

SOLUTION
After numerous feedback from test users and team discussions, we decided to design our application in a simple, minimalist manner so that our users will find our application easy to understand and use.

We created an alert notification system using Android's Notification Manager so that instructors are reminded to begin tracking participation.

We also created a tracking system in which instructors can begin the class' tracking and ask students to turn on individual microphones. We used Google App Engine to help manage Participation Events.

We also have a filtering system as statistics for instructors only. Our target users may be able to view statistics and infer analysis from the collected data.

FINAL PROTOTYPE
In addition to implementing the notification system, tracking system, filtering system, and account system, we also have implemented an instructor's control over adding and editing classes.

We have also made a similar student-version of the application. Students are only able to add and delete classes and turn on or off their microphone.

The main feature we did not include were the options surrounding filtering and viewing graphs based on the participation data. In order to give instructors insight into the breakdowns of which student populations participate the most and the least and whether or not instructors have certain biases regarding the students they call on, our application will eventually provide graphs for the instructors based on filters.