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**The goal of the project:**

Considering that professors in university need to count attendance every time during class hours, we were trying to design an attendance auto-counter app on Android system. The auto-counter can save estimated 5 minutes for each class, because attendance is counting automatically when a professor walking in a class as long as he/she launched the app. Hence, it can be a reasonable useful and convenient tool that should be installed in every professors’ Android phone.

On the first class of a semester, everyone in the class should match their Bluetooth with the attendance counter device. After initiation, what a professor only needs to do is launch the app and tell student turn on Bluetooth before class beginning, and AutoCounter will match the mac address of each student’s phone. Therefore, attendance will be recorded.

These data will be saved using SQLite so it’s persistent and safe. We also provide manually record approach for those people who don’t have smart phone or forget bringing it temporarily.

After 45 minutes the AutoCounter won’t scan or record Bluetooth anymore, instead, it start count attendance rate and send a notification to professor. Or professor can stop scanning manually. Meanwhile, the app will email students who didn’t show up automatically.

At the end of semester, the app can count each student’s score using pre-set percentage, and generate an Excel file.

**Features have been implemented:**

Add new courses

Update course information

Show courses’ information

Choose course

Initialize DB when first scan

Launch Bluetooth automatically

Scan Bluetooth

Save Bluetooth by its name and address

Email absentees

Show results of attendance

**Component diagram (by MS Visio):**

