

# USER REQUIREMENTS: CAMPUS EVENTS APP.

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## Overview

### *Western Mobile App group*

Our client, the Western Mobile App Group, "is a research and development group that offers mobile applications to the Western community" (Xiao, 2014, 15). They have enlisted our assistance to further develop and improve upon the current iWestern micro app "Western Events".

The current "Western Events" app is simple and lacking. The app currently lists all events shown on the Western Events Calendar webpage in a scrollable fashion and includes a standard search bar. The app neglects, however, the events included in separate calendars in the iWestern app, namely Academic Dates, and Alumni Events. The Mobile App Group would like to bring all event driven feeds in the iWestern app together in one location. In addition, the group would like to provide users with the ability to synchronize events with a calendar of their choice, and add notifications for upcoming events.

### *Research design*

At this time, the aim of our research is develop an understanding of users' requirements for the "Western Events" app in order to effectively and appropriately design and enhance the app. Through this research we hope to gain an understanding of current and potential users, and their current practices so as to offer an enhanced application that meets their real needs in a convenient and satisfying way.

### *Data collection*

Our user requirements study relies on a three-pronged approach to data collection: a questionnaire, an interview and a card sorting activity. These various data collection methods permitted us to (1) obtain basic data about the current use of the "Western Events" app and determine how users are currently accessing event information, (2) gain an understanding of what features potential users of a Campus Events app actually need and use, and (3) acquire a sense of the users' mental model regarding the types of events that Western hosts.

### *Analysis process*

Data gathered by different means was consequently analyzed by different means. Questionnaire results were analyzed using spreadsheet filtering and formula tools. Interview responses were categorized by "Features Liked", "Features Disliked", and "Suggestions", and an analysis of the card sorting activity relied on a card sort analysis spreadsheet and a co-occurrence matrix.

### *Findings*

Our study reveals that many people are not aware of, and accordingly, do not use the iWestern app. However, interest in a Campus Events app exists - particularly amongst the undergraduate population. At present, the "Western Events" app is not user friendly and leaves much to be desired. It does not contain all pertinent information regarding events, forcing users to look elsewhere to find it.

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## *Design suggestions*

We suggest significant modifications be made to the current app. As nearly all potential users of a Campus Events app are connected to social media, sharing capabilities with social networks is a must. In addition, the app ought to provide clearer date headers, and the information provided ought to include time, location, registration information, costs, parking and maps. A Campus Events app should include the ability to search, filter and share information. By adding more customizable features to the current calendar, we hope to create a more user friendly model.

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## Research Design

### STAKEHOLDER DESCRIPTIONS

A stakeholder can be defined as any person who will be “affected by the success or failure of the system” (Dix, A., Finlay, J., Abowd, G., Beale, R. 2004, p. 458); thus, we have a broad range of stakeholders listed below. However, this stage of our user research study concentrates chiefly on our primary stakeholders as their feedback is most relevant to ascertaining the user requirements for a Campus Events app.

**Primary Stakeholders:** UWO Students, alumni, and community members who use or plan to use the iWestern app to locate information about campus events. Their interests will be diverse as the app will be providing information for many different types of events. The greatest proportion of primary stakeholders will almost undoubtedly be students.

**Secondary Stakeholders:** UWO staff and club members who publish campus events information. Because there is no “director of campus events”, various department staff, faculty, student groups and clubs will need to ensure that their events are being represented in the app.

**Tertiary Stakeholders:** Event Organizers. The more successful the app is, the better informed the Western population will be about the events that are occurring on campus, which may, in turn, result in increased event attendance.

**Facilitating Stakeholders:** iWestern App Team who will be developing and launching the app, and providing support to both primary and secondary stakeholders.

### RATIONALE FOR DATA COLLECTION METHOD

In order to elicit user requirements for a Campus Events app, several varying kinds of data needed to be obtained. First of all, we needed to obtain basic data about the current use of the iWestern app, develop a broad understanding of users' event information needs, and determine how they are currently accessing that information. Secondly, we needed to get a fuller sense what features potential users of a Campus Events app actually need and use, and develop a more thorough understanding of the current iWestern app deficiencies. Finally, we needed acquire a sense of the users' mental model regarding the types of events that Western hosts. Thus, in light of these varying data needs, we employed a three-pronged approach to data collection: a questionnaire, an interview, and a card sorting activity.

#### *Questionnaire*

To launch our study and obtain some basic data, we offered participants the opportunity to fill out a self-administered online questionnaire. We decided that an online questionnaire would be the most efficient method to gather basic data for a couple of reasons; firstly, as we planned to use the results to inform our interview questions, we needed to complete the questionnaire in as timely a manner as possible, and secondly, the information we were looking for could be gathered by asking fairly straight-forward questions.

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One cited drawback of conducting a non-contact questionnaire such as ours is that it may result in a volunteer bias, meaning that the results may be skewed as only those interested in the topic will volunteer to fill out the survey (Palys & Atchison, 2008, p. 151). This, however, was not a significant concern for our questionnaire as the most likely users of a campus events app are people who are interested in attending campus events. Therefore, by administering a voluntary online questionnaire, we hoped to target our most likely primary users. Furthermore, due to their interest level, participants who chose to fill out the questionnaire would be likely to do so in a thoughtful manner.

