

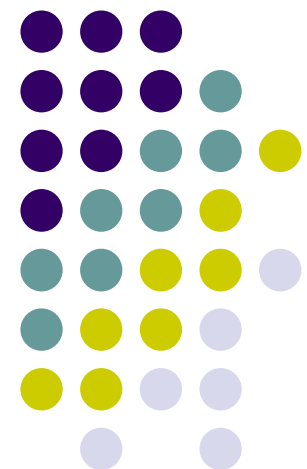
# Ubiquitous and Mobile Computing

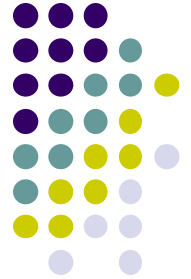
## CS 403x: *LocaList*

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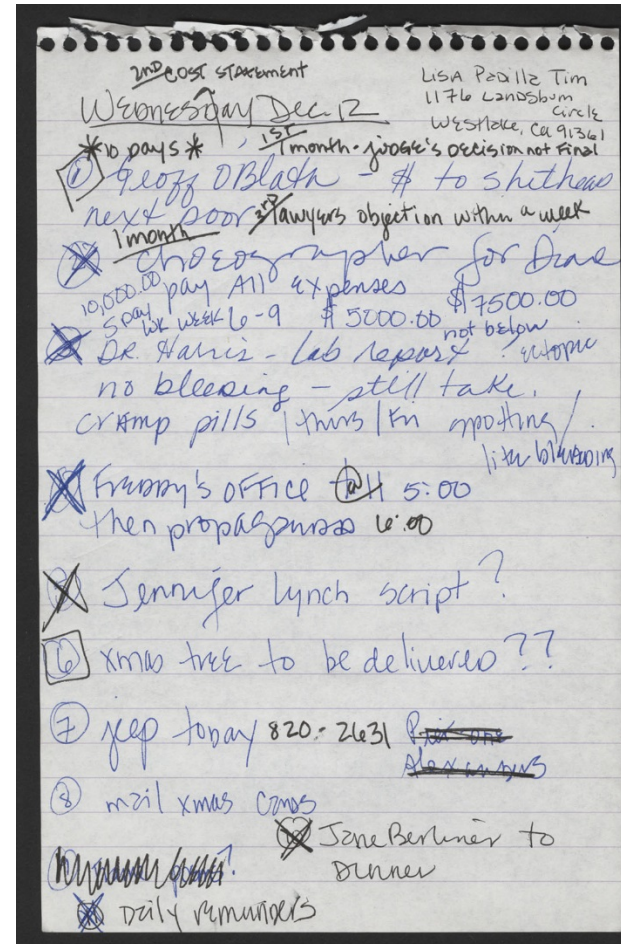
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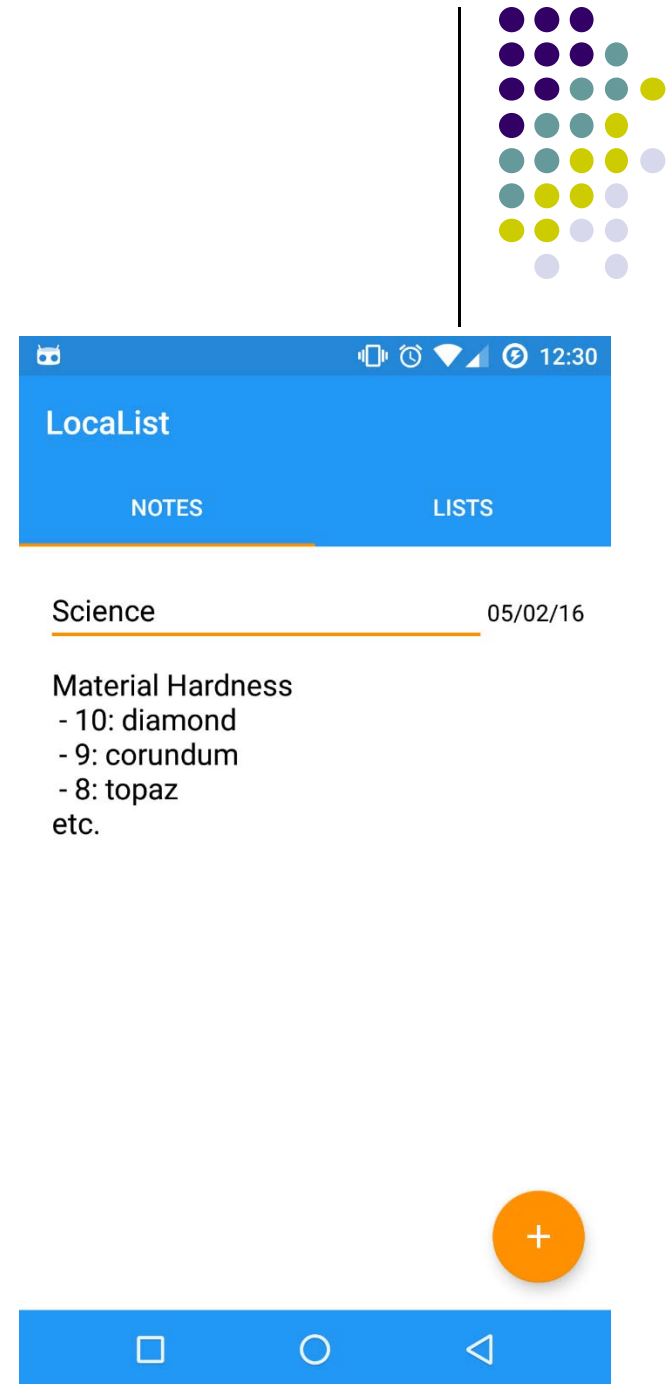
# Problem Motivation

