

# PART ONE

*Melanie Smith*

## Good UI



## Poor UI



## **PARKWHIZ: Analysis**

For Homework 2 I used and analyzed a parking meter in Tech Square, run by parkAtlanta. I purchased time for a parking space at the meter outside of Gyro Bros. This type of UI accepts keypad input.

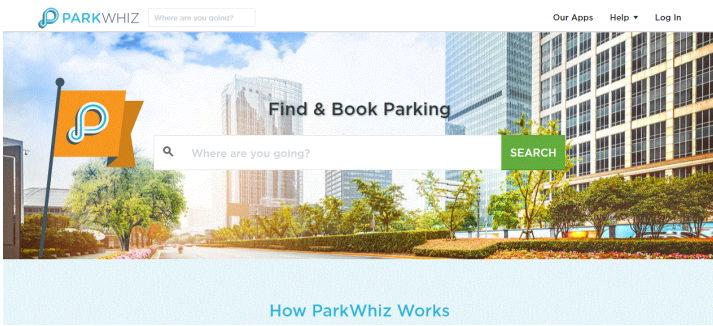
For this section, I chose a website called ParkWhiz (parkwhiz.com) to critique. This website allows the user to browse for parking by location and price, then select their desired parking spot or area and purchase parking time there. This type of UI accepts mouse and keyboard input. *See Figures on next page.*

While ParkWhiz has a few shortcomings, in general it is an effective and well-designed website. The first page the user sees is very well-designed for the user. It is aesthetically simple and does not overwhelm the user with color, text, or information. The function of the search bar is immediately clear. Upon entering text in the search bar, suggestions appear for the user, showing the status of the system. This ensures the user that the system is understanding their query and may also save them time they might have spent typing the entire line. Overall, visibility of system status and an aesthetically pleasing design allow the user to avoid frustration and confusion from the start (Figure 1, 2).

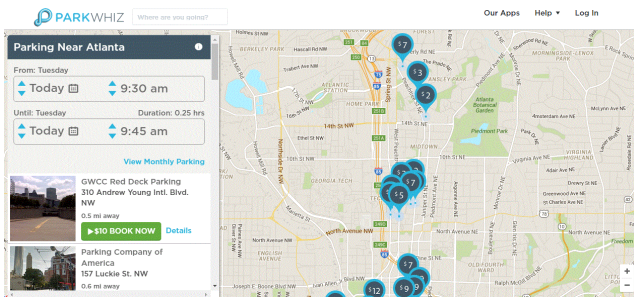
Once the user has typed or selected their desired location, they are presented with a map with process by parking location. They are also given drop-down boxes to select their desired parking date and time. While this may seem overwhelming at first, all of the vital information is presented to them at once this way. They can instantly view how changes in time will affect prices for different parking zones, creating minimal steps for the user if they change their mind. They can easily expand, narrow, or move the area on the map they are looking at by zooming and dragging the map, which adjusts available parking lots as they do (upholds principle of flexibility and efficiency) (Figure 3).

Next the user selects a spot on the map that they would like to see details about. This brings up reviews, photos, and detailed pricing for that location. If the user changes their mind about that location, they can easily exit out of it and resume their previous search. If the user is happy with their selection, they can proceed to the checkout portion from there (Figure 4).

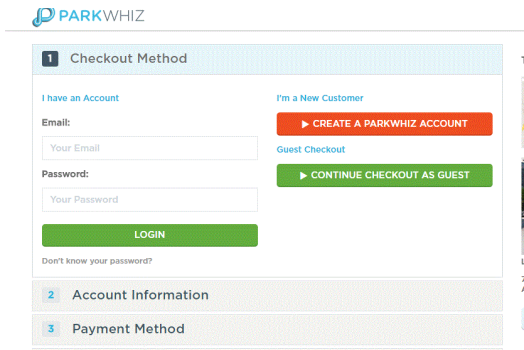
Furthermore, the user continues to enter information such as their name and payment information. Entry fields that might be questionable to the user such as the need for their billing zip code are explained through helpful text boxes when the user hovers over them. This helps alleviate any user concerns and confusion and speeds up the transaction as a whole. Lastly, the use is provided with a confirmation screen that summarizes their transaction before purchase. This follows the principle of making actions with consequence difficult to complete by preventing possible user error (Figure 7, 8). Overall, this is a thoughtful website when it comes to serving the user's needs.



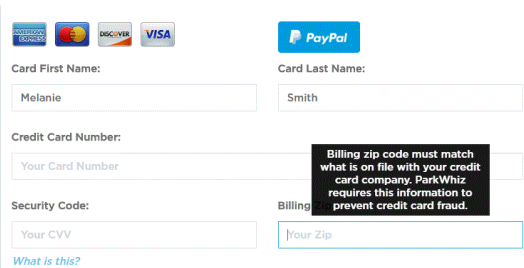
**Figure 2**  
Home screen for ParkWhiz - Purpose of site and search bar is clear: for user to find and book parking. Few distractions.



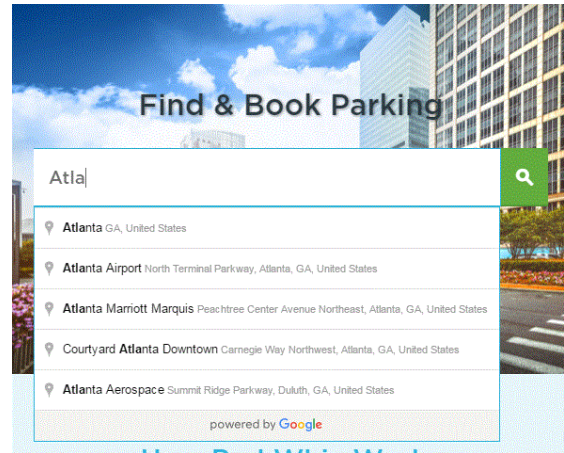
**Figure 3**  
User has selected parking for Atlanta, GA. User can select a date and time on the left and view prices by location on a map on the right



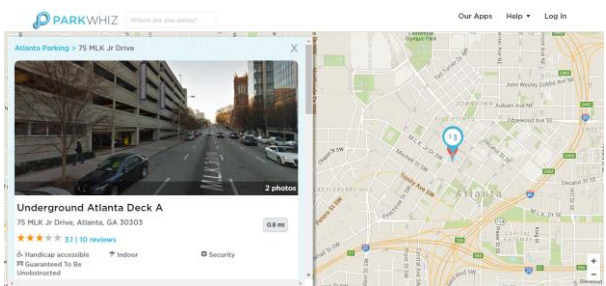
**Figure 5**  
User has confirmed desired spot and is given the option to sign in or continue as a guest user.