## *Interview*

In order to gain a richer understanding of our users and their experiences, we chose to supplement our questionnaire with semi-structured interviews. These interviews allowed us to gather feedback from users regarding the current iWestern app and other similar apps. This was especially important as many of the questionnaire respondents reported being unfamiliar with the iWestern app, thereby weakening their ability to provide us with substantial feedback.

By conducting semi-structured interviews, we were able to address a list of questions but remain flexible enough to discuss the issue more naturally, following lines of conversation that spontaneously arose during the interview. In semi-structured interviews, the researcher can probe beyond the formal question in order to gain deeper insight into what the interviewee is saying (Berg, Bruce, 2012, p.107). Additionally, we were able to observe interviewees interact with the iWestern app and discover more specific details about what did and did not work well.

## *Card Sorting*

Because the Western Mobile App Group has expressed a desire to merge all events driven feeds together into one app, and because several interviewees expressed a desire to have the option of selecting event categories in a Campus Events app, it became apparent to us that we needed to get a grasp of our users' mental models regarding campus events. Thus, a card sorting activity was undertaken to get a grasp of our users' mental models regarding events. Card sorting is also helpful in determining relevant terminology and natural groupings that we can be used in our new design.

## DATA COLLECTION INSTRUMENTS

*(Please see Appendices A, B and C for Consent Forms relevant to each data collection instrument.)*

### *Questionnaire Questions*

1. Are you presently a: Undergraduate student      Graduate student      Faculty      Staff      Other
2. Are you currently part of any student groups/clubs?    Yes      No      Other
3. If yes which student group(s)/club(s) are you a member of? \_\_\_\_\_
4. Do you attend any campus events?    Yes      No      Not sure
5. What campus events do you currently attend? (Select all that apply)  
    Sporting

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Fitness and Health  
Speaker series  
Skills development (writing, resume workshops, etc..)  
Student group events  
Western films  
Other (for example concerts, mixers, departmental events)

6. How many times do you attend an event on campus in a month?

None                      1-3                      4-6                      7-9                      10+

7. If none why not? \_\_\_\_\_

8. What is your biggest obstacle in attending events?

Lack of interest  
Lack of time/other commitments  
Lack of awareness or promotion  
Cost  
Other

9. Where do you currently access information about campus events? (Select all that apply)

Social media  
UWO website  
Word of mouth  
Posters  
Email  
iWestern mobile app  
Other (other websites)

10. If you don't use the iWestern mobile app, why not?

Don't know about it  
Not interested  
Didn't like it  
Not supported on my device  
Don't have a device  
Other

11. How interested would you be in a mobile calendar app which notifies you about events on campus?

not interested                      somewhat interested                      very interested

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12. What event information is important to you/do you want when learning about an event (Select all)

Location	Availability of parking
Map	Link to event website
Time	Accessibility
Cost	Other (please specify)

13. Do you currently use a mobile calendar app? Yes No

14. If yes which calendar app(s) do you use? \_\_\_\_\_

15. If yes what features about it do you like? (select all that apply)

Searchable	Sharable
Ability to import	Ability to export (to email)
Reminders	Filtering
Colour coding	Other

## Interview Questions

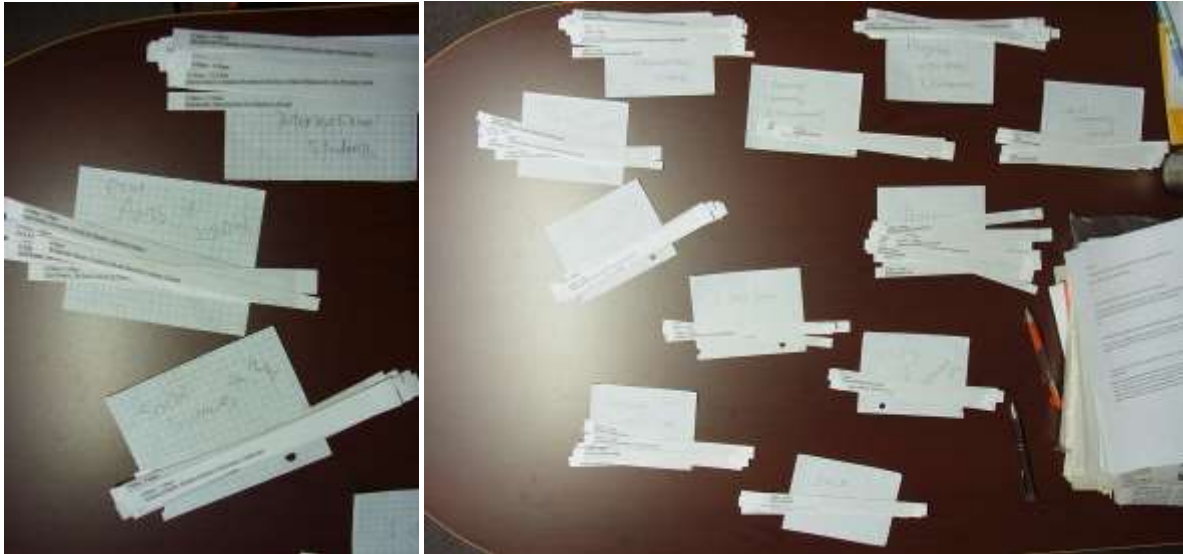
- Are you familiar with, or have you ever used, the iWestern app?  
(Interviewees are shown the 'Western Events' micro app housed in the iWestern app.)
- What do you think of 'Western Events'? What do you like about it? What do you dislike about it?  
(Interviewees are introduced to 3 other events apps: (1) the University of Alberta's 'Events', (2) Duke University's 'Events', and (3) the University of Toronto's 'UofT Events'. The interviewees are asked to spend a few minutes exploring each app.)
- What do you think of these apps in comparison with the 'Western Events' app? In comparison with each other?
- Of the four apps you've seen which do you prefer? Why? (You may blend features from different apps together to create your ideal events app if you wish.)
- Do you currently use a calendar app? Which one(s)? How do you feel about importing events into your calendar? What, if any, problems have you had importing events to your calendar?
- Do you have any other thoughts, ideas or criticisms about the apps I've shown you?

