

What is the problem?

- During drills and emergencies, no reliable or efficient way:
- to account for students
 - for teachers and administrators to communicate

Who are our users?

- Teachers (primary) and administrators (secondary) in high schools
- Varying technology skills
- Educated, most have college degrees
- Age range ~22-70 years old

Solution Design

Design objectives

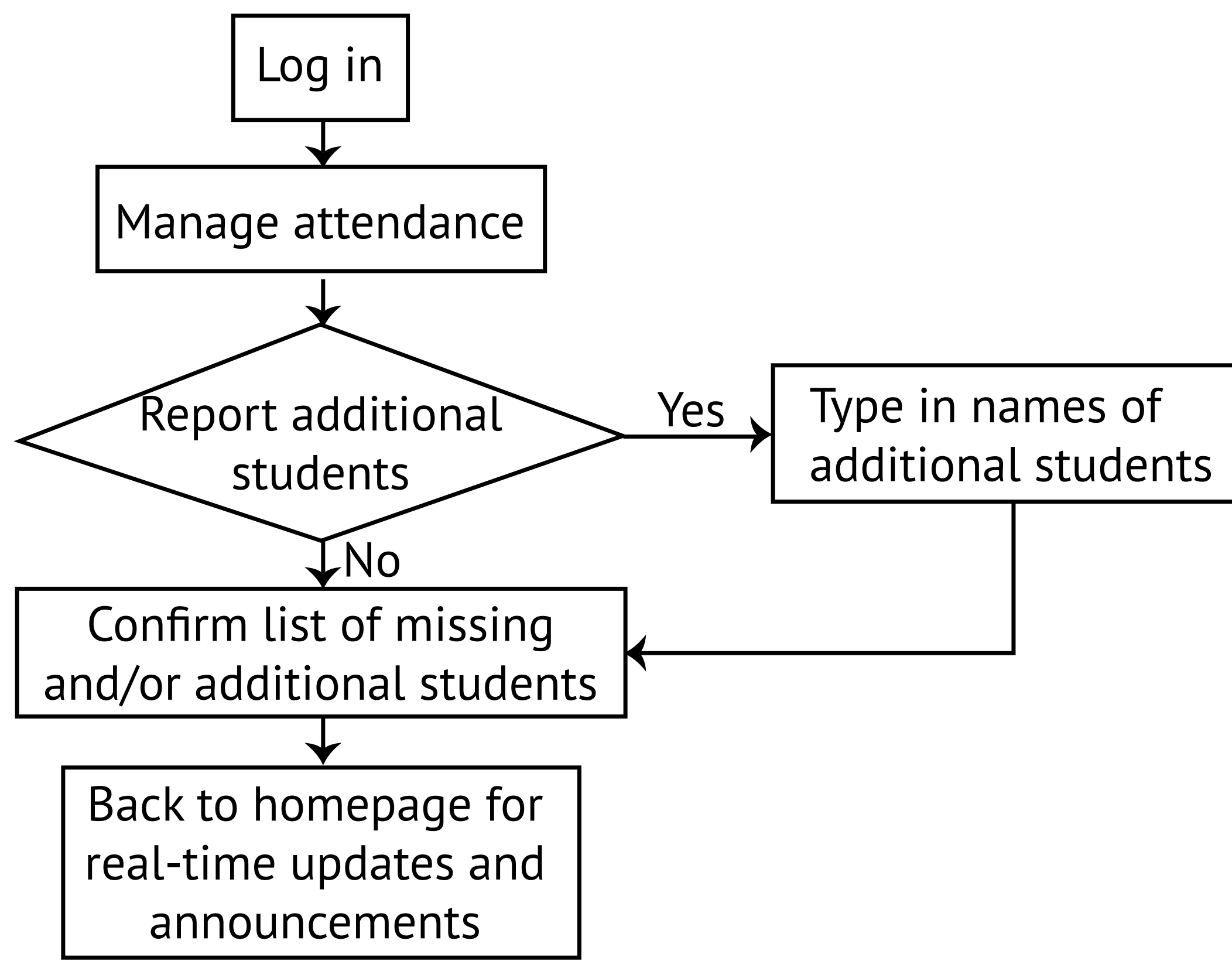
1. Help users account for students
2. Facilitate communication between teachers and administrators

Design advantages

- Mobile app
- Quick input of student attendance
- Faculty-wide announcements
- Communication via messaging
- Familiar technology
- Easy to learn
- Easy to adopt in schools