- People are lazy and forgetful
- Traditional note-taking requires manual organization
- Traditional to-do-lists aren't effective in the mobile lifestyle



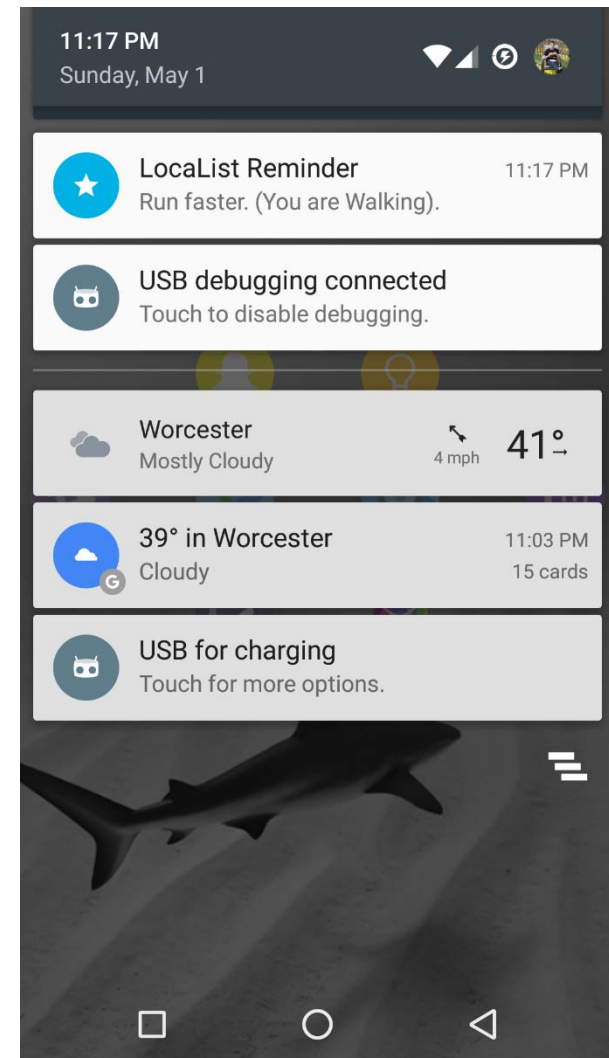
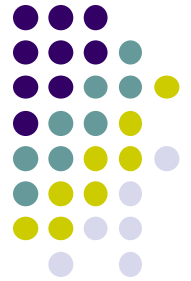
# Vision

- Intelligent note-taking and list reminders app
- Reminds user of relevant tasks by location, time, and other sensor information



# Methodology

- Manual user-based input
- Sensors/APIs in use
  - Location, Time, Activity Recognition
- Service running activity recognition and location for notifications





## Related Work

- Some older location-based note taking apps exist
  - But, no modern apps that take into account multiple sensors and sources of information
- Google Keep and Siri have location based reminders