## Card Sorting

Our card sorting activity involved "cards" representing all events found on the Western Events Calendar of October 2013.



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Photographs taken of card sorting instrument during a participant's card sort.

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## Data Collection & Analysis

### ONLINE QUESTIONNAIRE

The questionnaire was created using Google forms and made available online for participants to complete. We wanted to utilize social media to recruit respondents, so we used our personal accounts to publicize the questionnaire, but consequently received a disproportionate amount of results from graduate students. As we conjectured that undergraduate students would be the greatest users of a Campus Events app, this was slightly unfortunate. However, once we were able to get some undergraduate students to complete the questionnaire we utilized the “snowball sampling technique” and cordially requested they pass the link on to their peers. We also engaged with student groups directly and asked if they could share the link to the questionnaire with their members. Results were uploaded directly to a Google drive spreadsheet (comparable to Microsoft Excel), and were then analyzed using that software’s filtering and formula tools.

### INTERVIEW

As an online questionnaire is limited in its capacity to inquire into the user satisfaction level with, and the perceived user shortcomings of, "Western Events", we also conducted interviews with potential users. The interview method, which relied primarily on open-ended questions, was conducive to gathering user perspectives and generating alternative ideas; moreover, interviewing allowed for clarification to be sought - something that was not possible in our online survey.

Our interview format and questions were designed in light of our findings from our online questionnaire which revealed that many people are unaware of - or simply do not use (or do not wish to use) - the iWestern app, and that the majority of individuals are made aware of and learn the details of events on campus through friends and social media. As we were able to surmise from the results of our survey that finding people who actually use and rely upon the iWestern app would be difficult, we chose to rely on purposive sampling, a nonprobability sampling method in which “people...are intentionally sought because they meet some criteria for inclusion in the study” (Palys & Atchison, 2008, p. 124). We therefore recruited interview participants by relying on our knowledge of individuals who possess a Smartphone and who use mobile applications on their Smartphone. This familiarity with mobile applications allowed our participants to give us knowledgeable feedback throughout the interview session.

The interview itself allowed participants to interact with the 'Western Events' component of the iWestern app, and the events applications of three other universities (the University of Alberta, Duke University, and the University of Toronto). These university apps were selected because of their differing or contrasting features and layouts. Participants were asked to talk about what they liked and disliked about the different applications, and to make criticisms and suggestions. This contrast-and-comparison method allowed the interviewer to elicit the perspectives of potential "Western Events" users, and to gain insight into what user requirements exist for such an app.

Five interviews were conducted in a one-on-one setting, and the participants' comments were written down. Special attention was paid to claims of satisfaction and dissatisfaction. Statements such as "I wish

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that...", "It's frustrating that...", or "I wouldn't use that..." were also given special consideration. Post interviews, participant responses were categorized into "Features Liked", "Features Disliked", and "Suggestions." More weight was given to responses that were reiterated by multiple interviewees.

## CARD SORTING

The current iWestern Event App does not allow users to filter listed events. However, creating categories can allow users to find events according to their interests. To create new categories, card sorting is useful to understand how students and stakeholders on campus classify and categorize events and to structure the app design.

Our process:

1) Approximately 150 events, which were listed on the Western event page in October 2013, were cut into slips.

2) Two different stakeholders were asked to sort the slips.

Primary stakeholder (PS): a student in the MLIS program at Western who regularly attends fitness classes at the campus recreation centre and who is involved in two campus clubs. She occasionally attends special lectures on campus.

Secondary/Tertiary stakeholder (SS): a Chinese coordinator in French and Asian Studies at Huron University College who organizes a weekly meeting of the Chinese Program at Huron – Tea and Conversation. She responded to our request because she wanted to know how to promote her events.

