Group 9

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A4: Contextual inquiry field report and data analysis

TEAM MEMBERS

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Introduction

For the first studio testing, our group conducted a scenario-based contextual inquiry. Our study was to help find insight to the research question, "how do students find upcoming events on campus?" With this formative study, our goal is to understand different behavioral patterns and usability issues that are prominent whilst trying to find events on campus. The study presented two scenarios to the participants, with each task being timed upon completion or failure, and followed up with a post-study questionnaire. With the contextual inquiry, we hope to build data to create an enjoyable experience when seeking events.

Themes and Pain Points

Note: *Task 1* and *Task 2* are in reference to the tasks outlined in the Contextual Inquiry Protocol which can be found in the Appendices below

The contextual inquiry was performed with 6 participants that are students at the University of Toronto Mississauga. With the formative study, we were able to find key insights to user patterns and motivations whilst seeking upcoming events on campus. There are 3 main themes that were similar, found across each participant; lack of motivation in participating in events, using Facebook's search as the primary resource, and apathy for events overall. These themes will further help develop our medium fidelity, by building fundamental design requirements to help create an intuitive process in creating interest and enthusiasm for and seeking events on the university campus.

Of the small sample size of 6 participants, the majority opted to use their mobile smartphone or computer as the primary resource as a solution to both *Tasks 1* and *Task 2*. With their phone or computer, each participant decided to complete the tasks with the services of Facebook and Google in parallel. We noticed that every participant ended up using Facebook in some way or form. With only 2 of the participants being able to successfully find an event for "free food", shows that Facebook requires the user to know what exactly to search for. This introduces a common pain point

throughout each participant, of what specifically should they be searching. Participants became limited to Facebook's services, even though in the post-study questionnaire, they were asked if they use any other social media regularly. Looking at a sample of two participants in Figure 1, we see that participants were commonly using other social media like Instagram, Twitter, or Snapchat but not using them in the tasks. This is important to the analysis because it shows that the seeking process should not be complex making students jump from service to service just to look for an event. This suggests that students prefer to look at events under one common hub, by the assumption that participants only used Facebook and did not opt-in seeking on any other social media platform.

Figure 1: Sequence model of two participants in the study, highlighting their platform(s)

P2 Sequence: Searching for "Free Food" Event INTENT: Join a campus event, that is offering both free

entrance and food to eat TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
 Googles student center (Thinking it would be the most reliable source)

- Browses student center website
 Goes to Events page
 Scrolls through past and upcoming events
- Finds a resourceful link, and read into details
 Decides event meets the criteria of free food, and selects it for the task

Platform(s): Facebook, Twitter, Instagram, Reddit

P4 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- 2. Decides to go with computer for primary resource
- 3. Uses Google to search for Facebook UTM
- Opens Facebook UTM page
- Browses to Events page
 Quickly browses through populated list
- 7. Clicks on various events and read into detailed description
- 8. Selects most adequate event

Platform(s): Instagram, Facebook, Snapchat

The second recurring theme throughout the study was the participants explicitly stating that they are just generally non-interested or motivated to actively participate in events. This was an interesting occurrence in the pattern because it allowed insight on the type of student who generally participates in events. Of the six participants, two were active members of a club. In reference to Figure 1, we found that the participants that were not in a club tend to be quicker in going through the tasks given to them, whether they failed or completed the task. In contrast, the two participants who were in clubs took a

longer time, and therefore knew the process of finding specific events is not always immediate.

Continuing on the idea where if the student is more active in university clubs, they are more likely to participate in events. We found that if they are exposed to previous clubs or current clubs, they are more likely to check their events first. In reference to Figure 2a - P3 Sequence: Searching for "Any Interesting" Event, the participant would view their current club, to check for upcoming events and was also present in P6 Sequence: Searching for "Any Interesting" Event. This allowed us to gather insight on how the participants would generally look for events that would interest them. It is important to note that a viable solution needs to effectively display a curated list of events that would fit each student uniquely. As mentioned earlier, by Figure 2b we can see that the students who are more inclined to search events were present in a club or group. Based off our post-study questionnaire we wanted to ask participants how often do they attend events. This is to help find correlations between students who are active and inactive both student clubs/groups. You can see in Figure 2c that the two participants who participate in more than one event in a semester were the participants in a current club. Finding out if a student is in a club with classmates of similar interests will lead to insight on the how likely the chance they will participate in similar events. In other words, one of the goals for our app is to create a platform of events relevant to their interests. In order to help ease the process of finding enjoyable events, the app should present events that are relevant to the student's interests or hobbies.

