Evaluation Assignment 1
CS5760
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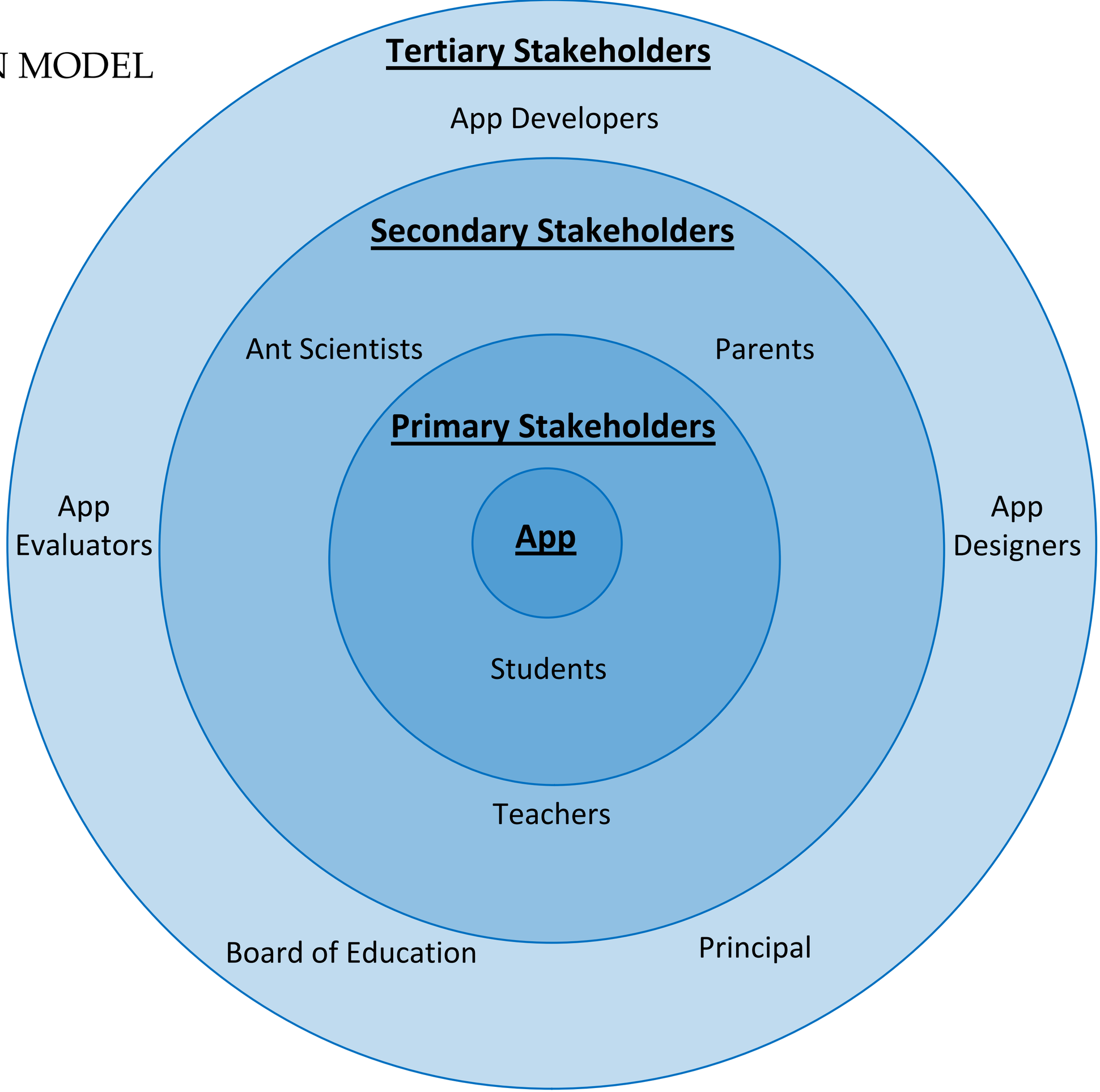
1/27/2016

Undergraduate Team: Team5 (Stomp - Ant Mounds)

We are collaborating to develop an app for Andrew Storer that will enable middle and high school students to collect data about local ant mound creation behavior. Specifically, Andrew is interested in what kinds of materials North American ants are using to create their underground mounds. The app will require students (primary users) to take pictures of ant mounds, record the location of those mounds, note the locations where there are no mounds, record the size of the mounds, as well as the flora species adjacent to the ant mounds. We envision that teachers and parents may also use the app to monitor the student/children activities as well.