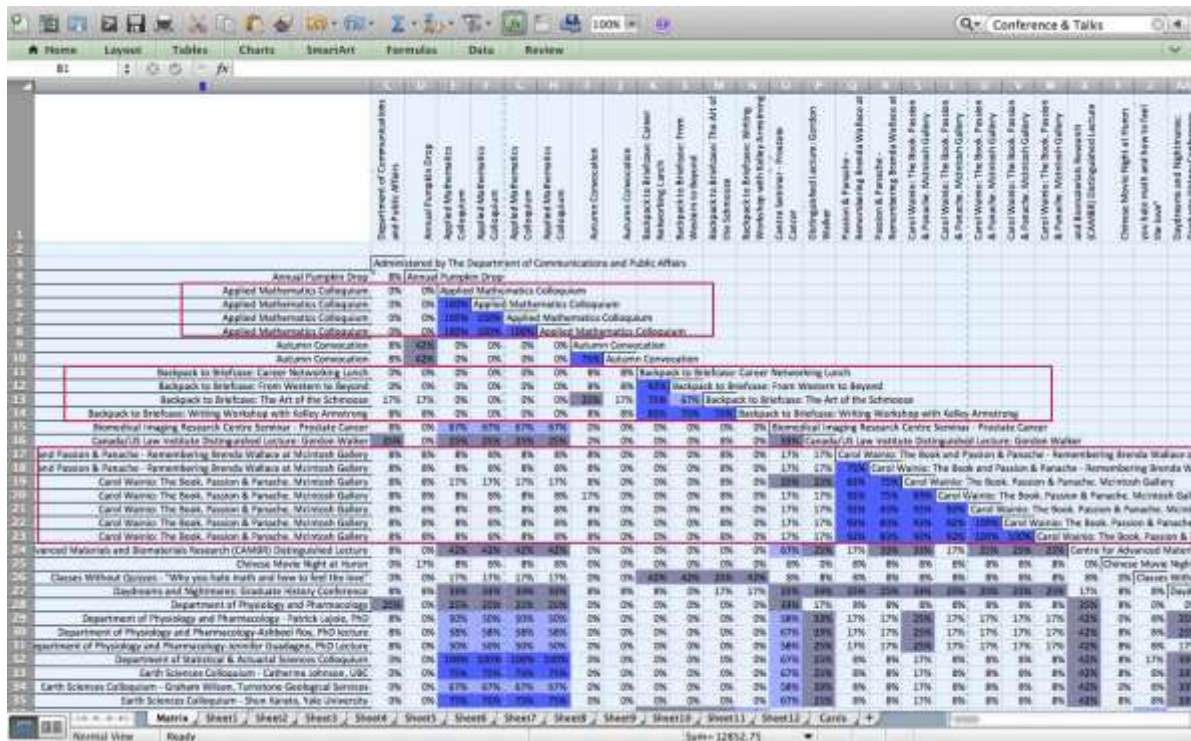
3) An online tool, websort.net, was employed to reach different stakeholders on campus (i.e., undergrads and graduate students in the Faculties of Arts, FIMS, and Law, and the Departments of Political Science, Geography, History and Computer Science). As a result, ten stakeholders participated in the card sorting.

4) The following tools were used to analyze the outcomes from the 12 sorters: a card sort analysis spreadsheet (Spencer, 2007) and a co-occurrence matrix spreadsheet (Rice, n.d.).

A co-occurrence matrix created by Rice (n.d.) allowed us to examine how often any pair of cards in a card sort were categorised into the same group (Figure 1). At the top, Applied Mathematics Colloquium is always categorised under the same name between the 12 sorters. Yet, inconsistent sorting is seen in events, for example involving the *Backpack to Briefcase* series. Students who knew about *Backpack to Briefcase* as a specific program categorized the events differently than students who were unfamiliar with the name. Because websort.net shows events randomly and does not introduce similar events in a sequential way, sorters sometimes did not sort them into the same categories. This case is also seen with Carol Wainio's events (See Figure 1).

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Figure 1. (a screen capture of data using informoires's spreadsheet)



After recognizing how differently the 12 sorters categorized cards by observing this co-occurrence matrix, we need to figure out the similarity matrix. Spencer's spreadsheet requires creating standardized categories manually, but this extra work offers a basic idea of how our team should effectively categorize a large number of events. We therefore created 18 categories out of the 148 as standardized categories by summarizing the 148 categories (Figure 2). We used terms like "Formal Sciences" and "Natural Sciences" to avoid listing all the scientific disciplines separately (just as some sorters did), as well as avoid categorizing all the scientific areas simply as Science.

Note that the 148 categories made by the 12 participants often overlap each other as in, for example, "Student Development Workshops" and "Student Skills Workshops" or "Health," "Health & Wellness," and "Health Clinic". Yet, this does not mean that these similar categories include the same events.

