Contextual Design

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Description:

This document outlines the contextual design project conducted by our group "The COMMies," The assignment aims to investigate and improve the user experience of Clemson University's public transportation system, specifically focusing on the TransLoc app. Through a combination of user interviews, models, and affinity diagramming, our group seeks to provide insights into how the app can better serve its users by delivering accurate real-time information, enhancing communication, and integrating useful new features.

Purpose:

The purpose of this document is to present our group's research and findings on how users interact with the TransLoc app and Clemson's bus services. By analyzing user feedback and exploring their views, our group aims to suggest practical improvements for the app. Key areas of focus include providing real-time transportation updates, offering better communication tools, and potentially adding features like showing bus capacity and allowing users to communicate with one another. The findings are based on interviews with Clemson students, who regularly use the TransLoc app, and the results will help shape recommendations for improving the app's functionality.

Contents Outline:

Executive Summary: A concise overview of the results of the project, summarizing key findings and recommendations.

Introduction: This section introduces the task and explains the focus of the project. our group decided to concentrate on how the TransLoc app could provide more accurate and real-time bus information, better communication features, and enhanced notifications based on the needs discussed during the focus-setting meeting.

Interpreted Interview Findings: This section presents the findings from user interviews. It includes a user profile, outlining the demographics and experience levels of the interviewees, as well as the key insights and takeaways from their feedback. Notable findings include users' frustrations with inaccurate bus times, strategies they use to navigate the system.

Affinity Diagram : This section provides a breakdown of insights from the interviews, organized into an affinity diagram. It includes an introduction to each major theme (green notes), followed by a hierarchical list of associated findings (pink and blue notes), which represent the key issues and observations from the interviews.

Consolidated Models : In this section, our group presents various user interaction models, including a day-in-the-life model, decision point model, identity model, and sequence model. Each model is briefly discussed, with an emphasis on breakdowns in the user experience that could be improved.

Reflection :This section reflects on our group's experience throughout the project. It addresses whether the focus changed during the process, any unexpected findings, and the team's understanding of the task. The reflection also covers how much time was spent on each step and provides suggestions for how the process could be improved if the project were done again.

Appendix : The appendix contains all raw interview notes, unconsolidated work models, and photos of the affinity diagram and other project artifacts.

Executive Summary:

In our research we explored the user experience of Clemson University's public transportation system by focusing on the TransLoc app. Through interviews and user feedback, we found that the main issues students face include inaccurate bus arrival times and delayed or inconsistent notifications. Many users mentioned that the app's real -time updates don't always reflect the actual location of the buses, which causes confusion and often leads to missed rides. Additionally, a lot of users said they wished the a pp provided more information or transparency about how full the buses are, especially during busy times. While students generally found the app easy to use, they noted that the notification system can be overwhelming and not very reliable. Some users also mentioned the need for better integration with other transportation resources, like the CATbus website, to get more accurate or detailed information.

Introduction

The following work tries to enhance the user experience in a bus -tracking application by addressing some of the key pain points that concern real -time information and communication. Through user research and interviews, there seemed to be a need for more a ccurate and reliable data related to transportation, especially concerning the arrival times and available capacity of the buses. The main complaints, voiced by many users, were the inability of the current application to update in real time and thus cause d them to miss the bus or make poor choices in their commute. A key feature of this would be an implementation of the ability to track how full a bus is, so users can make informed decisions on whether to wait for the next bus or board. This would come in handy, most especially for those carrying heavy items or during peak hours when the buses are crowded. The second point of priority to come up from discussions involves the issue of improved communication and notification to users. The users, for now, depe nd on some irregular notifications and most of the time seek external sources like websites or word of mouth for information relating to route changes or any form of delays. This would introduce an app user -feed feature or, alternatively, peer -to-peer comm unication, allowing riders to share real -time information among each other. Such a feature would

constitute a more collaborative solution for the existing gap in communication. Addressing the two core issues-accuracy of real-time data and improved communication-is what it can hope to achieve in order to make it easier for the average commuter to use these systems.

Interpreted Interview Findings

User one (U#1) is a nonbinary senior (age 23) data science major at Clemson University. They are from Indian descent. U#1 has used Clemson -specific public transportation since Freshman year. Because of this, they have experience with the bus system, route s, Transloc app, and CATbus website. They have primarily used Transloc over the years while not being interested in other bus commuter -based apps that have been released.

Key findings from U#1 include how an experienced user navigates through the Clemson bus routes. U#1 acknowledges inaccuracies in times shown on the Transloc app and their strategies to work around it which include allocating more buffer travel time, keepi ng the app open on their phone to monitor bus location, and asking friends for information regarding bus activity. U#1 has also used the CATbus website to find out information about scheduled timings for each stop and if there are any shutdowns. This user makes a point that it would be a lot more helpful if the information on the CATbus website can be accessed from within the Transloc app. Additionally, the user provided a unique idea of a calendar feature on the app that will show any future potential rout e changes/closures/temporary shutdowns.

User #2 is a 21 -year -old female Clemson student who frequently uses the CATbus but has not yet used the TransLoc app. Based on her experience and conversations with friends who use TransLoc, she finds the app straightforward and easy to navigate, appreciat ing its clear options and visual representation of bus routes, including helpful arrows that show bus directions. Notifications are a key feature for her, she values the easy access to both current and past notifications in the app.

