ObservAnt
Preliminary Usability Report

Team STOMP

UX Experts   **Jason Sterkenburg**, Mohammad Beheshti
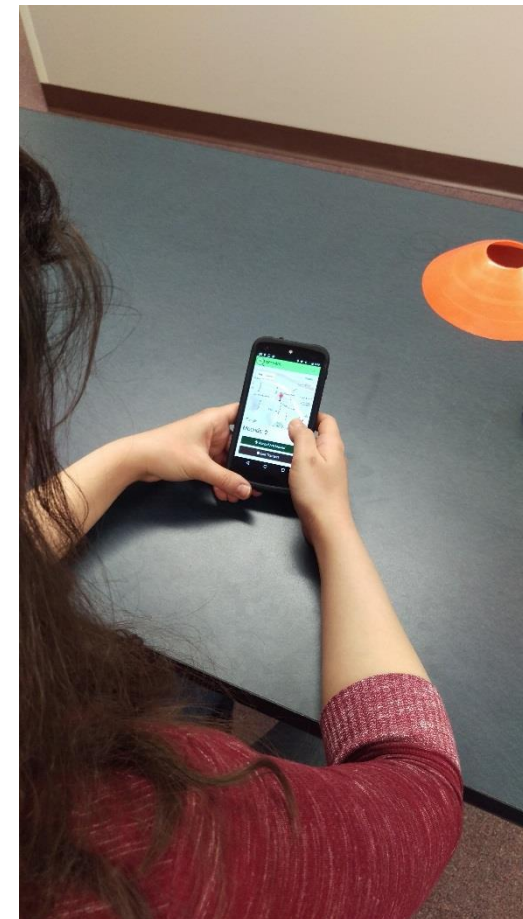
Developers   Evelyn Adler, Colin Hogue, Matthew Kersten,

Joan Perez Guerrero, Tory Taggert, Kathryn van Susante

Project Overview

- Dr. Storer is studying ant mounds
- Primary users are middle school/high school students
- Typical use is monitored and preceded by teacher instruction
- Will be used in the woods
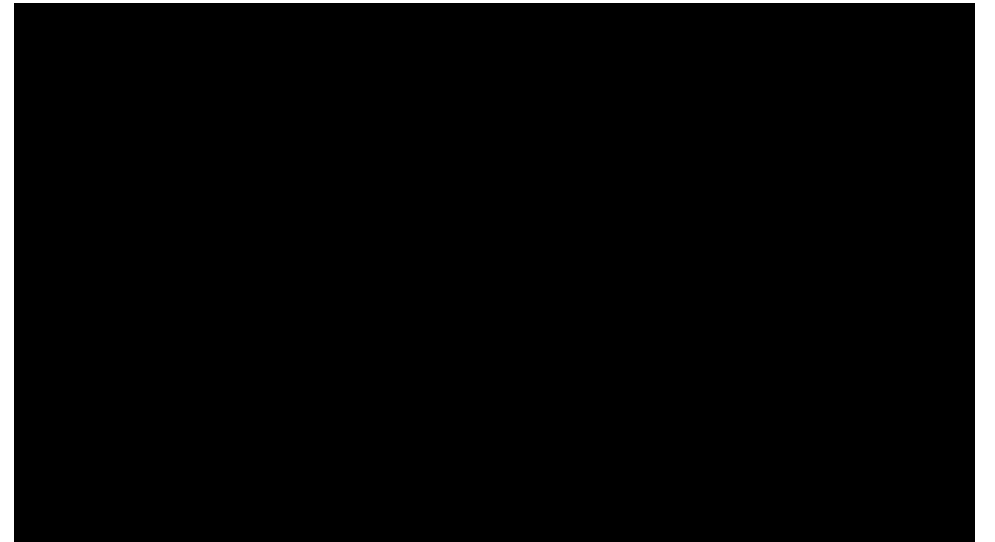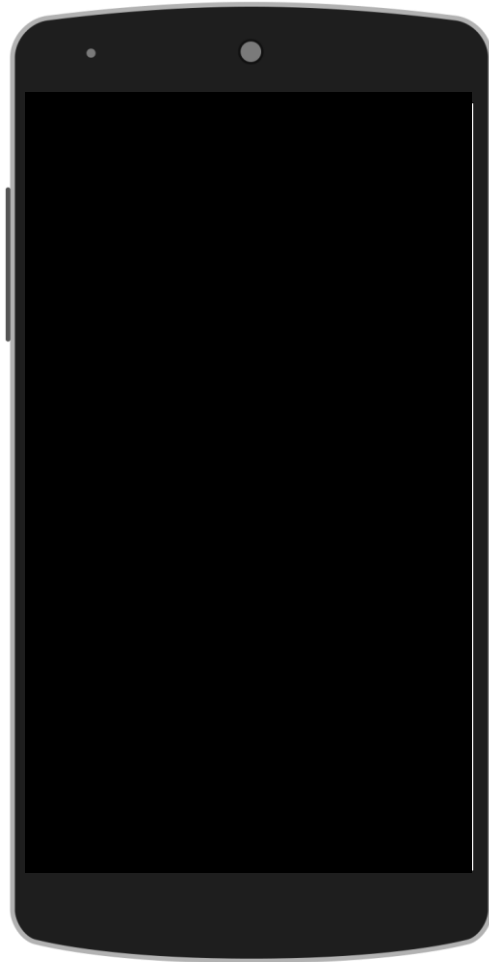
Usability Testing