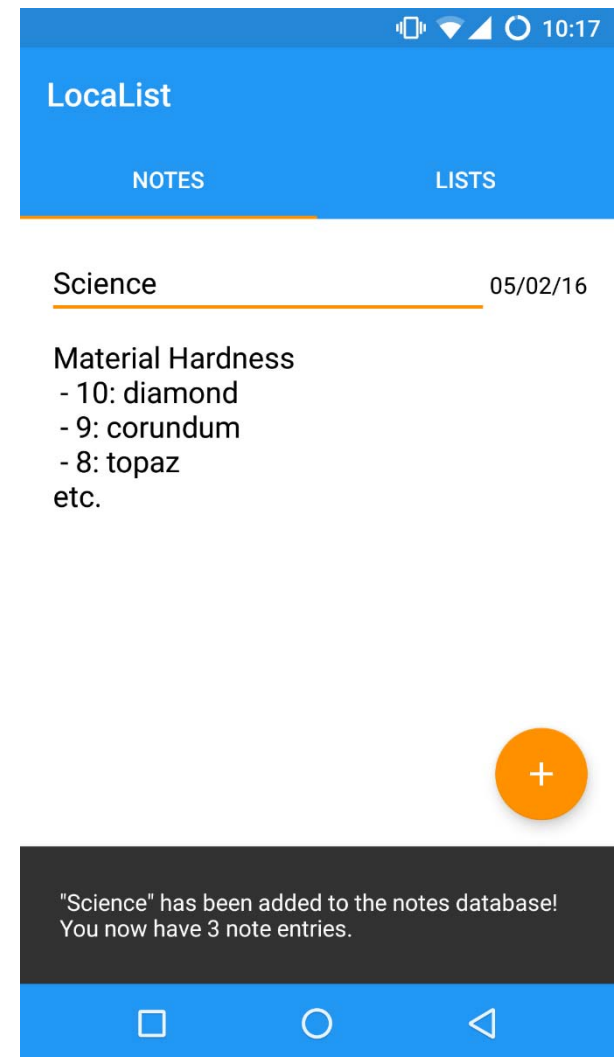
StoreNote



Google Keep

# Implementation: Backend

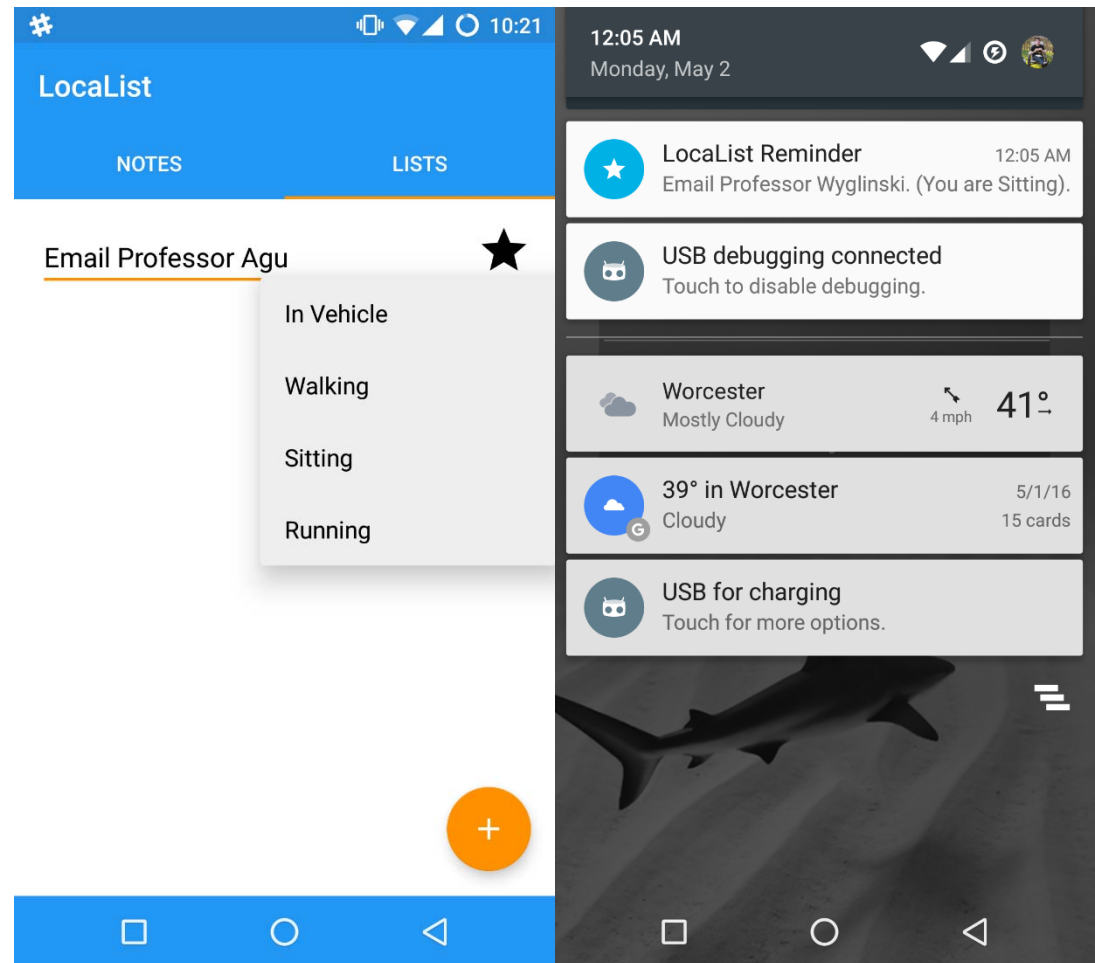
- SQLite Database to store user input
- Read from database to display relevant information
- Services to retrieve from the database to compare the required activity recognition/location to notify user