A major concern for User #2 is bus capacity during peak times. She suggested that TransLoc could add better features like a standing room indicator or a "clicker" system to track bus occupancy. While she found MyClemson useful for university -specific notif ications, she had a poor user experience with its bus transit feature. Additionally, she is against the idea of user - to -user (U2U) communication in the app, believing it could cause issues and prefers that communication be limited to official notifications .

User #3 is a college student who relies on public transportation for their daily commute to and from campus. Without a car, the bus is their main form of transport, and they use the TransLoc app to track bus schedules. Although they have moderate experienc e with the app, User #3 often encounters issues with inconsistent information, such as inaccurate arrival times and unclear route changes. Over time, they've learned to navigate these inconsistencies but still find it frustrating to rely on the app for pla nning their commute. User #3 also expressed the importance of knowing bus capacity in advance, as it would help them decide whether to board or wait for the next bus, especially when carrying items or during busy times.

Key insights from the interview highlight several pain points for User #3. They experience frustration with the app's ETA accuracy, as buses frequently arrive earlier or later than expected. The lack of timely notifications and real -time updates on delays or route

changes forces them to frequently switch between the app and the bus website for accurate information. Additionally, User #3 emphasized the need for an intuitive user interface, particularly for first-time users, and the importance of offline functionality when network connections are unreliable. They also expressed a desire for the app to integrate with a calendar system, which would allow for better planning during busy times like finals or campus events.

User #4 is a 23-year-old female who recently graduated from Clemson University with a degree in Biochemistry. She frequently uses the Catbus system to travel around the city, relying on it as her primary mode of transportation.

User #4 relies heavily on the TransLoc app to navigate around Clemson, frequently traveling to campus, Walmart, downtown, and friends' houses. She primarily uses the red route for commuting to campus and the blue route to get to Seneca. While User #4 finds the app useful for tracking bus locations and arrival times, she notes that it's not always reliable, especially during weekends or special events like game days. The app often lacks accurate updates on route changes caused by traffic, road closures, or accidents, leading to frustrating experiences, particularly when she is unexpectedly rerouted or delayed. Notifications about changes are infrequent, and past notifications are not easily accessible, adding to the confusion. User #4 also expressed that the app could be greatly improved by allowing real-time communication between riders, as this would help passengers stay informed about delays, changes, or even safety concerns on the bus.

User #5 is a 21 year old who recently lost access to a car. This was their introduction to the Transloc system. To put it simply they did not enjoy their first experience with the app.

The walkthrough of their use started with being asked to make what ended up being an unnecessary account. Next they noticed that upon viewing live bus tracking there was no way to tell which direction the buses were traveling. After that they selected a bus and input their destination they were given an eta that was about 15 minutes incorrect. All of these issues are problems that we hope to solve with our new app.

Affinity

Completes Purpose with Low Barrier of Entry

The purpose of this application is to assist in the usage of public transportation. This note considers that the app is functional, not overly frustrating or confusing, and most importantly can take the user from point A to point B. An important point to t   his is design. The appearance of the app should be attractive and not over crowded while also having intuitive navigation features. The design should be easily understandable from a new   -users perspective, and it should not require days or weeks of usage to   effectively use.

Topics within:

I find Transloc is not clear to new users > I have concerns with how this works in the real world; It took me time to get used to the app; I can see areas where Transloc can be improved

I complete the purpose of my commute and trip planning > Why I use Transloc; I like Transloc's simple design; I am able to use Transloc for its intended purpose; I use Transloc because it is free; I use Transloc to plan trips; How I use the app to commute

Visuals are important to me > I consider the visuals of the buses on screen; I like a good looking home page; I like effective details on the front page

Important Trip Information Provided

Many users expressed a want and concern with further features that provide information to the user in order to improve their commuting experience. The main points of information requested include providing accurate ETA of bus arrival, information about bus capacity and seating/standing availability, clear bus route information, and integration of information that can be found on multiple other sites.

Topics within:

The ETA is inaccurate for me > I consider timings when traveling; I find ETA accuracy important; The app ETA is inaccurate for my purposes; I find the app's connectivity falters; I debate the consistency of info

I want information about bus capacity > I would like to see bus capacity; I want to see standing room; I think it is the driver's responsibility to provide capacity; I am affected when buses are full

Bus routes must be clearly understood for me > I need to see the routes available; I consider bus direction; I have opinions regarding route shape

Integration of sources of info would be convenient to me > I use the CATbus website; I use MyClemson; I want more information within the app

Accurate and Accessible Notifications

An important feature many users have expressed wanting is to be updated regarding bus situations. Events and changes to the buses can affect a user's trip and trip planning, therefore it is important to keep users informed on any potential changes. Users have expressed the type of information they would like to see within notifications such as the locations and routes affected and the type of change that is occurring. Additionally users have stressed the importance of easy access to the notifications including being able to access past notifications. One more point is that users would like the notifications to function as phone alerts on the phone's lock screen instead of being only within the app.

Topics within:

I look at notifications within the app > I get notifications on my phone screen; Notifications are important to me using the app

My notifications should be timely and easy to find > I want to easily find notifications; I would use a calendar for information; I need time to see and consider notifications

These are the kinds of notifications I need > I consider this information in my notifs; I need a notification if the bus is broken; I need a notification if the bus is late; I need a notification if the bus has skipped a stop; I need a notification if there are road changes

Additional Debated Features

Within the contextual interviews done, there were multiple additional features brought up and mentioned by users. This includes making an account on the app, which interviewed users arguing if it would be beneficial or just tedious. Another feature would be assistance features as many users have stated needing to go to human sources to learn more about the apps. Assistance and app features have been mentioned that they should be available offline. Another feature that has been discussed including is a user-to-user (U2U) communication feature. This feature has gotten mixed reactions as users state the information provided by other users can be helpful but also providing users access to comment can lead to chaos and unpredictability which may be unnecessary within a bus commute app.