Figure 2a: Sequence models of two active participants in school clubs

P3 Sequence: Searching for "Any Interesting" Event INTENT: Join an upcoming campus event, that is of interest P6 Sequence: Searching for "Free Food" Event or hobby INTENT: Join an upcoming campus event, that is of interest TRIGGER: Many event services and not sure what to type or hobby Contemplates to use phone or desktop computer
 Decides to go with phone for primary resource TRIGGER: Many event services and not sure what to type Decides to go with Facebook "Events" Contemplates to use phone or desktop computer Opens Facebook "Events" built into Facebook
 Decides to look into DEM related events based on Decides to go with phone for primary resource 3. Opens Facebook application participant interest 4. Searches "ACCEPTED UTM" groups 5. Compares different factors across events (Price, 5. Scrolls down through recent posts Location, etc..) Selects an interesting upcoming event on group page 6. Relies on title and brief description outlining the event Clicks event, to read into further detailed description 8. Decides to select interested event

Figure 2b: Likert Scale - 1 being inactive to 5 being actively, of how likely is the student seeking events.

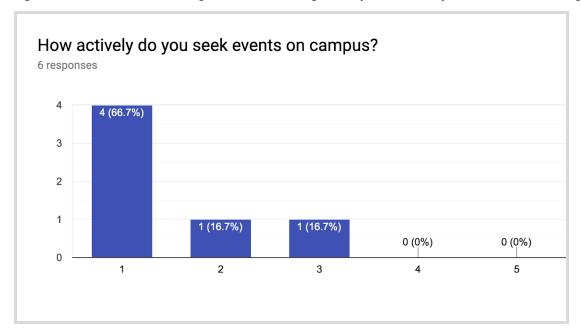
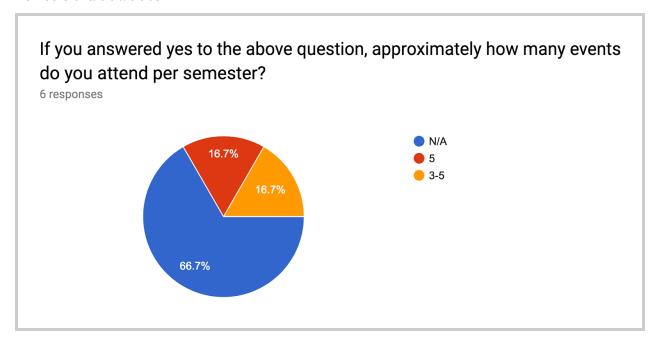


Figure 2c: The two participants who attend events each semester were the same ones who are active members of a club/clubs.



The last main theme we identified in the analysis was that participants generally had a small attention period when searching and viewing events both *Task 1* and *Task 2*. Looking at *Figure 3a* we can see that each participant went through each task in a quick manner and each participant averaged a total task time of 158 seconds. With the small sample size, this suggest that students only focus on the first dozen posts that are displayed. If the relevant event that they are interested in does not appear in the first few seconds of the searching process, there is a likely chance the student will give up and no longer look to participate in an event. This is evident by observing their struggle in searching the proper keyword and criteria whilst finding an event. In reference to the *Sequence Models*, many students Googled UTM events in hope to find events that offered "free food" for *Task 1*. The participant ends up with vague and generalized search results, that do not help refine their needs to the goal. We can see in *Figure 3b* that the pattern of minimal time spent on each task indicate failure in completing the task. This pattern demonstrates that students have a critical period while looking for an event that are of interest. Improving search and filter capabilities

will help eliminate the turnover rate, by promoting more events that are related to the searched query.

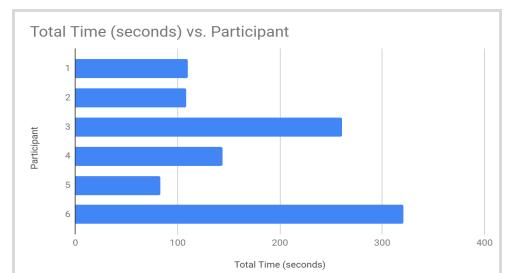
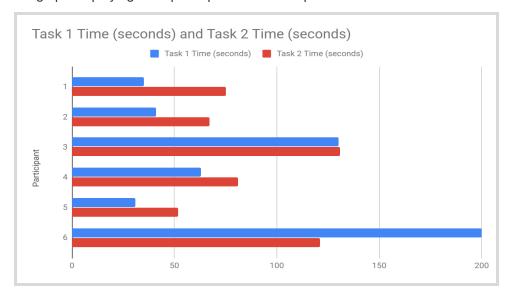


Figure 3a: Bar graph displaying each participant's total time of experiment

Figure 3b: Bar graph displaying each participants total time per task



A couple other findings in the analysis were that of the six participants, one participant still preferred traditional methods in finding campus events. Looking at *Figure 4 - P5*Sequence: Searching for "Free food" Event, you can see that the participant would generally still walk around school boards and view. This is important for developing the

solution and understanding the target audience. For instance, developing a mobile application would exclude students like this particular participant. Then the seconding finding was only one participant would refer to friends as an outlet to find events.