# Implementation: Reminders



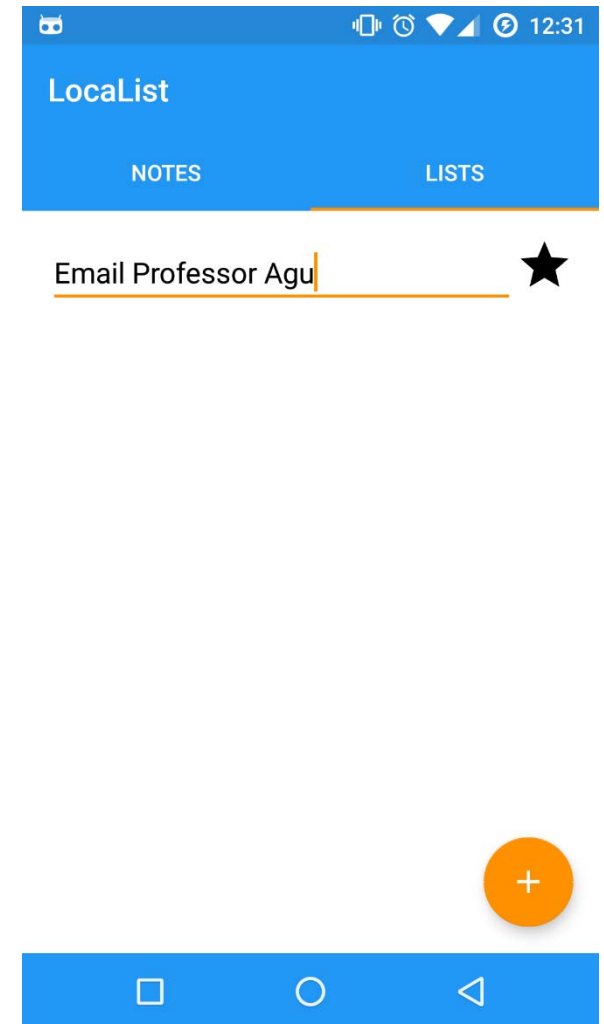
- Activity set via dropdown
- Stores activity choice to DB
- Notification generated when service sees activity



# Implementation: User Interface



- ViewPager to display fields of either “Lists” or “Notes”
- Notes contain EditText fields for title and body
- Lists contain EditText for the topic and CheckBoxes
- Floating Action Button to add notes and list items to database

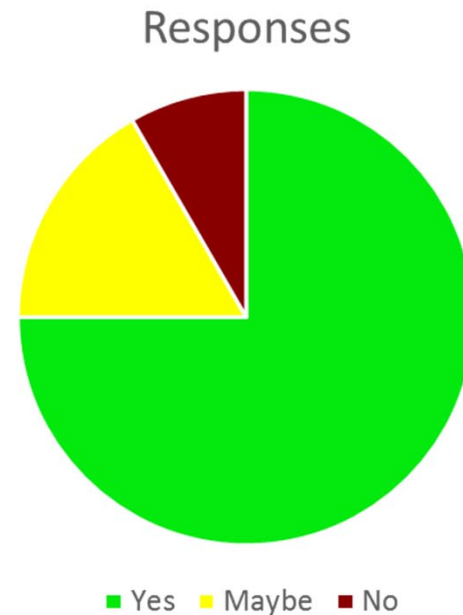






## Results

- A survey of 12 WPI students
- Question: “Would they find LocaList useful in their daily lives?”
- Yes – 9 students
- Maybe – 2 students
- No – 1 student





# References

- *StoreNote – location based note app last updated in 2013*  
<https://play.google.com/store/apps/details?id=com.filantus.now>
- *Google Keep* <https://keep.google.com>