Topics within:

Making an account does not benefit me > I had to set features upon opening the app; I created a profile on the app; My opinions regarding making an account

I require assistance > I use the app in low connection areas; I rely on talking assistance

I can commute with other users of the app > How I feel about U2U; U2U has its benefits; I think drivers have too much blame; I think a rating system can regulate the app and buses

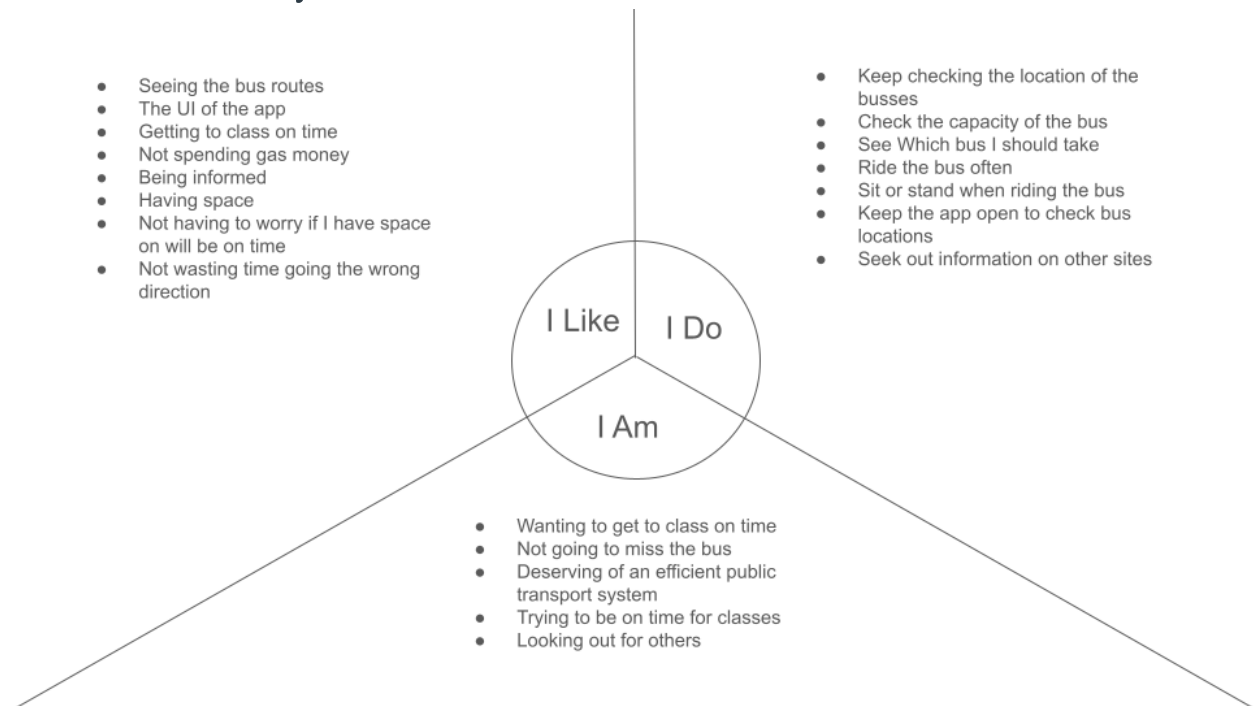# Consolidated Models

Consolidated Day in the Life Model

Time	Action	App Interaction	Issue/Pain Point	Notes
7:00 AM	Wakes up, prepares for the day	N/A	N/A	User knows the bus schedule from experience
7:45 AM	Walks to bus stop	Sporadically opens the bus tracking app	App lags, inconsistent updates, refresh issues	User opens the app repeatedly but doesn't fully trust ETA info due to past issues with accuracy
7:50 AM	Arrives at the bus stop	Bus tracking app shows bus 2 mins away	Bus sometimes arrives unexpectedly early or late	ETA in app isn't reliable; user has missed buses due to the app lagging
8:00 AM	Waits for the bus to arrive	Refreshes app to track arrival time	Refresh doesn't always update in the real time, showing delays	Inconsistent data frustrates the user and causes anxiety about missing the bus

8:10 AM	Boards the bus	N/A	No bus capacity info available	User wishes the app provided data on how full the bus is, to decide whether to wait for the next one
8:30 AM	Bus ride to campus	Checks app sporadically to verify ETA accuracy	Bus takes longer than estimated by the app	User finds that the app consistently underestimates travel time, leading to lateness.
12:30 PM	Preparing for return trip	Opens app to check bus status and routes	App does not provide bus capacity or seating information	Standing room only buses are an issue, particularly during peak times or after class.
12:40 PM	Arrives at bus stop	App shows inconsistent bus location data	Inconsistent lag or buses sometimes disappearing from the app	User worries about missing the bus again due to app lag and inaccurate bus locations.
1:00 PM	On the bus	N/A	Missed a bus stop due to bus driver skipping it	Frustration arises when buses skip stops
5:00 PM	Plans ahead for next day	Wishes app had a calendar feature for events or bus schedule changes	No option for pre-planning or notifications about bus closures	User relies on word-of-mouth or the website for shutdown info, which they find inconvenient
7:00 PM	Reflects on the day's commute	N/A	Wished for better notifications and real-time updates	User feels that more timely notifications about route changes or delays would improve their overall experience

