Ubiquitous and Mobile Computing
CS 403x: Study Aid

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Introduction

- Students need to balance going to class, clubs, athletics
  - Still need to find time to study

- Need to manage study time, study more efficiently, and study more effectively
Vision

Solo Study
- Track time studying
- Set goals
- Detect environment

Group Study
- Create or join study groups
- Subscribe based on classes

Note Taking
- Take pictures of notes
- Share with classmates
Methodology

- “Study Mode”
  - Track study time
  - Sense Loudness
  - Sense Darkness
  - Silence phone

- Customize
  - Loudness Threshold
  - Brightness Threshold
  - Vibrate on reaching Threshold
Related Works

- Apps: Spitball and StudyRoom
  - Both apps encourage students to help each other learn.
  - Users select schools, can join or create groups, upload files.
  - Spitball still maintained today.
Implementation

- Silencing the phone using Android’s AudioManager
- Environment Detection using sensors
  - Media Recorder
  - Front-Facing Camera
- Customizable Sliders with Android’s SeekBar
Future Work

- Additional environment detection
  - Temperature, humidity
- Savable settings
- Group study
- Note taking