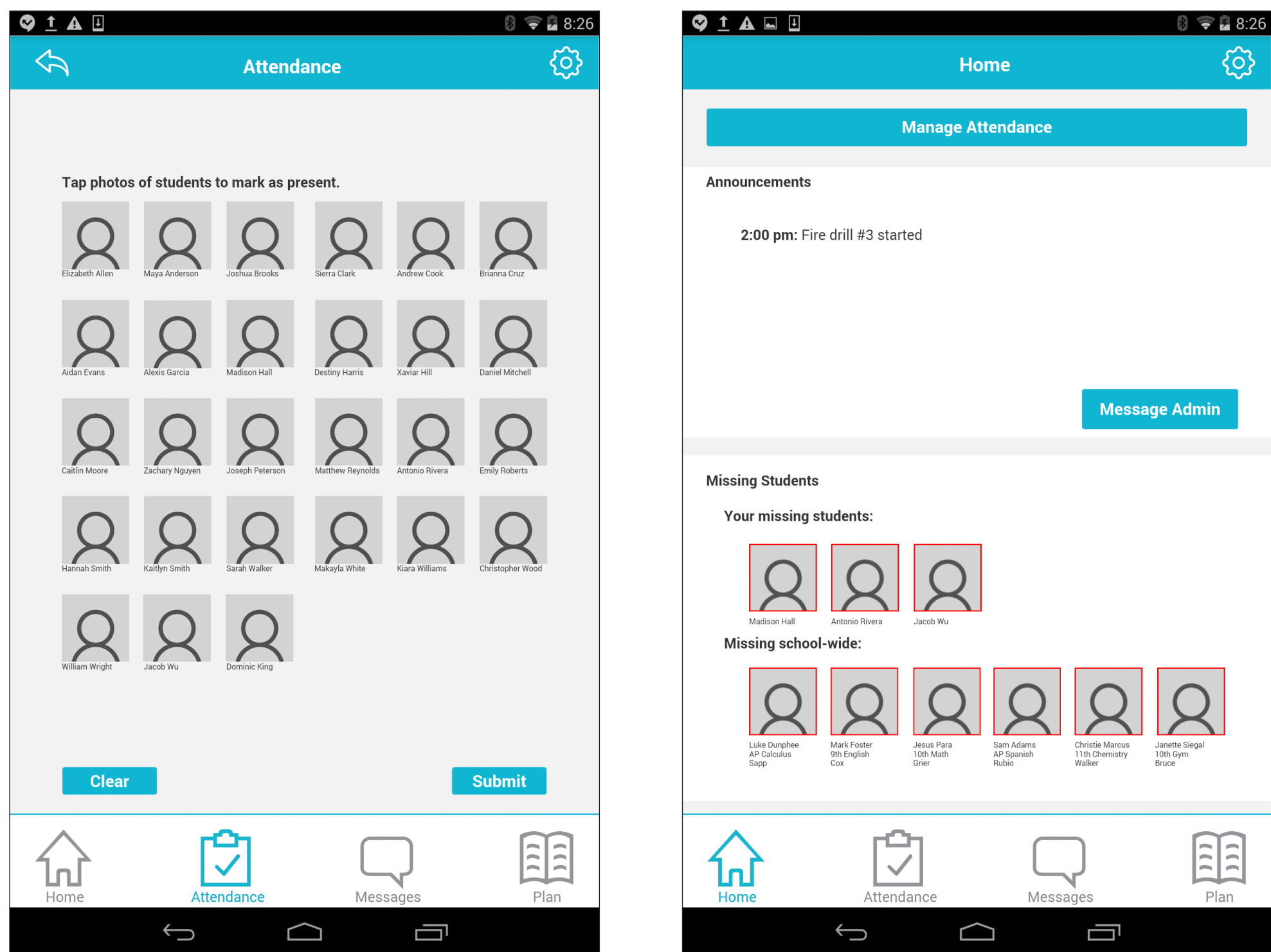
Task Flow

App flow for taking attendance:



UI design

- Current screen always indicated
- Student attendance readily available
- Uses existing attendance system
- Matches other messaging apps
- Back button available
- Attendance marking can be changed
- Red is reserved for missing students



Study and Results

Participants

- 4 teachers, ages 55–64
- from Wheeler High School, Marietta

Procedure

- Introduced participants to the app
- Participants completed tasks common to fire drill situations (e.g., attendance, missing students) on a tablet
- Completed a questionnaire about opinions of app
- Participated in a group interview

Results

- Teachers took an average of 7 minutes (3 out of 4 participants, one participant removed due to outlier)
- Teachers liked the tablet app
- All teachers said they would use it
- Most-liked features: messaging, attendance, missing students, home, fast communication, privacy, simplicity

Discussion and Future Work

- Suggestions for improvements: “everybody here” button, being able to account for another teacher’s class
- The app could also be used to indicate there is an emergency
- Next steps: develop app that could be used for testing during fire drill