This **Day in the Life Model** outlines a commuter's typical interactions with a bus tracking app, focusing on the challenges they face throughout their day. From the morning commute to the return trip in the afternoon, the user encounters inconsistent arrival times, lagging real-time data, and a lack of bus capacity information, all of which cause frustration and inconvenience. They frequently check the app, but its unreliability forces them to rely on external sources, such

as word of mouth or the bus website, for accurate information. The user's experience highlights the need for improved real-time updates, capacity tracking, and more timely notifications.

Consolidated Identity Model

I Like
- Seeing the bus routes
- The UI of the app
- Getting to class on time
- Not spending gas money
- Being informed
- Having space
- Not having to worry if I have space on will be on time
- Not wasting time going the wrong direction

I Do
- Keep checking the location of the busses
- Check the capacity of the bus
- See Which bus I should take
- Ride the bus often
- Sit or stand when riding the bus
- Keep the app open to check bus locations
- Seek out information on other sites

I Am
- Wanting to get to class on time
- Not going to miss the bus
- Deserving of an efficient public transport system
- Trying to be on time for classes
- Looking out for others

This **Identity Model** explores the values, actions, and self-perceptions of a user interacting with a bus tracking app. The user appreciates features that provide clarity and efficiency, such as visible bus routes, an intuitive interface, and timely updates that prevent them from wasting time or resources. Their actions include frequent checks of bus locations and capacities, using the app to make decisions about their commute, and consulting alternative sources when the app falls short. They define themselves as someone who prioritizes punctuality and efficiency, feeling they deserve a reliable public transport system. This model emphasizes the importance of accuracy, real-time information, and a seamless user experience to match the user's desire for reliability and control.
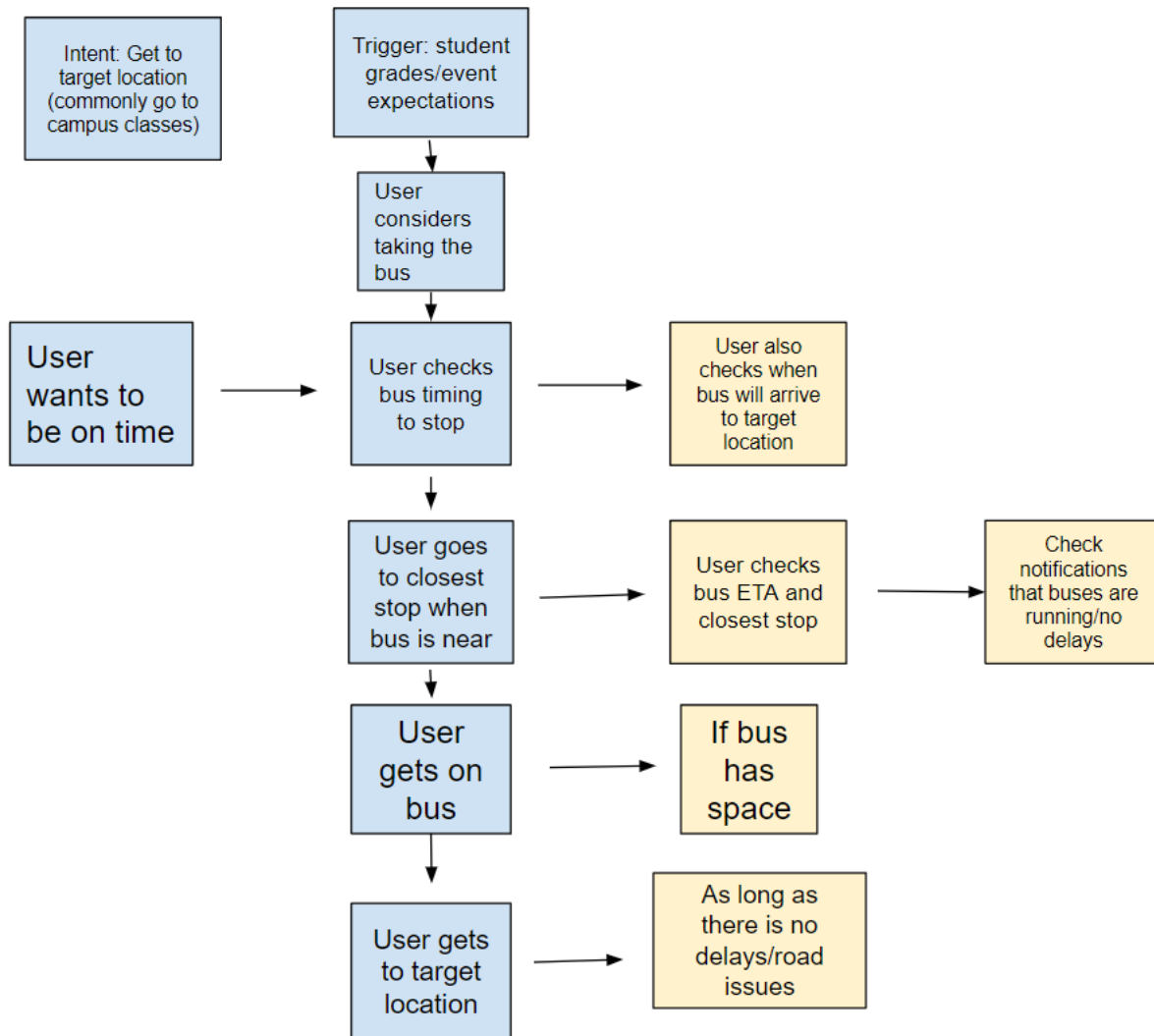
Consolidated Decision Point Model

Should I get on the bus?