Figure 4: Sequence model of Participant who uses traditional methods

P5 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- 2. Decides to go with phone for primary resource
- First chooses Instagram, searches "UTM events"
- Scroll through dozen posts, could not find anything
- 5. States "I don't really go to events"
- 6. Decides to Google "UTM Website"
- 7. Finds nothing reliable on UTM website's page
- Googles "UTM Events"
- 9. Finds nothing reliable on UTM Events website's page
- States "I don't really use social media, I always delete my apps"
- 11. Gives up, after not able to find specific event
- Explains to researchers that they would prefer to look around school for event posters (particularly in the Davis building)

Platform(s): Instagram

Takeaways

From the analysis, there are a few takeaways that are important to developing a successful prototype of a solution. Although, the formative study was a small sample size, the takeaways are formed around this study and any additional research would help refine the issues of event finding. With that said, the major takeaways from the analysis are:

- Lack of Motivation
- Students' focus and critical period
- Students' primary resource and service

With these, we can focus on creating proper design requirements that would help improve the experience of finding events on campus. Building off these takeaways, potential design requirements for the prototype are;

- Ease of searching and filtering events
- Incentive system (Gamification)
- Minimal, but captivating design
- Student network connection
- Classmate and friend event suggestions

Each requirement is aimed to help users become more inclined in finding events. The solution is to help students become motivated, and join events that genuinely interest them and create new connections with fellow classmates and similar interests. Design requirements will be further outlined and explained in A5.

Appendix

Please refer to the Google Drive link below that contains the Studio Transcript and Contextual **Inquiry Protocol:**

https://drive.google.com/open?id=1uJBxV0UWLftZvsgBTX0-OrEndQVBZqPD

please refer to the Google Survey link below to view Post-Study Questionnaire questions: https://docs.google.com/forms/d/1iCoNXg5Ge8cVfTOQ6hKuflChb4-YmnGZ70p0jteEu7I/edit#re sponses

Sequence Models for each participant:

P1 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- 1. Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
 States "I usually don't go to events"
- 4. Opens Facebook application
- Scroll through news feed
- States "I normally look at promoted events at the top of
- Start to search keyword in Facebook's search bar
- Scrolls through Facebook search
- Analyzes different event titles and brief descriptions
- Gives up, after not able to find specific event

Platform(s): Instagram, Snapchat

P1 Sequence: Searching for "Any Interesting" Event

INTENT: Join an upcoming campus event, that is of interest or hobby

TRIGGER: Many event services and not sure what to type

- Decides to go with phone for primary resource
- Opens Facebook application
 Scroll through news feed
- 4. Scrolls through Facebook search
- 5. Analyzes different event titles and brief descriptions
- Joins an interested event found in Facebook

P2 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- 1. Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
 Googles student center (Thinking it would be the most reliable source)
- Browses student center website
- Goes to Events page
- Scrolls through past and upcoming events
- Finds a resourceful link, and read into details
- Decides event meets the criteria of free food, and selects it for the task

Platform(s): Facebook, Twitter, Instagram, Reddit

P2 Sequence: Searching for "Any Interesting" Event

NTENT: Join an upcoming campus event, that is of interest or

TRIGGER: Many event services and not sure what to type

- 1. Decides to go with phone for primary resource
- Searches "UTM eSports" in Google
- 3. Redirected to Facebook group
- Browse recent posts in group feed
 Looks for upcoming events (Usually looking at the most recent posts)
- 6. Decides to give up after not finding an upcoming event after the initial scroll
- 7. Suggests that he will ask his friends and peers for any

P3 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
- Decides to use Facebook events service
- 4. Opens Facebook "Events" built into Facebook
- Look in upcoming events and browse through list
- Uses previous knowledge of events, to help determine an adequate event for free food
- 7. Looks into Career Fair event based on previous experience
- Read into detailed description
- Join the event

Platform(s): Facebook, Instagram, Snapchat

P3 Sequence: Searching for "Any Interesting" Event

INTENT: Join an upcoming campus event, that is of interest or hobby

TRIGGER: Many event services and not sure what to type

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource Decides to go with Facebook "Events"
- Opens Facebook "Events" built into Facebook
- 4. Decides to look into DEM related events based on participant interest
- Compares different factors across events (Price, Location, etc..)
- 6 Relies on title and brief description outlining the event
- Clicks event, to read into further detailed description
- Decides to select interested event

P4 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- Decides to go with computer for primary resource
- Uses Google to search for Facebook UTM
- Opens Facebook UTM page 4.
- Browses to Events page
- Quickly browses through populated list
- Clicks on various events and read into detailed description
- 8. Selects most adequate event

