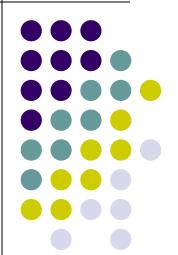
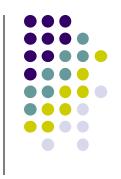
Ubiquitous and Mobile Computing CS 403x: Study Aid

Thomas Finelli, Artian Kica, Evan Gilgenbach

> Computer Science Dept. Worcester Polytechnic Institute (WPI)



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





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

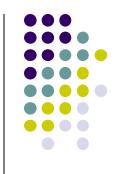
Methodology

- "Study Mode"
 - Track study time
 - Sense Loudness
 - Sense Darkness
 - Silence phone
- Customize
 - Loudness Threshold
 - Brightness Threshold
 - Vibrate on reaching Threshold



Related Works

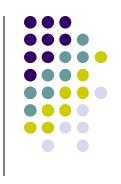
- Apps: Spitball and StudyRoom
 - Both apps encourage students to help each other learn.
 - Users select schools, can join or create groups, upload files.
 - Spitball still maintained today.







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