Real-time updates	Notifications are overwhelming
Map shows arrows and routes	Delayed alerts
Capacity alerts semi accurate	Lag of app / can cause to be late
Get to my destination	Geolocation accuracy issues
Able to see ETA on app	Overcrowding on bus

If I miss the bus

Can check location of next bus	Lose money on alternate transport
Other rideshares	App accuracy unreliable
Check status bus if bus is full and want to get on the next one	Miss event/class
	Attendances participation may suffer

The **Consolidated Decision Point Model** reflects the common considerations college students face when using a bus service app. On one hand, features like real-time updates, map routes, and capacity alerts help students make informed decisions about boarding. However, the app's drawbacks, such as overwhelming notifications, delayed alerts, and inaccurate geolocation, can create confusion and cause students to miss the bus. If they do miss it, they can check the next bus's location or use rideshares, but this comes with issues like extra costs and unreliable app information. Missing a bus can result in missing important classes or events, which can hurt attendance or participation.

Consolidated Sequence Model

Intent: Get to target location (commonly go to campus classes)	Trigger: student grades/event expectations		
	User considers taking the bus		
User wants to be on time	User checks bus timing to stop	User also checks when bus will arrive to target location	
	User goes to closest stop when bus is near	User checks bus ETA and closest stop	Check notifications that buses are running/no delays
	User gets on bus	If bus has space	
	User gets to target location	As long as there is no delays/road issues	

This **Consolidated   Sequence Model**   captures the decision and actions that the typical user would follow while using a commuter app. The model considers intents and conditionals that may affect the action of the user. The app provides important information that can influence the users decisi ons which is why this sequence model is important. While this model is very straightforward, this only considers the optimal scenario in which the negative options of the conditions do not come true.

Reflection

Overall, our project experience was productive, with a clear and consistent focus on improving campus public transportation. Our understanding of the task remained steady throughout, as we did not deviate from our initial goal. However, we were surprised t   o find that the problem we were addressing was simpler than anticipated; the users' needs were not as complex as we initially thought, which streamlined our approach. While we felt confident in our comprehension of the task, our execution could have been m   ore efficient, particularly with better time management. We estimate that we only spent about 50% of the recommended time on each

step, which may have impacted our overall performance. If given the chance to redo the assignment, we would prioritize starting work earlier to ensure smoother progress and better execution.

Appendix

Affinity Diagram

Interview Notes (observations)

- Friends enjoy the app
- seems straight foward, gives a bunch of options
- self explanatory
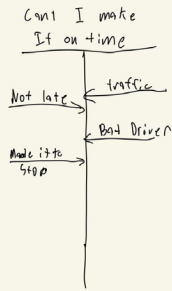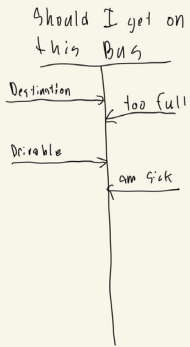- pretty annoying if busy time ie football.
- notifications are very important, where its going to be on, what route the bus is taking
- likes the fact that notification tab is right in the middle
- finds it very easy to access past notifications
- finds it helpful that she can access past notifications
- Thinks it's super important, visual representation of the app is important, time, geolical
- super helpful that the arrows show the arrows in which way the buses are going in
- most popular, priority for bus capacity.
- wants a rough poll of students about what they worry about is crowding
- thinks app should have standing room
- clicker is a solid sol to use to track people getting on and off the bus
- MyClemson - bus transit
- really disliked the app
- user experience was horrible
- useful for things such as events, Clemson university, road closures and construction clear in the app
- not useful for the city, city transport, or road closures
- thinks communication is a recipe for disaster
- bus notis can be sent out in alerts
- NO on U2U

