



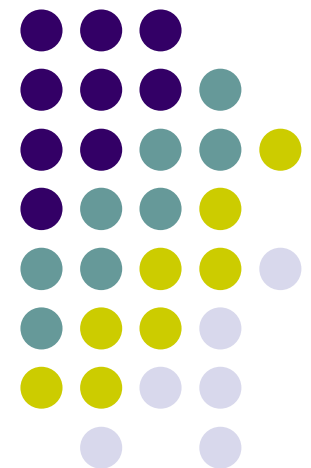
# Ubiquitous and Mobile Computing

## CS 403x: *Now @ WPI*

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Robert Esposito, Christopher Knapp,  
and Doruk Uzunoglu

*Computer Science Dept.  
Worcester Polytechnic Institute (WPI)*





# Our Goal

- To provide an easy and effective way for WPI students to browse and check into study spaces
  - Save students time and allow them to be more productive
- To help students use their time to study by informing them of campus events



# Our Vision



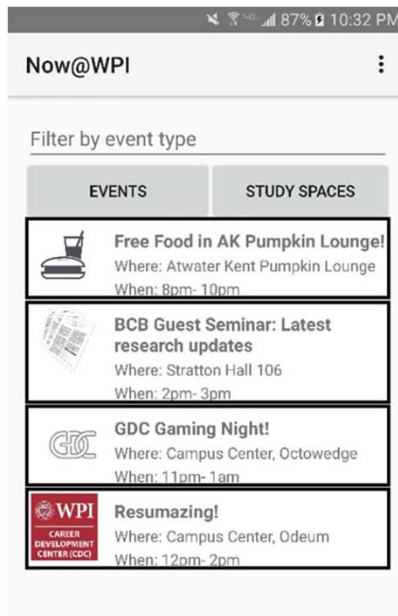
- Search for study spaces on campus
  - Filtering by building or availability
  - Color-coded room status
- Checking into a study space
  - Uses GPS to ensure correct location
- Events feed
  - Allows students to plan study sessions more effectively

Filter by building and/or check-in level	
Events	Study Spaces
0	Salisbury Labs 104
5	Salisbury Labs 105
20	Fuller Labs 311
	Stratton Hall 308 CS403X lecture until 12:50pm
	Washburn Shops 229 Room reserved for event until 2pm
25	Olin Hall 218 Room at full capacity

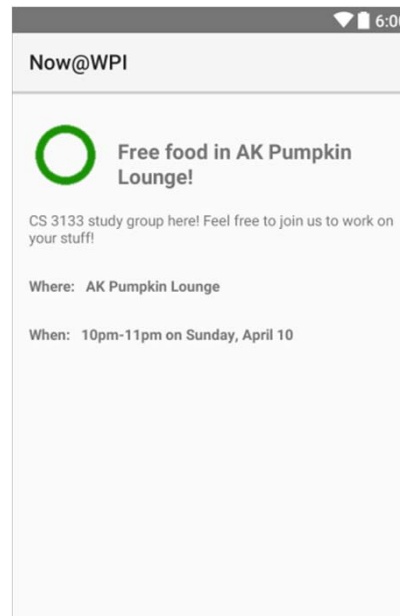
# Methodology



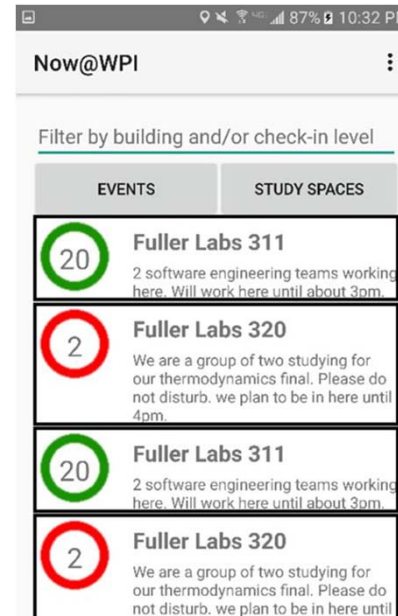
- Four main activities:



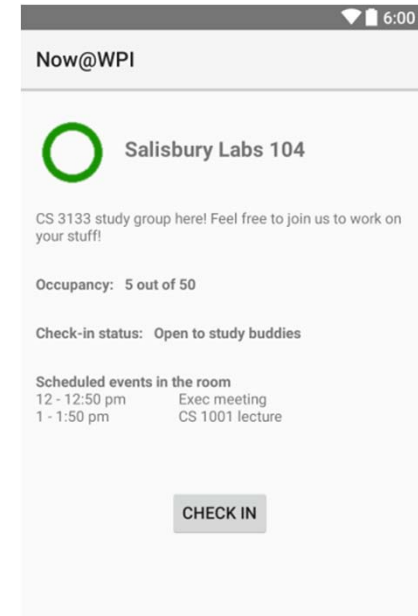
Events



Event Details



Study Spaces



Study Space Details



# Implementation

- Details on events and study spaces stored in SQLite database
- LocationManager used to determine user's proximity to each room
- ListViews dynamically populated from the database entries





# Results

- Working features:
  - Display list of events / study spaces
  - Sort spaces by GPS distance
  - GPS-based check in
- Evaluation
  - Interface is simple and intuitive
  - GPS is sufficiently accurate





# References

- [http://www.udayavani.com/sites/default/files/images/english\\_articles/2015/07/14/students\\_studying\\_for\\_test.jpg](http://www.udayavani.com/sites/default/files/images/english_articles/2015/07/14/students_studying_for_test.jpg)
- [http://storage.googleapis.com/ix\\_chooseemuse/uploads/2016/02/android-logo.png](http://storage.googleapis.com/ix_chooseemuse/uploads/2016/02/android-logo.png)
- <https://upload.wikimedia.org/wikipedia/commons/thumb/3/38/SQLite370.svg/2000px-SQLite370.svg.png>
- [https://pixabay.com/p-304842/?no\\_redirect](https://pixabay.com/p-304842/?no_redirect)