- 4 participants
- 2 Use Case Scenarios
  - Naïve Use
  - Trained Use
- 4 Edge Case Scenarios
  - No mounds
  - Editing pics
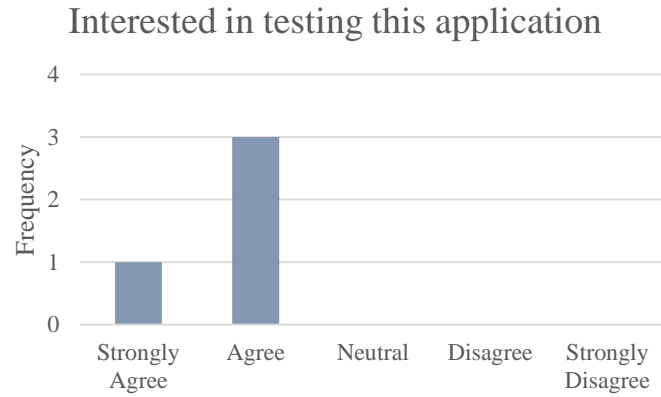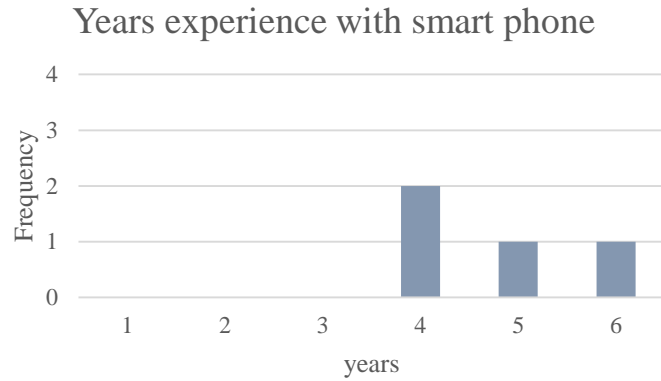 - Reviewing transects
  - Returning to home