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**Figure 2.**

Standardized category	Sorters who used this <sup>1</sup>	Total cards in this category <sup>2</sup>	Unique cards <sup>3</sup>	Agreement <sup>4</sup>
Alumni	9	48	48	0.11
B2B: from student to career professional	3	12	12	0.33
Career Services	2	5	5	0.50
Community Events	10	63	63	0.10
Health	4	4	4	0.25
International Opportunities	9	101	101	0.11
International Students	6	64	64	0.17
Language, Culture, Art, Music, & Film	19	344	344	0.05
Lectures, Seminars & Colloquium	12	251	251	0.08
Lectures, Seminars & Colloquium - Formal Sciences	2	11	11	0.50
Lectures, Seminars & Colloquium - Humanities	9	77	77	0.11
Lectures, Seminars & Colloquium - Natural Sciences	11	46	46	0.09
Lectures, Seminars & Colloquium - Professions and Applied Sciences	13	58	58	0.08
Lectures, Seminars & Colloquium - Sciences	5	73	73	0.20
Lectures, Seminars & Colloquium - Social Sciences	9	73	73	0.11
<b>Total of Lectures, Seminars &amp; Colloquium</b>	<b>61</b>	<b>589</b>	<b>589</b>	
Skills Workshops	18	257	257	0.06
University-Wide	14	102	102	0.07
Unknown (or Others)	5	27	27	0.20

The agreement rates above are low because the tool compares only the exact same names rather than categories including the same words. Thus, “Earth Sciences” and “Events: Earth Sciences”, all of which are regarded as “Lectures, Seminars & Colloquium - Natural Sciences”, are considered individual items for this algorithm. Some participants put all lectures or talks related to sciences together; in this case, we were unable to separate them either into Natural Sciences, Formal Sciences, and so forth. “Lectures, Seminars & Colloquium” could be the main category, but the result indicates that creating sub-categories is important.

Many events are sometimes categorized in the wrong categories, particularly when similar titles with different target audiences are not noticeable at a glance. This becomes obvious when standardized categories are employed and/or because the participants only skimmed the information very quickly (Figure 3). When it should take more than 45 minutes to sort 150 slips if one reads all the events and ponders how to sort them, 16 minutes seems very short. For example, “Scholarship Opportunities for

<sup>1</sup> Sorters who used this: this shows the number of participants who used this category (this is a standardized category—check the Original Category column for exact labeling)

<sup>2</sup> Total cards in this category: this is the total number of cards, from all participants, using this category.

<sup>3</sup> Unique cards: this is the number of individual cards in this category.

<sup>4</sup> Agreement: this is a measure of how much agreement there was between participant results for that category. It is a bit obscure, but very useful when you get your head around it.

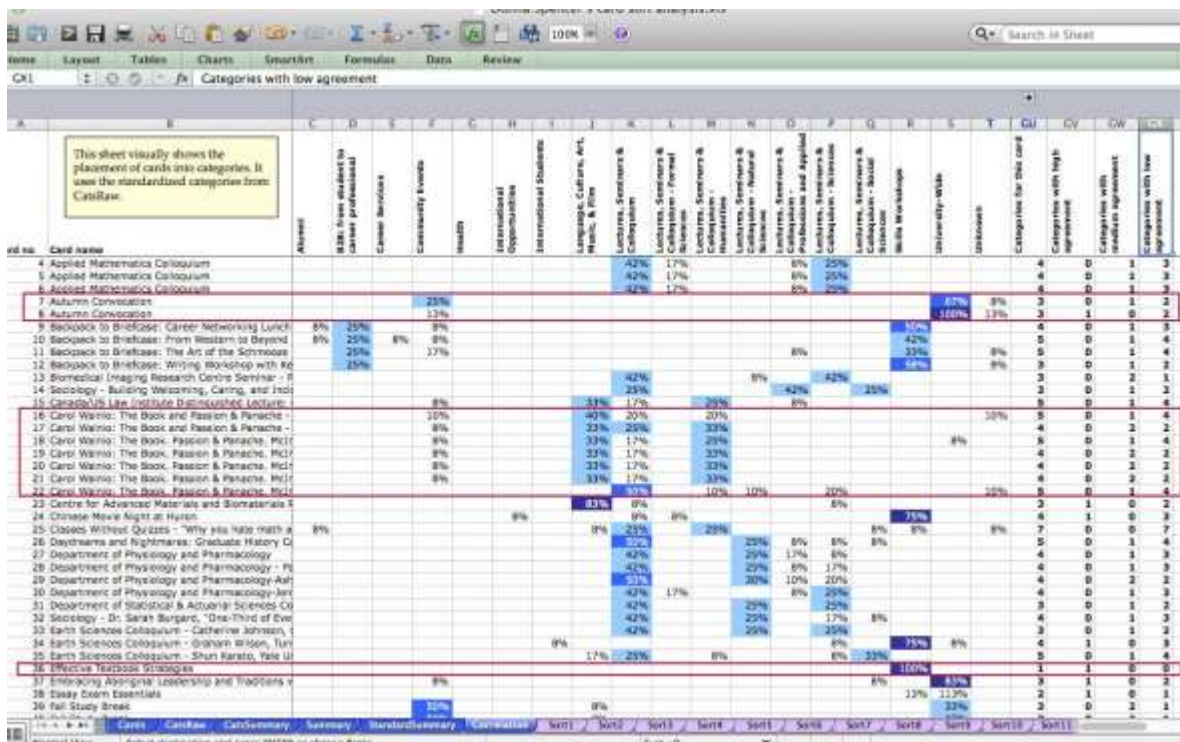


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Education Abroad” was wrongly categorized as “Events for International Students” by the person who spent only 21 minutes sorting.

