

# Ubiquitous and Mobile Computing

## CS 4518: *Crowdsourced Free Food*

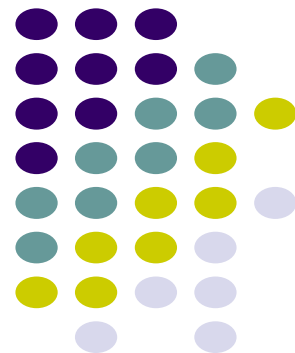
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Team RGB:

Rayan Alsoby, Gordon Gao, Bailey Sheridan

*Computer Science Dept.*

*Worcester Polytechnic Institute (WPI)*



# Want Food?



- In the United States, roughly 30% - 40% of food is wasted! [1]
- 7 out of 10 students are stressed about their finances [2]
  - But it's necessary to buy food to eat!

# Introducing FeedMe!



- An app to share and notify about free food
- Know where there's free food? Post it!
- Hosting an event with free food? Post it!
- Upvote and downvote posts based on availability
- Find free food in the moment



# Target Demographic



- Areas where free food readily available : College
- Event coordinators
  - Advertise food at your event
- Hungry college students
- Hungry professors

# Related Works



- Yelp
- FreeFoodFinder
- Food loyalty programs



# Implementation of FeedMe



- Google Maps Service: Markers over locations with free food for that day
  - Limited to WPI campus
  - Automatically drops pins when you post
  - Tap a pin for event info

# Implementation of FeedMe



- Location Service: When adding a post get the current location
  - Using Google Play services to get the longitude and latitude of the last known location

# Implementation of FeedMe



- SQLite database to store information about each post
  - Event title, food type, location name
  - Location (longitude, latitude)
  - Number of upvotes - downvotes



# Implementation of FeedMe

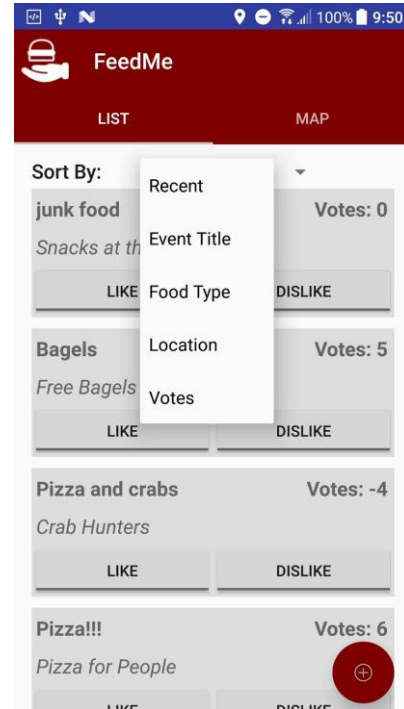
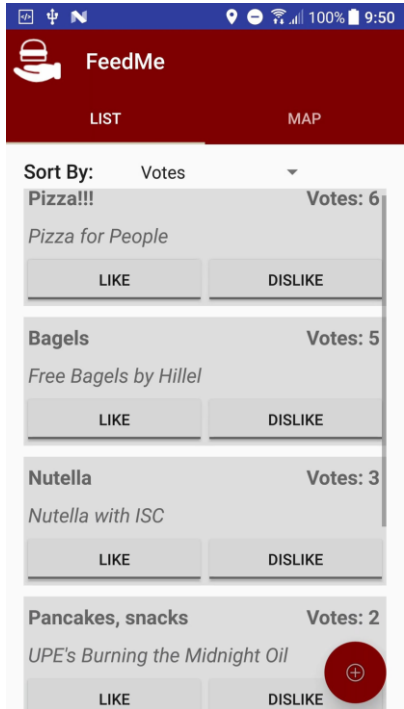


- Feed with posts which can be upvoted and downvoted (crowdsourcing)
  - Can be sorted by
    - Event title
    - Food type
    - Location
    - Votes
    - Most recent

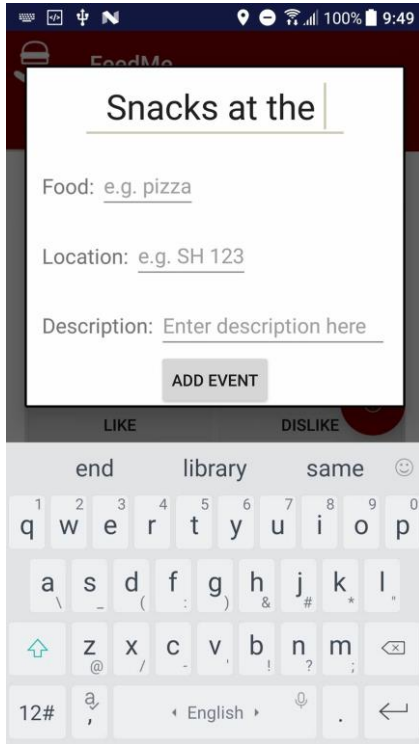


# Demo

# UX/UI



# UX/UI



# UX/UI



# Evaluation: User Quotes



- "Intuitive"
- "The color is nice"
- "I like the sorting"
- "I like the map"
- "When does the event start?"

# Future Work



- Connecting FeedMe to a server
- Real time database
  - Firebase
- Account systems
  - Keeps track of total points
  - Used to synchronize upvote
- Rewards system
  - Give flair or special font to active users

# Future Work



- Improved visuals
  - Food icons based on types of food
  - Add pictures of event
- Post management
  - The ability to add/edit posts by OP
- Sort by distance from event





# References

1. <https://www.usda.gov/oce/foodwaste/faqs.htm>
2. <https://news.osu.edu/news/2015/07/01/financial-wellness/>
3. Icons made by Freepik, from <http://www.flaticon.com> Licensed by Creative Commons
4. [https://www.freefoodfinder.co/users/sign\\_in](https://www.freefoodfinder.co/users/sign_in)
5. [https://en.wikipedia.org/wiki/File:Starbucks\\_Coffee\\_Logo.svg](https://en.wikipedia.org/wiki/File:Starbucks_Coffee_Logo.svg)
6. <https://www.yelp.com/brand>