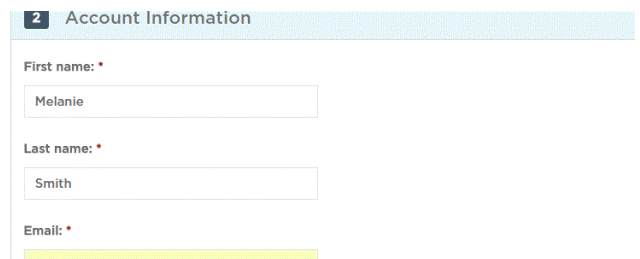
**Figure 7**  
User enters payment information. More information/help is provided for potentially confusing fields.



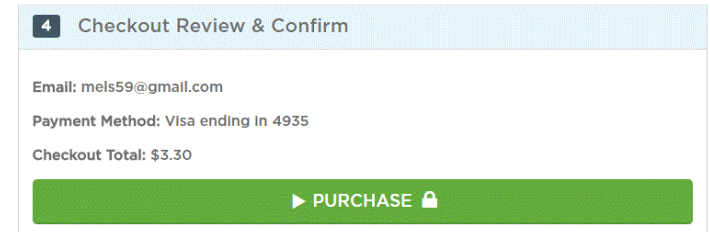
**Figure 1**  
User types query into search bar. Suggestions are updated as user types.



**Figure 4**  
User has clicked on a parking location. Photos and more information are provided to the user.



**Figure 6**  
User enters name and email address.



**Figure 8**  
A confirmation screen is provided for the user. The transaction is completed when the user clicks purchase.

## **PARKMOBILE: Analysis**

For Homework 2 I used and analyzed a parking meter in Tech Square, run by parkAtlanta. I purchased time for a parking space at the meter outside of Gyro Bros. This type of UI accepts keypad input.

For this assignment I chose to analyze Parkmobile, specifically for its downfalls. Parkmobile is an app that allows users to purchase parking in areas that are affiliated Parkmobile zones. This type of UI accepts touch input. *See Figures on next page.*

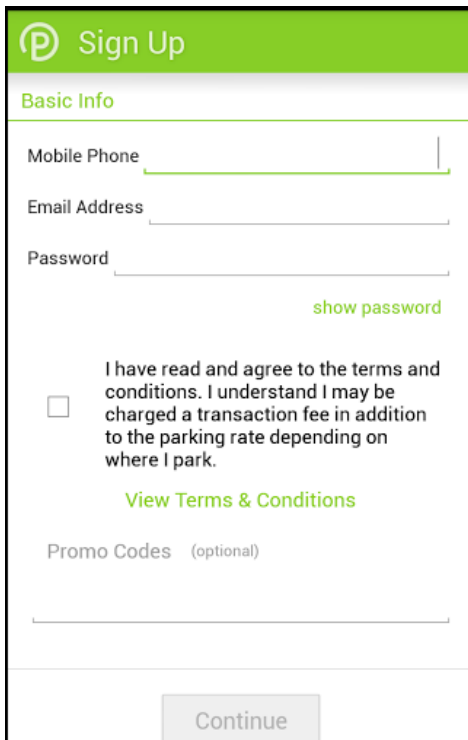
While Parkmobile seems more convenient than a traditional parking meter at first, it has some major flaws that can lead to the user actually doing more work. The first undesirable characteristic is that the user must either sign in or create a new account to see any other part of the app. There is no option to continue as a guest like ParkWhiz has. This forces the user to enter information, spending more time, before even ensuring that the app will help them complete the task they are trying to do (violates principle of flexibility and efficiency) (Figure 9).

Furthermore, the next screen the user sees is dominated by a tutorial screen. While tutorials can be effective in assisting the user with their task, this one is designed in a rather confusing way. The words “Quick Tutorial” and the instructions and buttons for the tutorial are much larger than the tutorial itself. The text is so small in the help instructions that it is easy to overlook it completely. It is likely that the user would be confused and not understand where the actual tutorial information is (violates principle of aesthetic and minimalistic design) (Figure 10).

Next, the user must enter their parking space and other payment information. There are no options for selecting the parking space. The user must recall their parking space, which means they cannot select one ahead of time, see how many are available or where they are located. Therefore, they must either complete this information near their vehicle or remember their space number when they leave. Moreover, the user must enter their license plate number which they must also be looking at during the purchase or have it memorized. Due to the necessary proximity to their vehicle at the time of purchase, the user could just as easily use the nearby parking meter to complete the transaction (Figure 11).

The user is then prompted to select either the maximum time or select time by hours. The system does not inform the user what the maximum time is or how much money that would cost. The max time could be anywhere from 10 minutes to 10 days and the user wouldn’t know unless they had already used that meter zone before. If the user chooses to pay by the hour, they can only pay for full hours. This provides less flexibility than a physical parking meter which allows you to pay for fractions of an hour (violates principle of flexibility & efficiency) (Figure 12, 13).