Two “Autumn Convocation” events (No. 7&8) in Figure 3 are categorized in an inconsistent way. This implies that sorters are not sure where to put them. Highly divergent numbers also indicate that some confusion surrounds events, for example starting with Carol Wainio, an artist’s name. Cases where everybody agrees how to categorize an event are rare, but can be seen in number 36 “Effective Textbook Strategies”.

**Figure 3 (a screen capture of data using Spencer's spreadsheet)**



Although finding similar themes was more complex than we thought, this result makes us aware of the importance of creating categories as one only glances at the entire screen while searching events.

The data can help us to reduce the number of standardized categories even further, as 18 is still a large number. The app should not list more than 9-12 categories at once.

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## Findings

### ONLINE QUESTIONNAIRE

We received a total of 136 responses to our questionnaire (85 graduate students, 27 undergraduate students, 21 faculty, 1 staff, 1 other, and 1 who did not identify). Close to half (48.9%), of respondents said they learned about campus events via social media. This number was greatest for undergraduate respondents as 74.07% said they used social media to learn about campus events.

79.4% of respondents indicated that cost and location were the information they desired when learning about an event on campus.

The average rating of interest users indicated they had in using a mobile event app, measured on a Likert scale ranging from one to five, was 2.85. This number was higher among undergraduate respondents at 3.44.

Only 3 respondents reported they use the iWestern app. The most common reason given as to why people do not use the iWestern app was they did not know about it (44.1% of responses).

The results reveal that users are learning about events on campus from means other than the dedicated app - mostly social media. The main impediment to using the iWestern app seems to be ignorance of its existence; that said, respondents expressed interest in using the "Western Events" app or something similar. We suggest that undergraduate students ought to be the group most intensely focused on both when designing and marketing the new Campus Events app as the data suggests they are more likely to engage with new ways of finding information and have expressed the most interest in such an app.

### INTERVIEW

Results from the interviews suggest users of a Campus Events app want clear and evident date headers that stand apart from the events themselves. (One participant recommended the date headers mimic the headers found in the MOMA app.) Though interviewees were not particularly interested in an option to email themselves event information, all five of the individuals interviewed expressed a high appreciation in the map link offered in Duke University's Events app. Sharing and calendar import features were generally appealing to interviewees, but more appealing was the notion of categorizing events to facilitate searching. Three of the five people interviewed suggested that events be organized by category so that they could find out about events that they may actually be interested in with more ease.

### CARD SORTING

Most participants divided events pertaining to relevant programs/disciplines into either the Arts, Humanities, Social Sciences, or Sciences. Four participants, including the two web participants who spent longer than one hour, divided all the speakers' events in Sciences into detailed disciplines, such as Math, Physiology, and Earth Sciences. On the other hand, the secondary/tertiary stakeholder put all the events in

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sciences as she said that they are not relevant to her and she is not interested in them. This suggests that our team should consider whether users could customize the event view according to their settings.



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## Problem Scenarios

### SCENARIO 1

Matthew is in his third year of the Music program at Western. He downloaded the iWestern app when he first arrived at Western, but has rarely had cause to use it. Matthew recently performed in the orchestra for the Faculty of Music's production of *La Cenerentola*. and wanted to let his friends and family know where they could buy tickets and find information about the show. An avid user of Facebook and Twitter, Matthew had hoped to simply "share" the event like he shares videos, links and other web pages. However, when he opened the 'Western Events' micro app he was faced with the frustrating reality that he couldn't search for the event he wanted by category, or even by faculty, but had to scroll through all listed Western events until he reached the date of the performance. He realized that he could have used the search bar, but tapping is always less effort than typing, and besides, he is still struggling with spelling '*La Cenerentola*' correctly.

When Matthew finally found the listing for *La Cenerentola* under the February 7th header he tapped on the event only to discover that a very limited amount of information was provided and that no option to "share" the event existed. Annoyed that he had wasted his time, Matthew did a quick search in Google for "UWO music Cinderella". The first hit brought up the Faculty of Music's event page for the performance. Matthew copied and pasted the URL into a short Facebook post, satisfied that his family and friends would now be informed about the performance and have access to the information they needed to attend.

### SCENARIO 2

Greg is an international student from Finland that has just arrived at UWO to begin his studies. Being new to both the country and university he wants to start attending events where he can meet and socialize with people that have similar interests to him. His English is very strong but he is unfamiliar with some of the terminology people in Canada use to name or describe their events so reading over the calendar online has been trying. He knows the types of events he would like to attend but just reading over a list of names and times does not give him the information he needs. He would like to attend social or entertainment oriented events, but at present there is no way for him to tailor the UWO calendar to isolate those types of events. He tried doing some research on clubs and events he thought he might be interested in, but information was either sparse or the process too time-consuming. Consequently he stopped using the official UWO channels and services to learn about events and turned instead to asking classmates what clubs they were a part of and started attending events which other students from his faculty attended.

