Project Part 1 – Understanding the Problem

An overview of what the system will do and why it's needed.

Our project hopes to make events on campus more accessible to Georgia Tech students. These events would include free food availability around campus, rush timings for fraternities and sororities, volunteer opportunities, career fairs, information sessions, seminars etc.
Our project would involve the extensive use of Google Glass.

We believe that this project would be well received on campus especially because students remain unaware of a large portion of events on campus. Students may also decide not to go to an event simply because it would take too much of their time to look up the timings and where abouts of the event. With our project we endeavor to compile all event location and timings into one database. Our application would also provide real time notifications about events as students walk by event locations.

A description of the important characteristics of the users of the system.

The users will primarily be undergraduate, graduate and PhD students at Georgia Tech. These students will most likely be:

- Driven, methodical and busy - This would imply that students hoping to get involved in events at Tech would appreciate a system in which all events are cataloged. Also, Tech being such a demanding institution most students would prefer to eat on the go or grab a meal when they can. Our real time pop-ups about free food availability would prove extremely helpful in these situations.
- Tech savvy -The design of our product would therefore be as mainstream as possible while still indulging our creativity.
- Demographically diverse - Students are bound to have individualistic preferences in terms of viable interfaces (For example, South Asian populations might not like to have a touch screen interface) and modes of communication (Should our automated popup notification service be auditory or visual? or both?). Our product would therefore be relatively simplistic, i.e. limited number of buttons with easily identifiable functionality, so as to be usable by a large population. We also hope to incorporate language customizability so that the user may choose the language of his preference

A task analysis consisting of:
-A description of the important characteristics of the tasks performed by users
-A description of important characteristics of the task environment.

- ***-A simple structured task analysis of the problem in one of the forms described in the textbook.***

- ***An analysis of the existing system, automated or manual, including its strong points and deficiencies.***

Tasks Performed By Users: College students who wish to advertise their event are often faced with multiple avenues to spread the word. As a result, event advertising is often long and tedious with limited effectivity. Whether printing fliers, chalking on sidewalks, or tabling in the Skiles building, or other means, student organizations can only dedicate a limited amount of their time and energy to notify other students of their event.

Task environment (The conditions and goals set upon the user): As we are trying to create a new situation for students to find nearby events, we will focus our task analysis on the current, old environment by using the Hierarchical Task Analysis:

a) In order to find nearby happening events:
    1) Log onto Facebook
    2) Find events happening in the relevant time period
    3) Go to event
b) Find weekly digest
    i. Log into gatech mail
    ii. search for weekly digest
    iii. Find event of interest
    iv. note down when and where the event is happening

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Since there are a large and diverse amount of methods to discover events, the HTA could continue on for long amount of steps. It is this problem that we are trying to solve.

Existing system analysis: There currently is no existing system that allows students to view free food events within their area. From past experience, we have seen that many events have been advertised through a variety of methods, both automated and manual: chalking, the Weekly Digest, Facebook, etc. However, there is no centralized system which allows ANY student to view current nearby events. There is also no application which catalogs all the events in a single database. Existing methods of advertising often can only serve a certain subset of the student population. For example, on Facebook: events held by certain clubs are only viewable by club members or their friends.

Events being cataloged on other websites and publications first have to compete with other events to earn their mention in said website or newspaper. For example, events submitted to the Weekly Digest have to be first meet certain requirements in order to be published and even having met those conditions the digest only has space for a limited number of advertisements. A large advantage with our application is the freedom to advertise all events without space and monetary restrictions.

A description of the larger social and technical system or context in which your design will intersect.

Our design is intended to reach out to the whole student body at Georgia Tech and help them get involved in Campus Life. There may be events on campus that student have not heard about or events that they have forgotten about because of their busy schedules. Our design will not only help save travel time for students but at a higher level, will also help build a well-connected student community at Georgia Tech.

An initial list of usability criteria, or principles that should be used in the eventual evaluation of your design, including a high-level description of how you could measure the successful adherence to these principles

Transparency

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Understandable Feedback and Messages

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. The system should incorporate natural mapping where possible. Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Easy to Remember and Recognize

Instructions for use of the system should be visible or easily retrievable whenever appropriate. The user should not have to memorize a certain set of instructions.

Measurements of Success:

1) When user has the app open, google glass should be able to recognize nearby building within 500 feet as users walk around campus
2) Once the building is recognized (via image or wifi signal), a query database search for events happening now and nearby future of that building should take no more than 5 seconds.
3) App should have a sign to tell the user if a particular event has free food or not.

A brief description and justification of how the above information was gathered.

We plan to reach out to Campus Services and the various campus organizations to gather information about potential events and free food available in these events on campus. We also plan to reach out to our friends in the different organizations to help put together the data for our design project.

Most important: A discussion of the implications of what you learned above.

Lessons Learned:
1) Because of our diverse international audience, we will be adding multilingual support.
2) Because of the limited real estate available, there will be no clutter on the screen and there will not be an overboard of functionalities and features that the user will have to navigate through.
3) Because we are offering two types of information (free food and events), we will color code them to easily differentiate