Overall, the Parkmobile app may seem initially enticing to users because it is on their phone and therefore seems faster and easier, but it has quite a few drawbacks that prevent it from being a superior method for paying for parking. It has less flexibility of payment than the physical parking meter and has less flexibility of user location than ParkWhiz, which allows the user to pay for their parking from anywhere. Additionally, the app has some usability issues that are unnecessary, such as the distractingly designed tutorial, which have resulted in an overall poor app.



**Sign Up**

**Basic Info**

Mobile Phone

Email Address

Password  [show password](#)

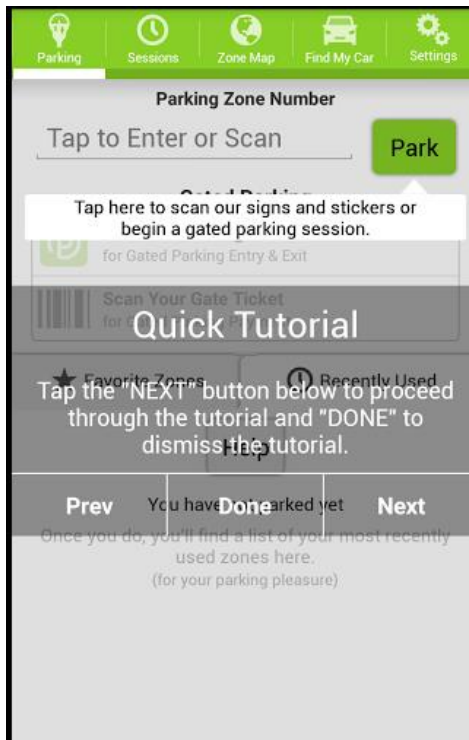
☐ I have read and agree to the terms and conditions. I understand I may be charged a transaction fee in addition to the parking rate depending on where I park.

[View Terms & Conditions](#)

Promo Codes (optional)

[Continue](#)

**Figure 9**  
The user opens the app and must either sign in or sign up.



**Quick Tutorial**

Parking Zone Number

Tap to Enter or Scan [Park](#)

Tap here to scan our signs and stickers or begin a gated parking session.

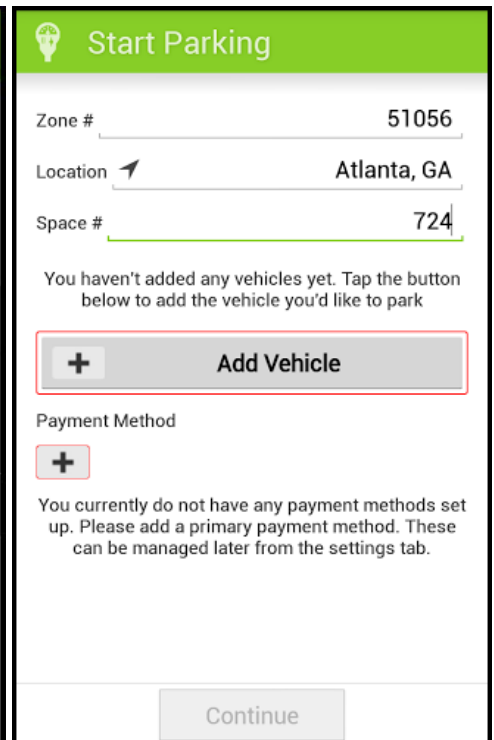
Scan Your Gate Ticket for

Tap the "NEXT" button below to proceed through the tutorial and "DONE" to dismiss the tutorial.

Prev You have **DONE** parked yet Next

Once you do, you'll find a list of your most recently used zones here. (for your parking pleasure)

**Figure 10**  
Upon first use, the user is presented with a tutorial. They are prompted to enter their parking zone number.



**Start Parking**

Zone #

Location

Space #

You haven't added any vehicles yet. Tap the button below to add the vehicle you'd like to park

[+ Add Vehicle](#)

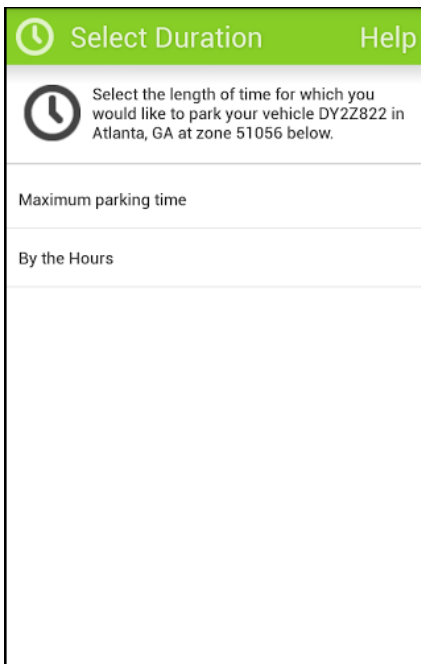
Payment Method

[+](#)

You currently do not have any payment methods set up. Please add a primary payment method. These can be managed later from the settings tab.

[Continue](#)

**Figure 11**  
The user must enter a space number, add their vehicle information, and add their payment information.



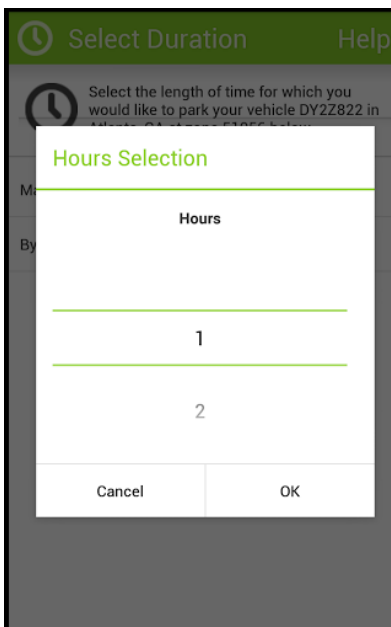
**Select Duration** [Help](#)

Select the length of time for which you would like to park your vehicle DY2Z822 in Atlanta, GA at zone 51056 below.