### SCENARIO 3

Heather is an undergraduate student at UWO. She lives off campus with some friends. While she has a car, she chooses to walk to class or take a bus in order to avoid expensive parking fees.

While perusing Facebook recently, Heather noticed that one of her classmates is planning to attend the upcoming Gender & Global Change Conference at Western. This is an event that she would like to attend.

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Unfortunately, the reference to the conference is in a status update, and therefore contains no further information.

Having never heard of the iWestern app, Heather instead navigates to the UWO homepage to see if she can find information about the conference. After scanning the page, she notices a list of upcoming events under the heading “What’s Happening”. The conference is not included, but she selects the button at the bottom of the list that says more events. This brings up the Western Events Calendar.

Because her classmate did not include the date of the conference in her Facebook status, Heather must look at every event displayed on the calendar until she can find the Gender & Global Change Conference. After several minutes she locates it on the first of March. By clicking on the event, the website of The Centre for Research and Education on Violence Against Women and Children comes up and she is able to find information about the conference proceedings, time and location and registration information.

She is directed to another website in order to register. After registering for the conference, she emails the PDF flyer to several of her friends to see if they would like to come. Three of her roommates express interest and ask if she would be able to give them a ride in her car. She agrees.

Because she walks or takes the bus to class, Heather needs information about parking for the event. The conference flyer and website does not contain the information. She returns to the Western homepage to find the information. After several minutes of exploring she finds the link to Transportation and Parking under the Campus Life pull-down menu. On the Transportation and Parking homepage she locates Evening/Weekend parking information from a long list on the left hand side of the screen. She learns that there are four parking lots in which she can park for free on the date of the Conference: Althouse, Springett, Medway and Elborn. Because she is unfamiliar with parking at Western, she must download a PDF of the campus map and locate those lots using the legend in order to locate which would be most convenient.

Finding out about the conference, registering, inviting friends and locating parking information has consumed a lot of Heather’s time. Now that she knows the effort required to attend campus events, she will only investigate those which she is especially interested in attending.

## PROBLEM SCENARIOS CLAIMS

Our problem scenarios demonstrate the reality that many people do not know about the iWestern app and therefore have to find events through the events calendar on the UWO homepage, or through social media. Some advantages to finding events through the UWO homepage is that the link to the calendar is fairly easily found on the UWO homepage under the heading: “What’s Happening”, and that once found events often include links to the event website which contain further information. Unfortunately, however, links to events websites do not necessarily provide all required information and therefore it may require several steps to find what is needed. Furthermore, there is no share feature making it easy to let friends know about events that might be of interest to them, there is no search feature you must read all events to find the one you are looking for, and there is no filtering feature you have to look through all the events, even if they are of no interest.

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## RATIONALE FOR DESIGN

The purpose of a Campus Events app is to make finding information about events uncomplicated and convenient. Our research has demonstrated that the current iWestern app does not simplify the process of locating information for students and has therefore been unsuccessful. The design goal for our app will be to rectify the shortcomings of the current iWestern app.

Our research has shown that social media is a significant source of event information for Western students. If the event is not already on a social media site, than students expect to be able to share the event on social media with relative ease. What is more, the user experience is frustrated when users must gather the various bits of information they need to attend an event (such as location, parking, cost, etc.) from various sources. Hence, introducing sharing capabilities, maps and parking information to a Campus Events app would ameliorate the user experience. Additionally, browsing and searching campus events could be facilitated by allowing users to search by categories.

By designing an app that contains most information students require regarding events, we will make visiting multiple websites unnecessary, vastly improving the simplicity of the information search. Furthermore, by adding filtering and sharing capabilities, we will allow users to easily locate the events they are most interested in attending, and share that information with friends. It is our hope that by increasing user-friendliness, knowledge about and satisfaction with the iWestern app will improve.

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## Appendix A - Questionnaire Consent Form

### *UWO event app research — User Experience Research — Campus Event App Design*

You are being invited to participate in a brief survey that will contribute to a research project looking at into the development of the iWestern app.

We are students in the Faculty of Information and Media Studies at The University of Western Ontario and the information we are collecting through the following survey will be used in a research project for one of our classes: LIS 9706 - User Experience Research. The information gathered will be used to gain a better understanding of user requirements for a Campus Events micro app - an app which may later be developed by the Western mobile app group.

#### WHAT PARTICIPATION ENTAILS

If you agree to take part in this study, you will be required to offer 10 minutes of your time to complete a brief online survey regarding your use of the iWestern app, the types of campus events you attend, and how you learn about those events.

#### VOLUNTARY PARTICIPATION

Participation in this study is voluntary, and there are no known risks to your participation.

You may refuse to participate, refuse to answer any questions or withdraw from the study at any time. This project is an opportunity to give students experience in doing research, it is a training and teaching exercise. Please note that if you decide not to participate or to withdraw from the study at any time, our grades in the course will not be affected.

#### CONFIDENTIALITY

The results of the project will not be published, but the data collected will be discussed during our classes. Never the less, no identifying information will be collected, so your participation will remain anonymous.