ONION MODEL


Tertiary Stakeholders
App Developers
Secondary Stakeholders
Ant Scientists
Parents
Primary Stakeholders
App
Students
Teachers
App Evaluators
App Designers
Board of Education
Principal

Stakeholder Analysis

Kit	Primary Stakeholders	Secondary Stakeholders	Tertiary Stakeholders
App	**Students** - middle school and high school students who are assigned ant mound research as homework **Goals** -Complete assignment (smash N mounds) **Influences** Contributing -Data collection (pictures of ant mounds) -Mound measurements (size) -Nearby tree species Constraining -Simple interactions -Need training -Need to see where they've been before	**Ant Scientists** - Consumers of the data collected by the primary users. **Goals** View data: -location (gps coordinates), time ant mounds are found -locations ant mounds were not found -pictures of mound contents carried out by ants -pictures of ants in mounds **Influences** Contributing -N/A Constraining -Needs a lot of data **Teachers** - caretakers and managers of middle school/high school students **Goals** -Track students current positions -View student past activity -Annotate/comment on pictures **Influences** Contributing -provide students feedback on picture quality Constraining -need to see past student data records (when/where did they take pictures) -need to be able to comment on pictures -need to be able to view current student locations **Parents** - caretakers of students **Goals** -Track children's (students) current position -View student past activity **Influences** Contributing -N/A Constraining -need to see past student data records (when/where did they take pictures) -need to be able to comment on pictures -need to be able to view current student locations	**Developers** - programmers who code the app **Goals** -pass HCI class -write code for app -ensure app is functional **Influences** Contributing -create the app Constraining -limited time -dependent on feedback from designers and evaluators **Evaluators** - people who assess the app including: UX consultants, usability test participants, and HCI professors **Goals** -pass HCI class -conduct usability test -ensure app is effective, efficient, and enjoyable **Influences** Contributing -test the app -provide feedback to guide development to a more usable app Constraining -limited time -dependent on production of developers and designers **Designers** - HCI student(s) who create the "look and feel" of the app **Goals** -pass HCI class -create aesthetic interaction experiences for users **Influences** Contributing -N/A Constraining -limited time -dependent on production of developers and feedback from designers **School Principals** - people who manage school teachers, likely responsible for accepting or rejecting class assignments that involve going into woods. **Goals** -safety of students -meet educational goals **Influences** Contributing -N/A Constraining -dictate what activities are appropriate for out-of-classroom activities for students (in groups during class hours, done at home, etc.) **Board of Education** - committee of people who oversee school policies for out-of-classroom activities. **Goals** -safety of students -meet educational goals **Influences** Contributing -N/A Constraining -dictate what activities are appropriate for out-of-classroom activities for students (in groups during class hours, done at home, etc.)

Summary of Stakeholder Analysis

There is type of primary user: high school and middle school students. These students are presumed to be competent in their mobile phone use because they are digital natives. Parents and Teachers may be considered secondary users because they are mostly interested in current or past locations of students (rather than ant mound data). Tertiary users are developers, designers, and evaluators of the app, but may also include school principals, and school boards of education who make policies regarding the types of activities appropriate for students to engage in as part of classroom activities.

Personas

Name: David
Occupation: Student
Age: 12
App Familiarity: Competent Performer
Stakeholder: Primary User

David is a straight A student. He wants to get a good grade on his field experiment assignment which requires him to use STOMP. He didn't understand the instructions given in class about how he should use the app. He has been using smart phones and apps his whole life. He's not worried about navigating the app, but he is worried that the app won't give instruction about how he should complete the assignment. David hopes there is a tutorial explaining how to gather the field data.