Use Case Scenarios

Task Subgoals

- ☐ Press *transect path*
- ☐ Press *transect*
- ☐ Press *record ant mound*
- ☐ Press *surrounding area*
- ☐ Take photo of surrounding area
- ☐ Press *undisturbed ant mound*
- ☐ Take photo of undisturbed ant mound
- ☐ Measure the ant mound
- ☐ Enter measurement data
- ☐ Press *mound with first layer gone*
- ☐ Take photo of mound with first layer gone
- ☐ Press *end transect*
- ☐ Press *photo of surrounding area*
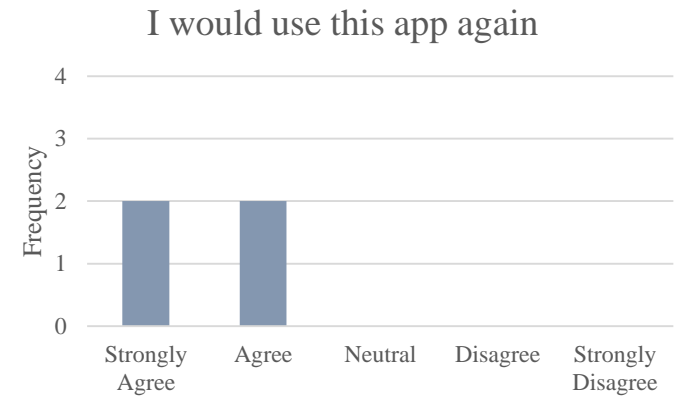- ☐ Take photo of surrounding area
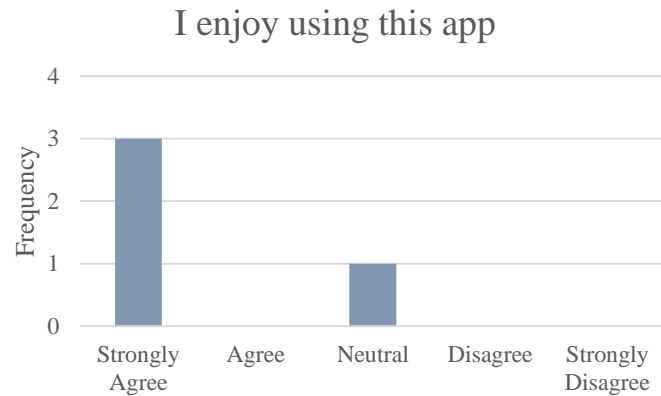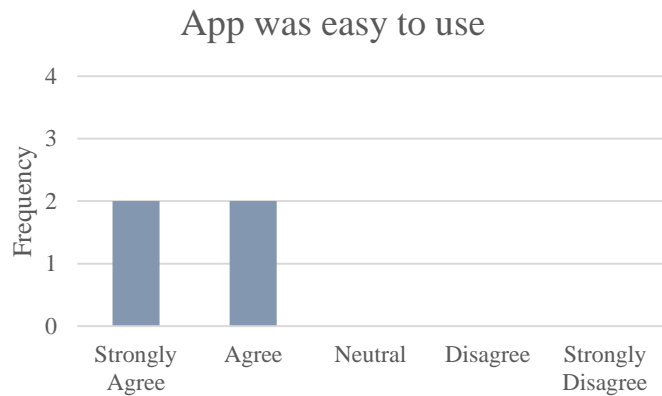- ☐ Press *submit transect*
- ☐ Press *finish*
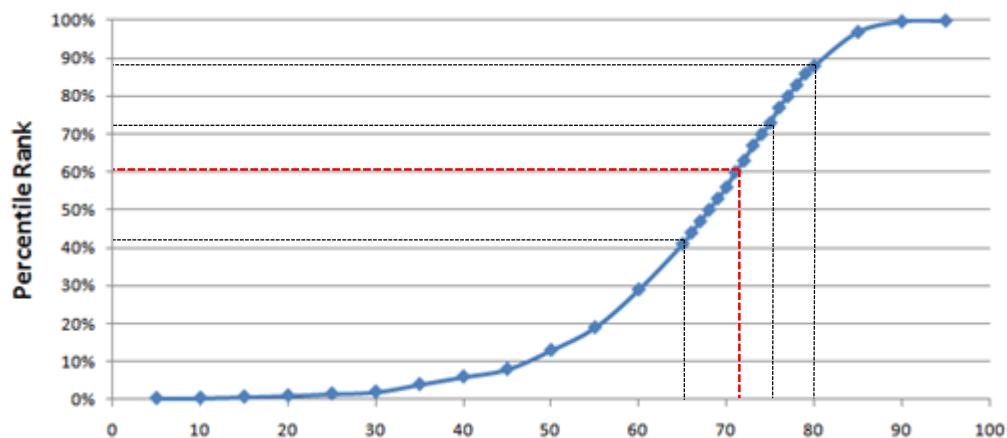
Findings – Common Questions

Findings – Use Errors

- Major errors
  - unable to complete task
  - giving up
  - mistake without possible recovery
  - submission with incomplete/incorrect data.
- Minor errors
  - mistake with recovery