#### CONTACTS

If you have any questions about the study, you may contact us:

Mark Borden at [mborden@uwo.ca](mailto:mborden@uwo.ca), or our instructor, Professor Lu Xiao at [lxiao24@uwo.ca](mailto:lxiao24@uwo.ca).

If you have questions about your rights as a research subject you may contact the Director of the Office of Research Ethics, The University of Western Ontario at 519-661-3036 or [ethics@uwo.ca](mailto:ethics@uwo.ca).

#### CONSENT

Your completion of this questionnaire implies that you have read the information provided above, had the nature of the study explained to you, and have consented to participate in this study.

Thank you in advance for your time.

# USER REQUIREMENTS: CAMPUS EVENTS APP.

## Appendix B - Interview Consent Form

### *User Experience Research – Campus Event App Design (Interview Consent Form)*

You are being invited to participate in a brief interview that will contribute to a research project looking at into the development of the iWestern app.

We are students in the Faculty of Information and Media Studies at The University of Western Ontario and the information we are collecting through the interview will be used in a research project for one of our classes: LIS 9706 - User Experience Research. The information gathered will be used to gain a better understanding of user requirements for a Campus Events micro app - an app which may later be developed by the Western mobile app group.

### WHAT PARTICIPATION ENTAILS

If you agree to take part in this interview, you will be required to offer 10-15 minutes of your time to answer a few questions about your own use of mobile calendars and the iWestern app, and to offer your opinion(s) on a few different events-related mobile applications.

### VOLUNTARY PARTICIPATION

Participation in this interview is voluntary, and there are no known risks to your participation. You may refuse to participate, refuse to answer any questions or withdraw from the interview at any time. This project is an opportunity to give students experience in doing research, it is a training and teaching exercise. Please note that if you decide not to participate or to withdraw from the study at any time, our grades in the course will not be affected.

### CONFIDENTIALITY

The results of the project will not be published, but the data collected will be discussed during our classes. Never the less, no identifying information will be recorded (your data will be collected under the guise of "Interviewee # \_\_") so your participation will remain anonymous.

### CONTACTS

If you have any questions about the study contact: Mark Borden at [mborden@uwo.ca](mailto:mborden@uwo.ca) or our instructor, Professor Lu Xiao at [lxiao24@uwo.ca](mailto:lxiao24@uwo.ca).

If you have questions about your rights as a research subject you may contact the Director of the Office of Research Ethics, The University of Western Ontario at 519-661-3036 or [ethics@uwo.ca](mailto:ethics@uwo.ca).

### CONSENT

Your verbal consent to the interviewer implies that you have read the information provided above, had the nature of the study explained to you, and have consented to participate in the interview.

Thanks!

# USER REQUIREMENTS: CAMPUS EVENTS APP.

## Appendix C - Card Sort Consent Form

### *User Experience Research – Campus Event App Design - Card Sort Consent Form*

We are students in the Faculty of Information and Media Studies at The University of Western Ontario. Currently completing the LIS 9706 - User Experience Research class, we are conducting research that will help us gain a better understanding of how the iWestern Events App should be organized to make it easier to use. The information gathered will be used to gain a better understanding of user requirements for a Campus Events micro app - an app which may later be developed by the Western mobile app group.

#### INSTRUCTIONS

You will be given approximately 150 slips with event names. Please categorize them as it makes sense to you. Repeat with the remaining items, grouping items that belong together. (You may find the same cards several times because they were offered more than once within the month.)

What items belong together? Think of where you expect to find these items on iWestern Event App. Then name each group with a word or words that describe the set of items it contains.

There is no right number of groups, but make sure that you think about how the items relate to each other. If you have a group with a large amount of items, you may be able to split it up.

#### WHAT PARTICIPATION ENTAILS

If you agree to take part in this study, you will be required to offer approximately 45 minutes of your time to complete this card sorting practice regarding campus events at the UWO.

#### VOLUNTARY PARTICIPATION

Participation in this study is voluntary, and there are no known risks to your participation.

You may refuse to participate, refuse to continue this card sorting practice, or withdraw from the card sorting process at any time. This project is an opportunity to give students experience in doing research, it is a training and teaching exercise. Please note that if you decide not to participate or to withdraw from the study at any time, our grades in the course will not be affected.

#### CONFIDENTIALITY

The results of the project will not be published, but the data collected will be discussed during our classes. Never the less, no identifying information will be collected, so your participation will remain anonymous.

#### CONTACTS

If you have any questions about the study contact: Mark Borden at [mborden@uwo.ca](mailto:mborden@uwo.ca), or our instructor, Professor Lu Xiao at [lxiao24@uwo.ca](mailto:lxiao24@uwo.ca).

If you have questions about your rights as a research participant, you may contact the Director of the Office of Research Ethics, The University of Western Ontario at 519-661-3036 or [ethics@uwo.ca](mailto:ethics@uwo.ca).

# USER REQUIREMENTS: CAMPUS EVENTS APP.

## SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I understand the information provided for the study iWestern Event App as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

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Name of Participant

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Signature of Participant

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Date

## SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

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Signature of Investigator

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Date

# USER REQUIREMENTS: CAMPUS EVENTS APP.

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