Maximum parking time

By the Hours

**Figure 12**  
The user can select to park for the maximum time or park for a certain number of hours.



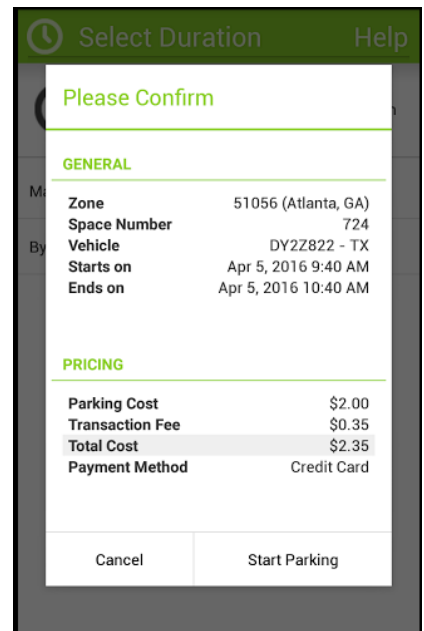
**Hours Selection**

Select the length of time for which you would like to park your vehicle DY2Z822 in Atlanta, GA at zone 51056 below.

Hours

[Cancel](#) [OK](#)

**Figure 13**  
The user touches the desired number of hours of parking time.



**Please Confirm**

**GENERAL**

Zone 51056 (Atlanta, GA)

Space Number 724

Vehicle DY2Z822 - TX

Starts on Apr 5, 2016 9:40 AM

Ends on Apr 5, 2016 10:40 AM

**PRICING**

Parking Cost \$2.00

Transaction Fee \$0.35

Total Cost \$2.35

Payment Method Credit Card

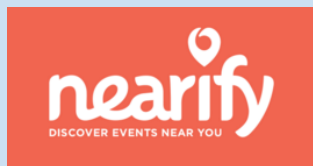
[Cancel](#) [Start Parking](#)

**Figure 14**  
The user is presented with a confirmation screen and completes the purchase.

## PART TWO

*Melanie Smith*

### Good UIs



### Poor UIs



**Event Finder**

## **Target User Group for Project**

The target user group for our app is Georgia Tech students who want to keep up with events happening on and around campus. The main problem we are trying to solve is that there is no one effective resource that allows the user to search for and communicate about events on campus. Many students use email or Facebook to find events but are left with a fear of missing out on events they didn't know about.

## **Prototype Description**

Our team is prototyping a mobile app to allow students to keep track of all events happening on campus. Students can scroll through preview of events, filter them, and view more information. In addition, the user can see who else is attending the event and view tweets that are related to the event. Events that the student plans to attend to attend can be saved to their personal events page. Having the prototype be a mobile app allows the user to use it while they are on the go, giving them more flexibility.

## **EVENTFUL: Analysis**

Eventful (eventful.com) is a website that allows the user to browse events by city. The user can purchase tickets for events from the site, search for specific types of events, and save events to your own account. This UI uses mouse and keyboard input. *See photos on next page for more details.*

Eventful is a good UI from the first screen the user sees. It upholds the principle of consistency and standards due to its horizontally linear layout. The menu bars, as well as event squares are easy for the user to browse. Moreover, the home screen upholds the principle of visibility of system status. As the user enters the keyword of the event they are looking for, the system updates with suggestions for them. This makes the user aware that the system is or isn't familiar with what they are looking for right away (Figure 15, 16).

Furthermore, when the user selects an event, they are able to view more information about it. This portion of the site boasts the principle of minimalist design where only the most important features of the event are shown at the top of the page. This helps the user avoid confusion since they are not overwhelmed with text to sift through. The site also anticipates the user's future needs by showing the weather and contact info for the event. This shows that site was designed with the user in mind (Figure 17, 18).

Additionally, Eventful has a very usable page for creating an event. It promotes the principle of providing online documentation and help by giving the user tips off to the right. These tips allow the user to create their event correctly the first time, saving them time and frustration. There is additionally help provided in some of the fields which guides what the user must type. Optional and required sections are clearly marked (Figure 19).

### **Application to user group:**

This analysis applies directly to the target user group because Georgia Tech students represent a very diverse group of people and this site's flexibility allows it to cater to all students. Users can not only easily find events, they can also create them quickly: a great feature for leaders of on-campus organizations. Overall, this site would be an excellent choice for discovering events all around Atlanta.



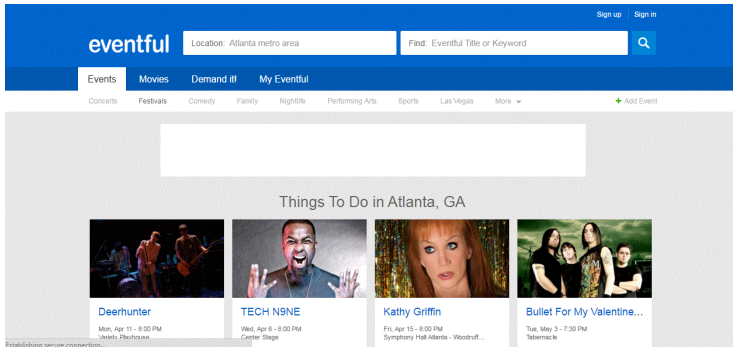


Figure 15

The user starts by viewing various events hosted in their area which can be changed at the top of the screen.

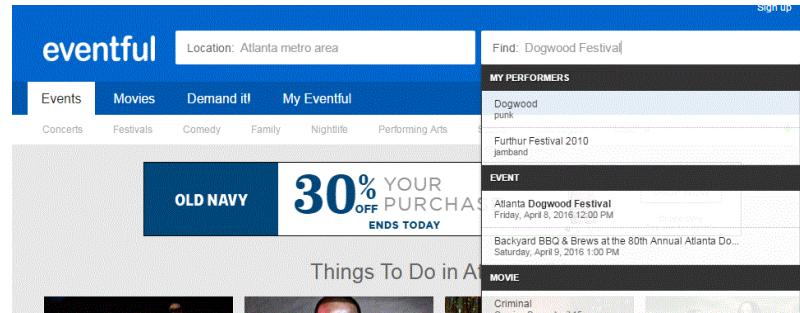


Figure 16

The user can also search for a specific event or type of event using the right search bar.