Name: Drew
Occupation: Student
Age: 18
App Familiarity: Competent Performer
Stakeholder: Primary User

Drew is a senior in his final semester before high school graduation. He has a severe case of "senioritis". He is totally unmotivated to complete his assignment. Drew needs some compelling interactions to draw his attention or he will get bored with the app and go back to procrastinating or hanging out with his friends.

Name: Robert
Occupation: Teacher
Age: 70
App Familiarity: Novice
Stakeholder: Secondary User

Robert is an experienced and wise 9th grade biology teacher. His teaching methods are more traditional and he usually avoids using technologies like apps. However, the school Principal has suggested he give the students a field experimentation assignment using the Stomp app. Robert is most concerned with being able to view his students' activity so he can grade them. He's worried that some students will record a lot of ant mounds and some will do nothing, and he won't be able to tell them apart. He is easily discouraged by technological failures. He hopes that the new app will facilitate his teaching and grading.

Name: Susanna
Occupation: Mom
Age: 40
App Familiarity: Competent Performer
Stakeholder: Secondary User

Susanna is a mother to one of the students who is using STOMP to complete her homework assignment. She is most worried about keeping track of her daughter as she walks through the trails behind the house. If she had time, she'd go with her daughter but she's at work. But she still wants to check in to see where her daughter is. Susanna has experience using smart phones and apps but she gets nervous when she thinks her daughter could be lost in the woods. She hopes she can easily access an intuitive-to-use/read map showing the location of her daughter.

Simplified HTA

Upper Level Views	Login view	Tutorial view	View Map	START STOMPING - Available after tutorial is complete
Goals	-Enter Unique ID to find self/others in app	-Intro to purpose -Learn how to use app	-Track current position of self/others -Track past position of self/others	-Take picture of ant mound -Measure ant mound -Identify local tree species
Mid Level Views	**-Enter username** **-Enter password** **-Re-enter password**	**-Active introduction guide (requires participation to complete)** **-Active tutorial guide (require participation to complete)**	**-View current position** **-View past positions** **-View others current position** **-View others past positions** **These could be checkboxes**	**-Take picture of ant mound** **"Keep measuring stick in view" OR** **Text entry boxes for W x H x D dimensions** **-Take picture of popular trees nearby**
Lower Level Views	**-Submit** **-Cancel**	**-Press "stomp" button to continue** **-Place ruler to continue** **-Next** **-Finish**	**-Back** **-Home**	**-Submit (geotags, uploads picture)** **-Retake** **-Cancel** **-Home**

Summary of Simplified HTA

This table outlines the basic structure of the app menu - the higher level menu items being located higher in the table and lower at the bottom. The simplified HTA is not an exhaustive list of all menu structure proposed, but does hold examples of key features which could be considered. There may need to be more discussion with the scientist, Dr. Storer, to understand exactly how he'd like the mound measurement and local tree species identification processes to be completed.

Appendix A: Meeting Notes - 1/26 *taken from developers

in europe: you find mounds that are produced above ground
in USA: the mounds are underground

can we find more ant mounds than are currently known to exist

Wood ant mounds: organic: created by pine needles, etc.

enagagemnet into a project

NOT STOMP: just move a part of it.

Yes to GPS

Perhaps tablets, but not at first.

Location info provided from students: What type of forest
- The dominant species of tree
- Measurements of the mound (ruler for reference? Optional)
- Documentation as to where there are not mounds
- (Sending app to others in Europe)

There will be an offline version of the app
(data points on a map, vary from lab verified vs. location verfied)

Style of reseacrh:
- There is an initial starting point
- This is the basis for general information
- Then, they describe how far they walk in a given direction
- They record nay ant mounds encountered
- After a distance they stop, and may repeate this in any given direction (apart from retracking)

- Transect (what is this exactly)

- GPS tracking at the start and end of each transect

- (this has specific guidlines for recording)

- Do not deviate from the transect, finish it, and create another one if there is an ant mound farther away.

good contrast with the screen

Contact Info
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