Decision Point model

Should I get on this Bus

Destination → too full

Drivable → am Sick

Cant I make it on time

Not late ← traffic

← Bad Driver

Made it to Stop
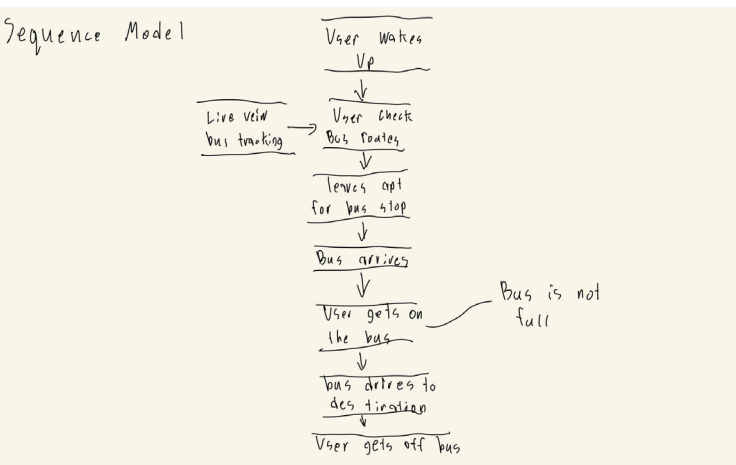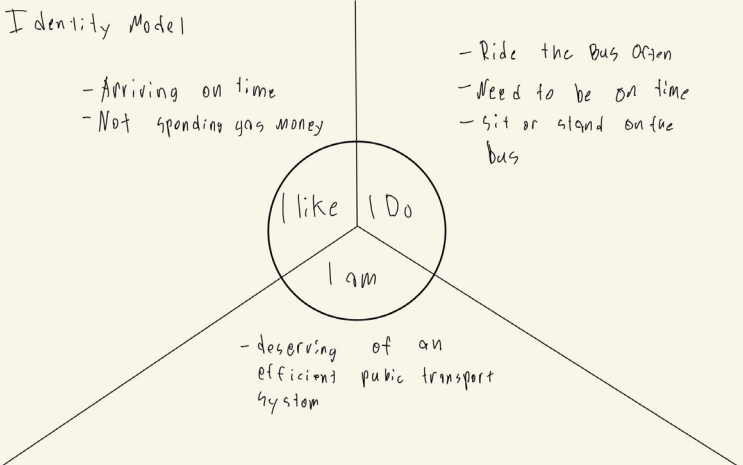
Day in the life

Wakes Up
- Well before bus will arrive
- Works Morning routine

checks bus routes
- sees where closest bus is
- arrives at bus stop apx. 5 mins early

Gets On Bus
- bus is most likely not full
- ride bus until destination

Jack Contextual Interview Notes

Jonathan

- Arrive on campus
- Uses app to see when bus is coming
- Before they updated it
- Do not like current system
- Could not find live bus feed
- Put destination
- In accurate
- Want to see options first
- Want to pick route
- Never kicked off a bus
- Not aware of capacity
- Would like to show fullness
- Used to be circles for direction
- Makes you create profile
- Had to set destination
- Bus arrived 10-15 mins early
- Wants routes to be shown with times
- Get notifications of downed bus
- Arrival notifications
- Opposed to to making an account
- Like profile idea
- Bus driver should help with bus fullness
- Would not use communications

Sequence

Intent: Get to class

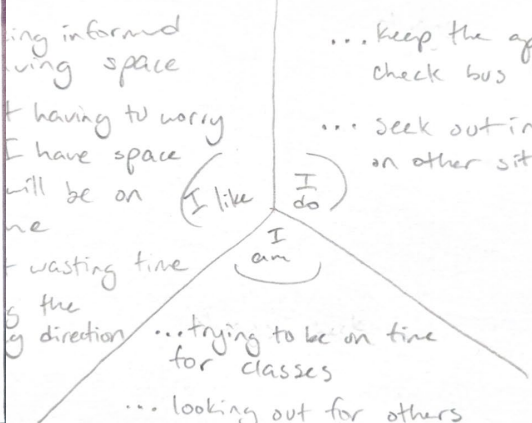Trigger: responsibility as a student
↓
wake up with enough time
↓
consider steps to campus
↓
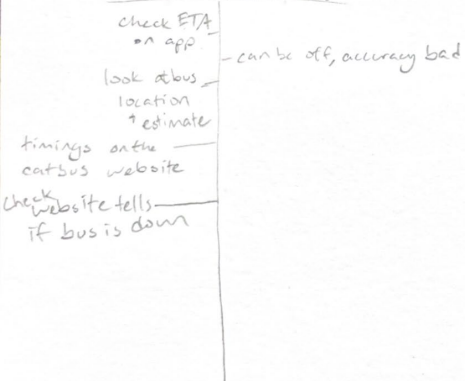Intent: be on time ——→ find time required per step
↓
ride bus at appropriate time
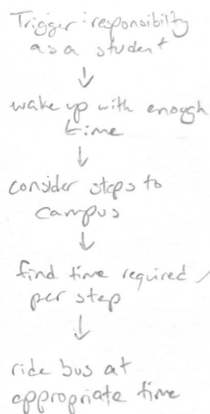
bus ETA to your closest stop
+
walking time to stop
+
bus time to dismount stop
+
dismount stop to class location walking time

Identity Model:
U#1

...ing informed
...ving space
...t having to worry
...I have space
...ill be on
...ne
...wasting time
...s the
...g direction

(I like) (I do)
(I am)

... keep the app open to check bus locations

... seek out information on other sites

...trying to be on time for classes

... looking out for others

Decision Point Model

When to take bus
- check ETA on app —— can be off, accuracy bad
- look at bus location + estimate
- timings on the catbus website
- check website tells if bus is down

Day in the Life:
U#1

If missed bus

User — money
ask around
miss class/event — participation/attendance suffers
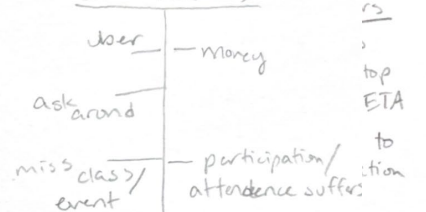
...o go
...rs
...top
...ETA
...to
...tion

During Ride

checks transloc to see stop location to press to stop

smooth ride, no worries

Returning Home

does not check app unless very long wait time already

if there's lots of people i understand it might get full
- push forward, wait earlier, wait for next bus
↑ check transloc