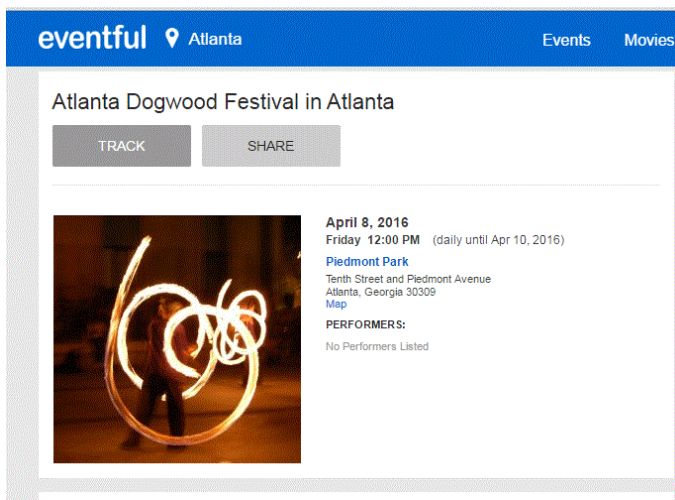


Figure 17

The user can get more information about selected events, as well track the event or share the event.

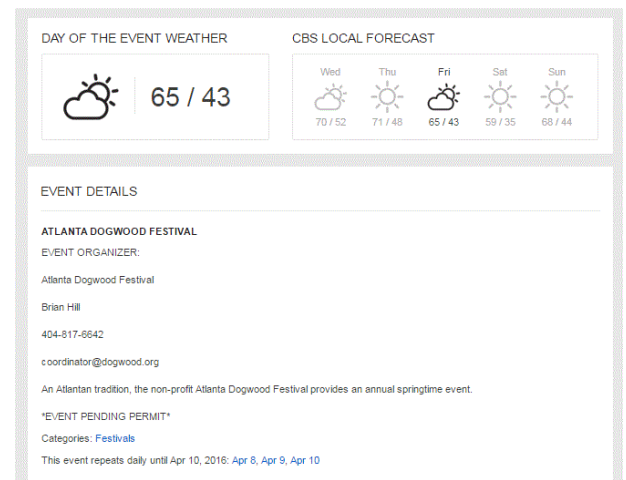


Figure 18

The user can event see projected weather for the event as well as any necessary contact info.

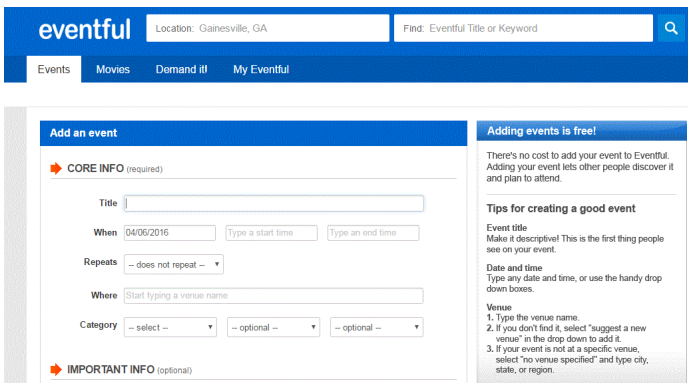


Figure 19

The user can also create their own event directly on the site by filling out the required information fields for their event.

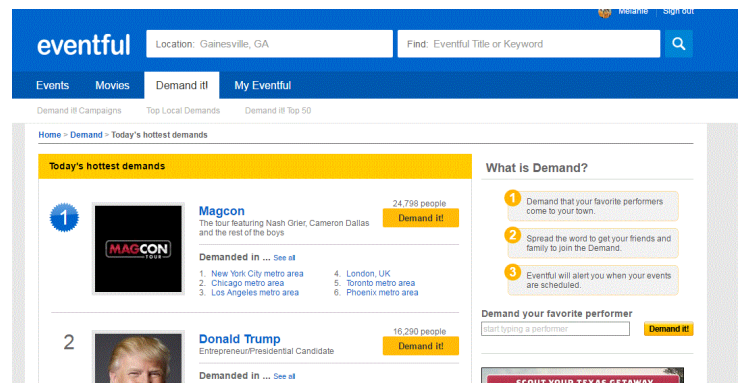


Figure 20

The "Demand It!" tab gives the user the option to view people and events that are most demanded by other users of the site. They can also demand events themselves.

## **NEARIFY: Analysis**

Nearify is an app (downloaded for Android) for finding events in the user's area. The user selects at least 10 categories of events that they are interested in and then they browse by their location through a list of events. They can also look at events by location and follow certain events. This UI uses touch for user input. *See photos on next page for more details.*

The opening screen of the app upholds the principle of visibility of system status because as each category is selected, the category is highlighted red, showing the user that their touch has been recognized by the system. Furthermore, the same principle is upheld when the user has selected 10 categories. The system alerts the user when the minimum of 10 categories has been met by providing a message to the user that they may now continue if they desire. This saves the user from having to count as they select each category, making them do less work (Figure 21, 22).

Moreover this alert to the user upholds the principle of user control and freedom. The user is informed that they may either move on to the next section or continue selecting categories. This puts the user in charge, making them feel completely in control of their actions, while still keeping them informed of their options as they progress. Overall, this message on the screen is simple, yet shows that the app is detailed to meet the user's needs well.