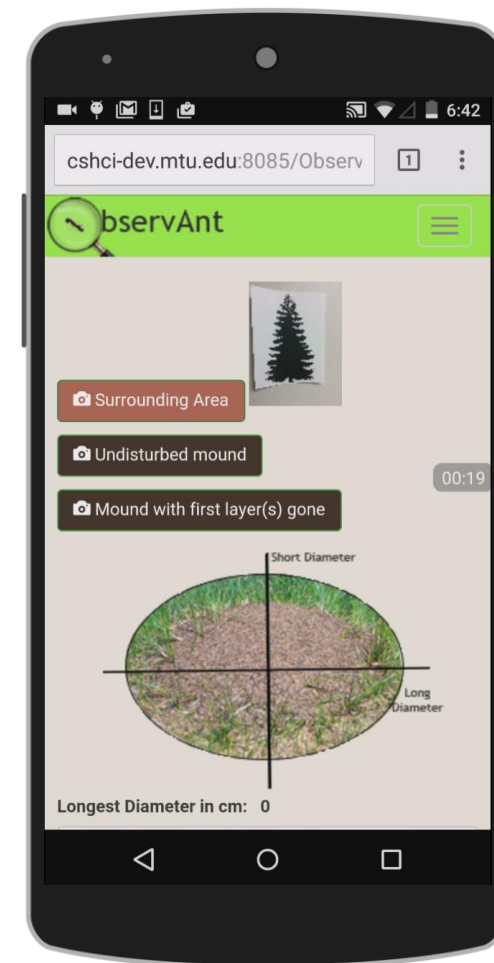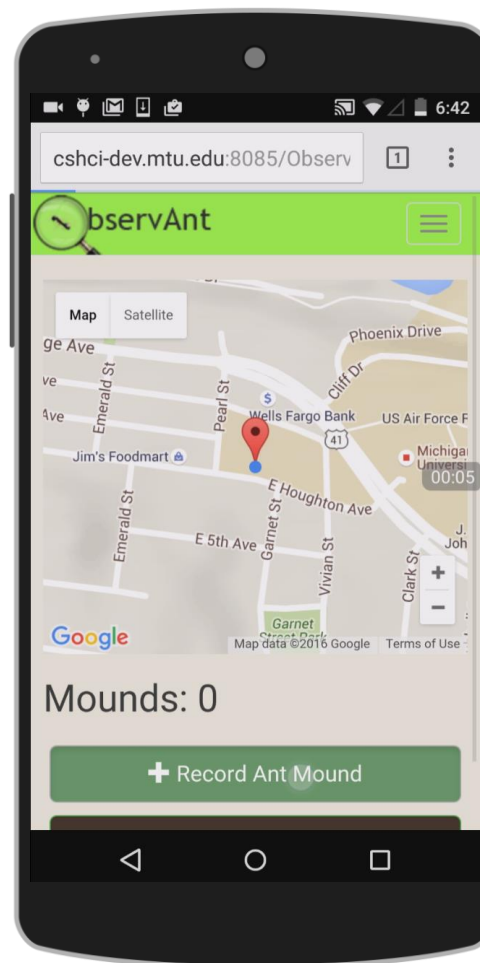|	Major Errors		Minor Errors	
ID	Frequency	Description	Frequency	Description
P1	3	Naïve Use - order No mound - submitted empty data Review transects - gave up	2	Naïve use - hit slider when scrolling - submitted video, but recovered
P2	5	Naïve Use - order - surrounding area (mound) - surrounding area (transect) No Mound - didn't start transect Review transects - gave up	0	
P3	3	Naïve Use - surrounding area (mound) No Mound - submitted picture Review transects - gave up	0	
P4	3	Naïve Use - order - surrounding area (mound) Review transects - gave up	1	Naïve use - tried to take multiple photos

Findings – System Usability Scale (SUS)

	I would like to use this app frequently	I found the app unnecessarily complex	I thought the app was easy to use	I think that I would need the support of a technical person to be to use this app	I found the various functions in this app were well integrated	I thought there was too much inconsistency in this app	I would imagine that most people would learn to use this app very quickly	I found the app very cumbersome to use	I felt very confident using the app	I needed to learn a lot of things before I could get going with this app	Overall SUS Score
P1	4	2	4	1	4	2	5	2	4	1	75
P2	2	1	3	1	4	1	4	1	2	4	65
P3	5	1	5	2	4	2	5	1	5	2	80
P4	3	2	4	3	4	1	4	1	4	4	65
Average	3.5	1.5	4	1.75	4	1.5	4.5	1.25	3.75	2.75	71.25

	Overall SUS Score	Percentile	Grade
P1	75	74	B
P2	65	43	C-
P3	80	89	A-
P4	65	43	C-
Average	71.25	61	C+

Findings – Qualitative Analysis

- Participants did not use the map

- Some participants ignored or were confused by the ant mound diagram, plus small text

- Participants generally looked for summary results in hamburger menu or homepage

Bug Report

ID	Name	Frequency	Location	Description
1	Camcorder Error	1	camera selection page	Choosing an imporoper input option (not camera) from phone option thrown an error (not handled by us yet)
2	Define transect w/ phone	2	home page	Does not provide in-page description (uses apple definition)
3	False increment	0	mound data page	Mound count increments every time a user goes back to data entry page and then goes forward
4	Ghost sliders	0	mound data page	When a user goes back after submitting data for a mound, the slider values show zero but the slider positions are maintained from the previous data (number says 0, but position is 10)
5	Forever red button	A lot	mound data page	Buttons stay red until something else is clicked
6	Failure to increment	1	mound data page	ant mound count did not increment after submission of complete data

Design Recommendations

1) Change order of data entry so measurement comes before picture of ant mound with top layer removed

2) Consider adding more descriptive label for button on "record ant mound page", e.g., "No mounds found."

3) Consider adding visual aid, or description of "surrounding area" for both ant mounds and transects

4) Consider adding text box instead of sliders

5) Consider adding review summary in the hamburger menu