Day in the life

Morning

7:00 AM: The user wakes up + and wakes up earlier because they rely on the bus

7:30 am: user opens up transLoc app to check bus. The user needs to reopen app to work

7:45 am: user walks to the bus stop that closest
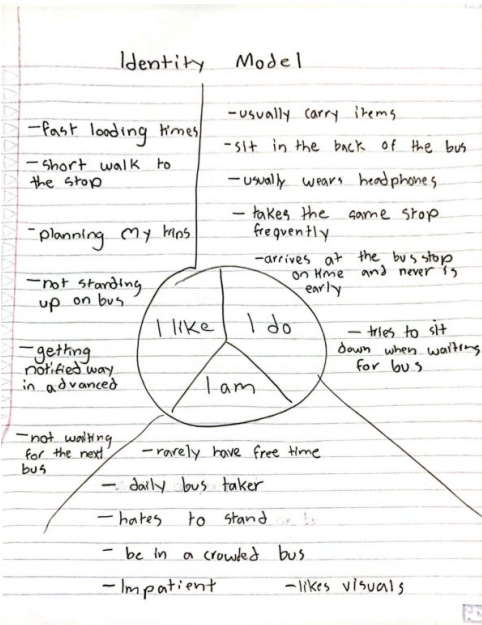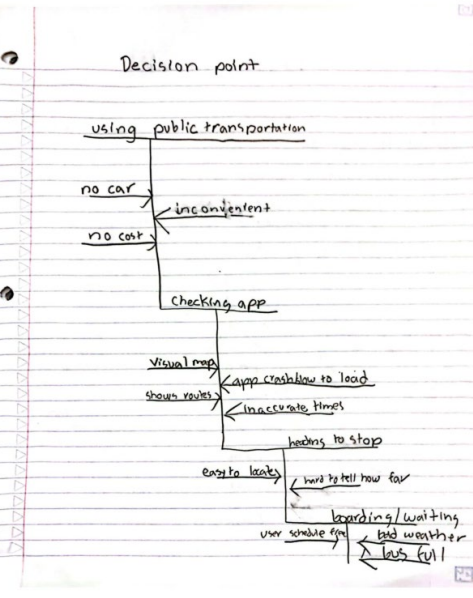
8:00 am: user gets on the bus, which might be full

Midday

12:00 pm: user goes to the grocey store which takes lon using the bus

1:00 pm: The bus arrives but the bus seems full so the wait for the next

Afternoon

5pm: user goes home and again waits the bus There a delay and bus arrives 15 mins late

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Decision point

using public transportation

no car → inconvenient

no cost

Checking app

Visual map shows routes
- app crash/slow to load
- Inaccurate times

heading to stop

easy to locate → hard to tell how far

boarding/waiting
user schedule free → bad weather / bus full

Identity Model

- Fast loading times
- Short walk to the stop
- planning my trips
- not standing up on bus
- getting notified way in advanced
- not waiting for the next bus

- usually carry items
- sit in the back of the bus
- usually wears headphones
- takes the same stop frequently
- arrives at the bus stop on time and never is early

I like | I do
I am

- tries to sit down when waiting for bus

- rarely have free time
- daily bus taker
- hates to stand
- be in a crowded bus
- Impatient   - likes visuals

Sensation Model

Positive Sensation

1. Visuals in the App

Reaction: "The visuals are good when they work. I like that I can follow the bus along its path

Sensation: A sense of control and confidence

Negative Sensation

1. Frustration with Inaccurate Info

Reaction: "Sometime it's dead on but other it's super early or late

Sensation: Anxiety and annoyance when the app fails

2. Overcrowded buses

reaction: "it would be nice to see how full the bus is with grocies

Sensation: Physical discomfort caused by overcrowded buses

U#1
Mostly commute in mornings (9ams)
1. Get up at 7
2. **Walk to bus stop 10 min before scheduled to come**
   - Keeps app open to check location of the bus
   - Does Not track eta of app 100%
   - Opens app a lot (sporadic) at every point
3. Bus would come at 8 every 15 to 30 min ish, unsure when
   - Info on cat bus website
   - **Got familiar with website**
   - Had to learn intervals through **experience**
4. Sometimes early sometimes late
5. Used transloc
   - Usually a **couple minutes off**
   - Usually **took longer to get to campus than app info gives**
6. Way back was a problem due to lack of seating
   - Wished it said bus capacity on app
   - Scanner feature mentioned
7. Usually going back to easier if on the bus
8. If missed one bus then late for class
   - Takes more time in the mornings to be on time
Missed bus?
- Ubered to class before (no car)
- Ask around
- Or give up
Walked if bus is down
How to come to learn if bus is down
- Transloc app
   - No buses shown
- Catbus website tells if route is closed
   - Wants information on the app instead of going to website
   - ALL ON TRANSLOC
   - Get to bus stop and then connection is spotty
- Word of mouth
- Wishes there were more announcements
- Didnt know about the football route shut down notifications
   - Wants more notifications
   - Calendar feature on planned shutdowns
Bus accuracy bad
- Shows two minutes away and then its there
- Always has a slight lag
- Doesnt refresh
- Inconsistent lag
   - Cant even work around it