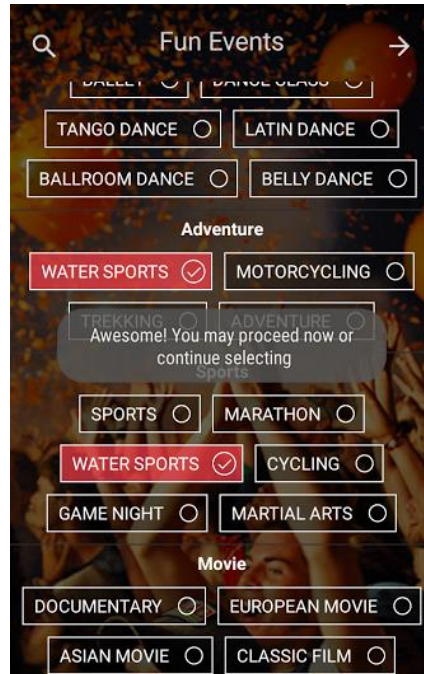
Next the user can determine their search radius. This screen displays the Gestalt principle of continuity through the use of a slider. This follows general usability guidelines, which makes the app easier for the user to interact with. The slider also gives the user flexibility, allowing them to choose what they want more accurately. Overall, Nearify is a very good app when it comes to usability, especially since it follows Nielsen Molich's principles so well (Figure 23).

### **Application to user group:**

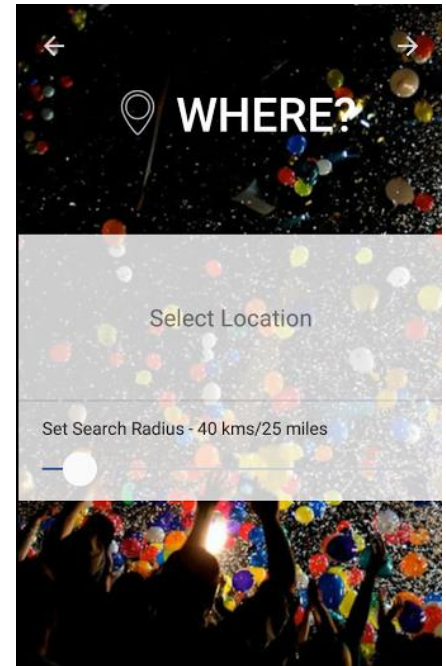
This analysis applies directly to the target user group because it is insanely easy to use on the go. Students are constantly working on something or getting to their next destination and have no time to spend reading through countless emails or Facebook post for new events to attend. This app is also aesthetically modern which appeals to the demographic. Moreover, like Eventful, it provides flexibility which is vital for such a diverse group of users.



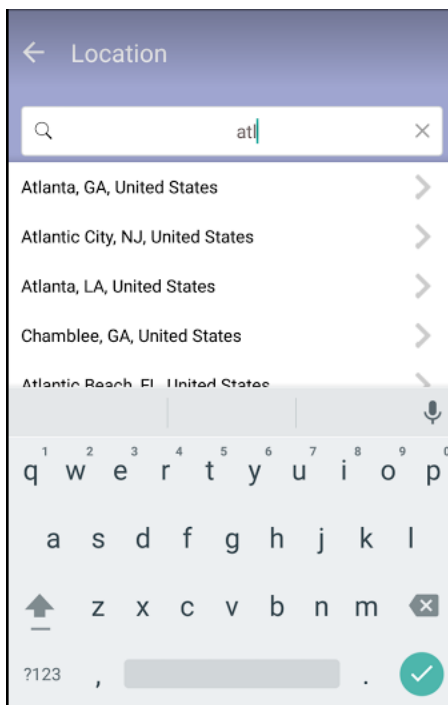
**Figure 21**  
The user selects at least 10 event categories that interest them.



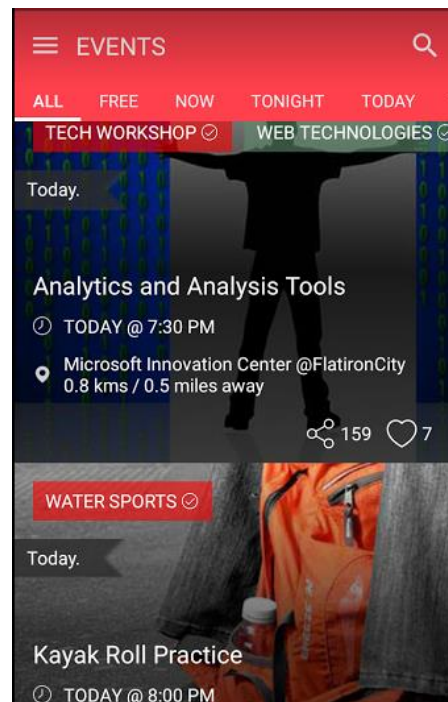
**Figure 22**  
The user is alerted when they have selected 10 and may continue on.



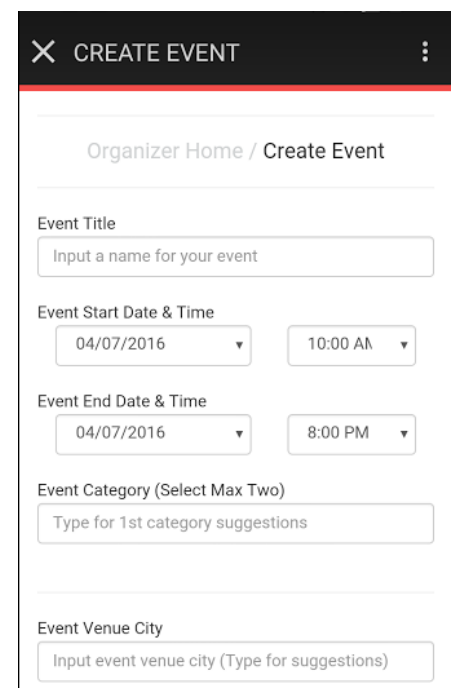
**Figure 23**  
The user is prompted to select their search radius by using the slider.