Platform(s): Instagram, Facebook, Snapchat

P4 Sequence: Searching for "Free Food" Event

INTENT: Join an upcoming campus event, that is of interest or hobby

TRIGGER: Many event services and not sure what to type

- States "I usually don't go to events"
- Opens Facebook UTM page 2.
- Go to Events tab 3.
- Browse populated list of events 4
- Read into different events and join most interesting one

P5 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
- First chooses Instagram
- 4. Scroll through dozen posts, could not find anything
- States "I don't really go to events" Decides to Google UTM Website
- 6.
- Finds nothing reliable on UTM website's page
- 8. Googles UTM Events
- Finds nothing reliable on UTM Events website's page 9
- States "Doesn't really use social media" 10.
- Gives up, after not able to find specific event
- Suggests, that they would look around school for event posters (Particularly Davis building)

Platform(s): Instagram

P5 Sequence: Searching for "Free Food" Event

INTENT: Join a campus event, that is offering both free entrance and food to eat

TRIGGER: Event for today only

- Contemplates to use phone or desktop computer
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- 8. Googles "UTM Events"
- Finds nothing reliable on UTM Events website's page 9.
- States "I don't really use social media, I always delete my apps" 10.
- 11. Gives up, after not able to find specific event
- 12. Explains to researchers that they would prefer to look around school for event posters (particularly in the Davis building)

Platform(s): Instagram

P6 Sequence: Searching for "Free Food" Event

INTENT: Join an upcoming campus event, that is of interest or hobby

TRIGGER: Many event services and not sure what to type

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource
- 3. Opens Facebook application
- Searches "ACCEPTED UTM" groups
- Scrolls down through recent posts
- 6. Selects an interesting upcoming event on group page

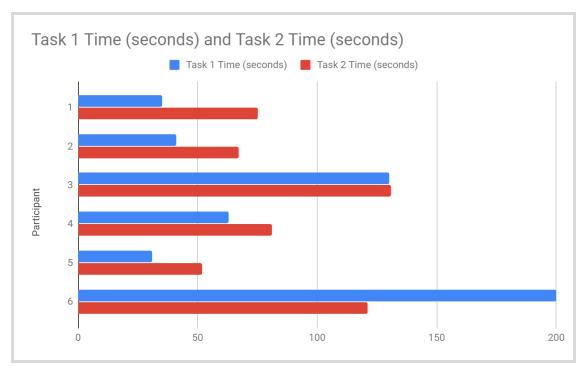
P6 Sequence: Searching for "Free Food" Event

INTENT: Join an upcoming campus event, that is of interest or hobby

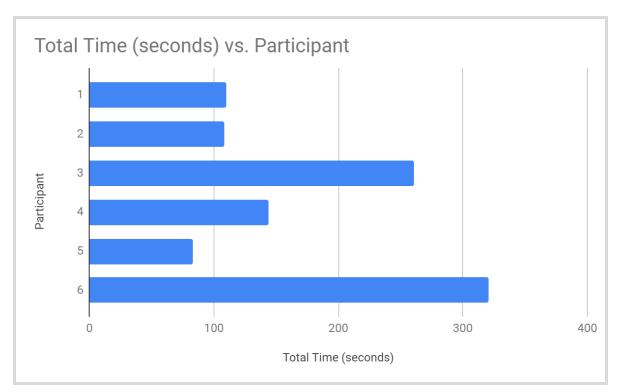
TRIGGER: Many event services and not sure what to type

- Contemplates to use phone or desktop computer
- Decides to go with phone for primary resource 2.
- 3. Opens Facebook application
- Search ACCEPTED groups
 Browse through recent posts
- 6. Join any interesting upcoming event on group page

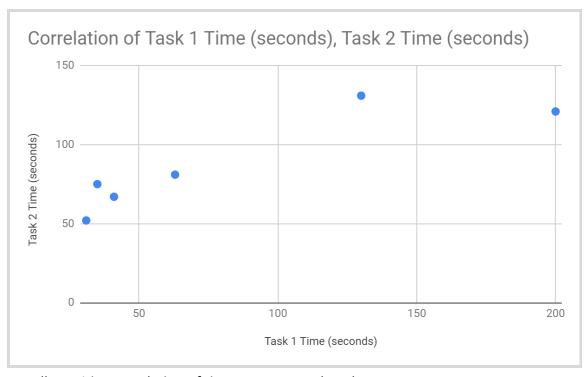
Graphs and Charts for visual data representation:



Comparison of task 1 and task 2 times between participants. Notice how 5 of the 6 participants spent more time on task 2.



Comparison of total time spent on both tasks by each participant. Participants 3 and 6 were the only ones who are active members of a club and also took the most time on the tasks.



A generally positive correlation of time spent on each task.