Got on wrong direction of bus at least twice
- No direction
- Miserable
- U-shaped (not a circle) with a break so going the wrong direction is a huge time waster
   - Has been to the headquarters expecting it to circle
      - Based on experiences with India
Routes differ
Standing room vs sitting room feature
- Would be great for disabilities

Skipped bus stops
- If no one looks like they're there
- If bus is full
- Interval stops getting skips
User communication would be helpful
- Would take expectations off of drivers to give information
- Maybe more timely
- Trolling could occur (esp at a college campus)
- Validity can be questioned
   - Other user confirmation/denial
   - Report function
- Band: housing live groupchat
- Regarding login
   - Would use it if it is main source of transportation
   - Maintains login information

New York
- Busses are more timed
- Users just know
- More busses (india also)
   - Red route maybe 3
- Circular routes are better

Post interview key notes:
Uses buses for Red route
   - *Has issues with direction*
When there's more buses = more reliable = less need to check app for buses
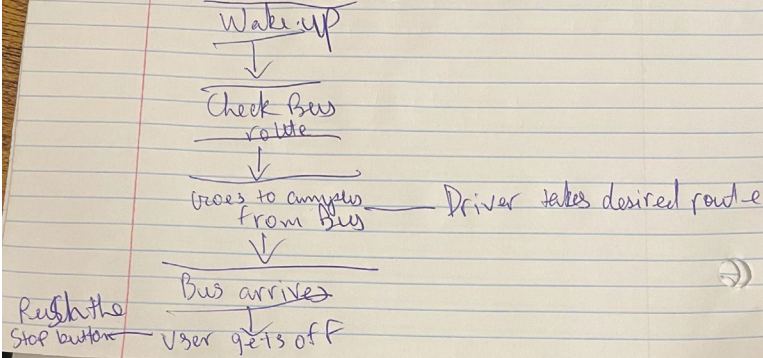*Calendar events idea*
Sympathetic with drivers
Goes in between website and app for info

Identify model

- getting ready early   - planning for the next day
- reaching bus before   - do not like waiting too long
  5 mins   for the bus
- getting to class   - my work on time -
  early
                    I like | I do
- going to the
  gym   I am

      - a frequent
        traveller

      - a student
      - a re. meticulous
            worker

Sequence Model

Wake up
↓
Check Bus
route
↓
Goes to campus —— Driver takes desired route
from Bus
↓
Bus arrives
↓
Push the
Stop button —— User gets off

Day in the Life

Morning: 8:00 a.m

~~Looking to go to class~~

Wakes up and gets ready

9:00am

Looks on the app to go to class
Goes to the bus stop 5 mins before the bus arrives

9:30 - 12:30

Goes from class to class using on campus commute

4:30

Goes back home from classes after work

6:00

Goes to gym and comes back.

Decision point

Should I get on the bus

Where to? →
← Bus capacity

Walkable? →
← Too far?

How early? →

Sequence Model

1. What has been your experience using a Transportation App and which one?
   a. **User has used Transloc to get from home to campus and other places like Downtown, Y-beach etc.**
   b. **I use it a lot to get around at all places around clemson like Walmart, Campus, Friends' house and Downtown.**
2. Do you use multiple routes or just one?
   a. **I use multiple routes. Mostly the red to get to campus and back and then blue to get to seneca.**
3. Imagine you are going from campus to your place (University place). Can you track the bus and explain what you look for?
   a. **I first look at the Sikes Hall(East) bus stop. Then, it tells me how long till the bus arrives. After that I look at the bus and see where the bus is**
   b. **Based on that I can estimate where the bus is.**
   c. **I know how long it usually takes to get to my apartment**
4. How accurate do you think the following aspects of the bus are?
   a. Arrival/Location of bus:
      i. **Mostly very accurate. I can usually tell where the buses are and if they will arrive**
   b. Directions of buses
      i. **I can tell where the buses are going most of the time except for when they are in the loop. Most of it is very reliable but sometimes I have to wait for some time to see if the bus will come down or go up**
   c. Bus fullness
      i. **It shows the percentage of how much the bus is filled up but I usually don't use it because I try to get on the bus no matter what.**
   d. Update route if it has changed due to game/traffic/etc
      i. **It is not very accurate because on weekends especially when the busses run less frequently, it is hard to navigate where the bus will go due to changes in routes**
      ii. **I have got on the bus on the gamedays and been taken to different places because the routes are closed due to traffic.**
      iii. **Also, when there is a car crash there are no updates. The busses can be seen going out of their route which is annoying especially if you have someplace to be**
   e. How often do you track notifications in case of route updates or changes. How accurate is that?
      i. **As a regular user of the bus commuter app, I find that notifications about route updates or changes are not updated as often as they should be. It's really hard to track when there's a change in the schedule or route, and often, I end up missing crucial updates. The system feels very inconsistent, and sometimes the notifications don't even come through in time. This makes it haphazard to predict whether the routes have changed or not, which can be quite frustrating when I'm trying to plan my commute efficiently.**
   f. How Easy is it to access past notifications?
      i. **Past notifications is very secluded as I have to go to "Me" and then go into notifications. If there is a different tab on the main screen, It would be more useful to keep the user up to date.**
      ii. **The notifications are also less and out of date. Major events have not been included**
   g. How useful would communication between users be for the app?
      i. **It would be very useful because like because a lot of students travel on the bus and more people could update the statuses of routes/missed stops and changes in schedules. I would find it very useful and it would be much safer to travel knowing there was no suspicious activities going on on the bus.**