**Figure 24**  
The user types their desired location. The system updates suggestions as the user continues to type.



**Figure 25**  
The user can now scroll through events they that match their interests in their area.



**Figure 26**  
The user can also create their own event if desired by filling out the required fields.

## **GEORGIA TECH CAMPUS CALENDAR: Analysis**

This is a Georgia Tech affiliated website (calendar.gatech.edu) which displays all campus events on one site. Users can view events filtered by day and category. This UI uses mouse and keyboard as user input. *See photos on next page for more details.*

While the Georgia Tech campus Calendar may seem useful at first, it has several drawbacks that make it less than ideal for the target user group of students. First, against the general aesthetic and minimalist design principle, there are a lot of links to other pages and such in view when the user first gets to the main page. The user must scroll to reach useful features such as the search bar and filtering options. Because these are not immediately visible to the user, the user might be completely unaware that they have the option to search the events or filter (Figure 27, 28).

Moreover, this site violates the principle of flexibility and efficiency of use. A common goal of the user might be to search for a particular event. When searching on this site, all relevant event entries appear as results. There are no options to sort or filter the results and many of the resulting events are ones that have already taken place. The violation of this flexibility principle causes the user to spend far more time scrolling for what they're looking for, leaving them frustrated with the site.

Lastly, there is very little online feedback available, violating another of Nielsen and Molich's principles. There is no direction at all on the site. While much of it is self-explanatory, if the user were to struggle with some portion of the site, there is no obvious resource for assistance. This could lead to unnecessary errors made by the user. Overall, this website falls short of being an effective tool for staying informed about events on campus.

### **Lack of application to the user group:**

This analysis applies directly to the target user group because it doesn't cater to the large, diverse group of students Georgia Tech has. Students are limited in how they can search for events and no student has time to sit and scroll through every entry until they find something that piques their interest. Furthermore, the site has the opportunity to be much more modern in its general aesthetic design, which would make it much more appealing to the younger age group.



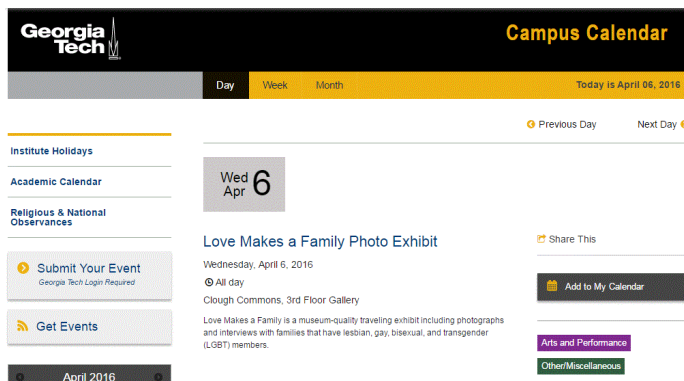


Figure 27

The user can view events for the day when they first visit the site.



Figure 28

Search bar and filter categories are available if the user scrolls down the page.

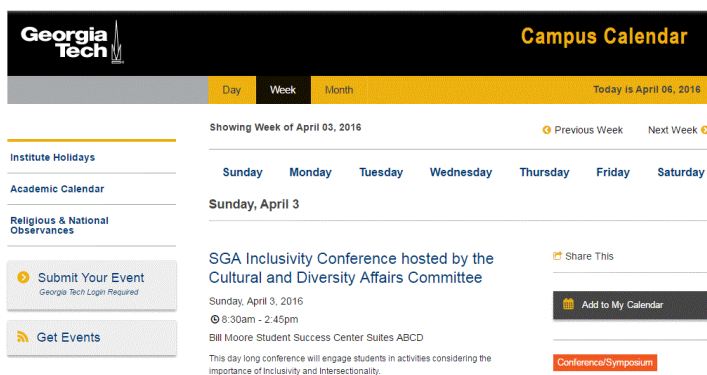


Figure 29

User can also view the events by week by clicking "week".

Institute Holidays

Academic Calendar

Religious & National Observances

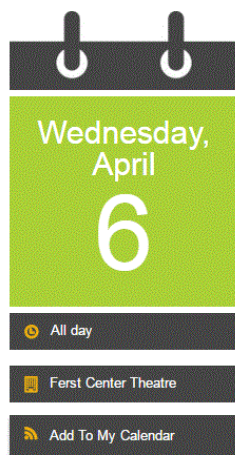
Submit Your Event

Get Events



Figure 30

User can also view the events by the full month by clicking "month".



## 2016 ACC InVenture Prize Finals

**They have fought on the field, now the ACC's best entrepreneurs battle it out Shark Tank-style!**

Each Atlantic Coast Conference university has set out to find their very best students to compete against the other ACC schools in this inaugural year of the ACC InVenture Prize.

On April 5th and 6th, 2016, the best student teams of the ACC will come to Georgia Tech and pitch their inventions to a panel of expert judges. The competition will be held in front of a live audience and broadcast live on television, as well as streamed online.

Find out more about this exciting event by linking us at <http://accinventure.gatech.edu/>

Secure your free ticket to the ACC InVenture Prize by logging onto <http://accinventure.gatech.edu/acc-inventure-prize-ticket-request-form>.

Share This

Figure 31

Clicking on the event allows the user to view more information about an event or share the event by clicking "Share This".

## **EVENT FINDER: ANALYSIS**

Event Finder is an app (downloaded for Android) that connects to the user's Facebook and displays events from their Facebook location. The user can also view Facebook events from other locations. This app uses touch for user input. *See photos on next page for more details.*

Event Finder as a whole has many flaws and principle violations that lead to it being a fairly ineffective app for users. A major principle that it violates is the principle of flexibility and efficiency of use. As visible in the screens below, the app is alarmingly simple. It doesn't have any kind of settings page which leaves the user extremely limited. For example, a lot of the text is in another language, which could easily be fixed with some language settings. In its current state, the app is likely to confuse or frustrate users due to the lack of flexibility (Figure 33).

Furthermore, no documentation or help is available to the user. This violates another usability principle of Nielsen and Molich's. Providing help is vital because it ensures the user that they are using that app correctly or assists them if they are not. Inability to figure out how to use the app can easily become aggravating for users. Without this feature, the app definitely demonstrates a poor user interface design.

The app could also be better with error prevention. Because the preview for each event only shows the user the title and location of the event, it is very easy for the user to select an event thinking it was something completely different. Many other resources, such as Nearify provide more information in the preview, ensuring the user that they are selecting the right event before they are redirected to an entirely new page. Overall, this app design is too bare and simple, causing it to fall short of meeting all of the user's needs.

### **Lack of application to the user group:**

This analysis applies directly to the target user group because it does not accomplish anything unique. This app doesn't save the student any time which is a vital characteristic for Georgia Tech students and their busy schedules. Additionally, the app lacks flexibility. The lack of filters or settings for the student would likely make searching for an event on Event Finder not worth the effort. The student is better off using Facebook from the start to find their events.

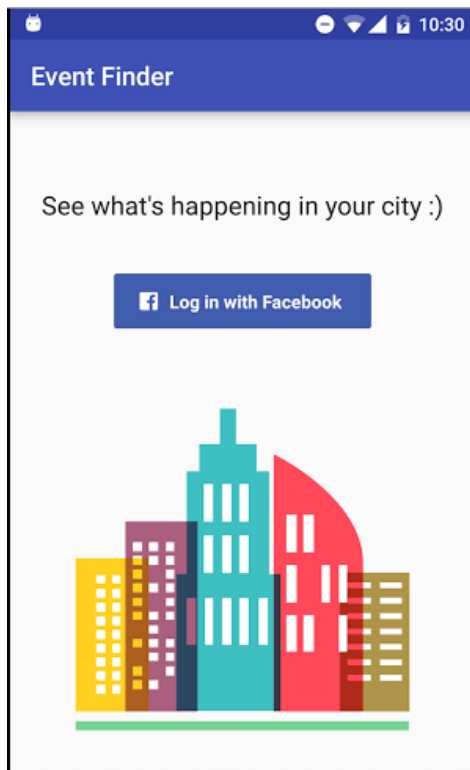


Figure 32

User must log in to Facebook to continue using the app.

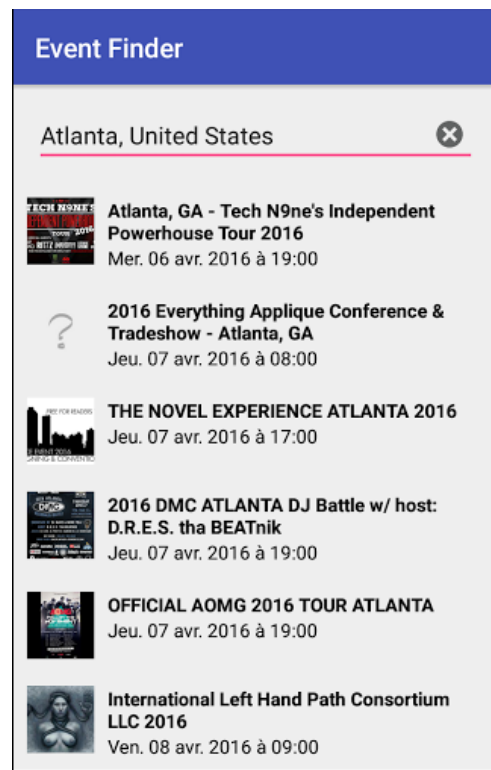


Figure 33

User can view events near their location retrieved from Facebook.

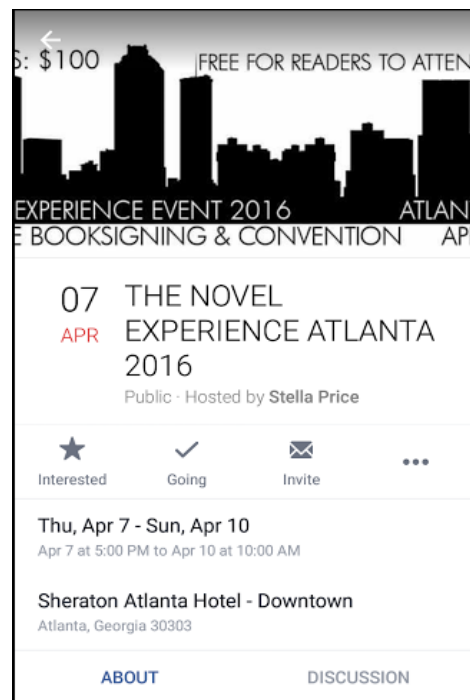


Figure 34

Clicking on an event brings the user directly to the Facebook page for the event.

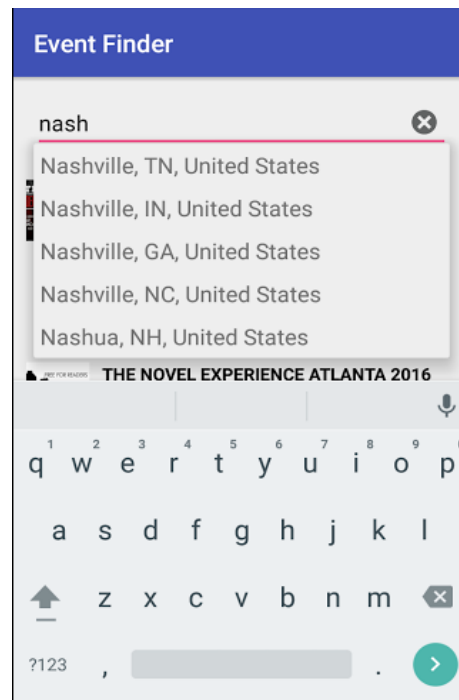


Figure 35

The user can also view Facebook events located in other cities.