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📄 **Assignment 4**

Assignment 5 Roadmap

With an idea of what we want to build, and using qualitative (and possibly quantitative) data from assignment 4's user research, we can begin to see user goals, pain points, use cases, and opportunities to explore in our design sprint.

Detailed Breakdown of Tasks

- As a group of 5, we would ideally divide up the tasks so that everyone is equally involved in the design process and agrees with the implementation of research process insights. An initial breakdown of tasks would look like this:

User Personas, Objectives, and User Journey

- We would use key user data and takeaways to build a general persona and user profile of the demographic we are researching and targeting. 2 people should work on this as an initial step to finalize any targeted design choices.
- 1 Person should work on the objectives section, centralizing key stakeholder requirements as well as user expectations and combining them into a few use cases/objectives which will define the functionality and interface of our design solution.
- 2-5 people will also work on the user journey as it requires collaborative thinking and a holistic view of the problem and solution's functionality to be able to understand how a user would be interacting with existing problems and our prototype.

Information Architecture

- Through the user persona, objectives and user journey, we can decide on how we want to organize, structure and label our information, as well as a rough idea of content and context in terms of the users. We can see what people are looking for in a transportation app and implement information architecture that is relevant to our user personas, objectives and user journeys. The whole group should work together on this step.

Low-fi & wireframe Sketches

- To form a collaborative design process, each member in the group should ideally work on their own sketches. Then, we would use all those sketches, gather commonalities and decide on a finalized low-fi wireframe to base off our high-fi wireframe. This is a really important step because often, people have disagreements in the layout and content which emphasises the importance of

objective thinking from each group member when deciding what to finally implement.

Hi-fi Sketches

- For the purpose of this project, we are planning to build an interactive hi-fi solution to our design problem in Figma.
  - This would provide the most flexibility in terms of Usability testing (such as A/B testing) potential as we are able to make several hi-fi interactive designs.
- Basing off the low-fi wireframes, we should ideally have 2 or 3 complete, interactive hi-fi designs to maximize usability testing potential.
  - We are most likely not going to be implementing co-design methods with stakeholders as that would provide too much of a time and scheduling constraint on both parties.

Project Schedule, Individual & Group Responsibilities

Since Assignment 5 comes straight after assignment 4, we can assume that there will be around 1 week to complete the design process. Here is a detailed breakdown of how we plan to manage this:

Day	Objectives	Individuals in Charge	Plan
Day 1 - 2	- User Persona - Objectives - User Journey	- Osbert, Vanessa - Anne-Marie - Mainly Elena, Emily (w/ whole team)	- By the first day, we should be able to conjure a user persona or several (this includes objectives) - On day 2, we would meet and holistically meet to discuss User Journey
Day 2 - 3	- Information Architecture	- Whole team	- Use Google docs to asynchronously add aspects of information architecture while discussing it in the group chat
Day 3 - 5	- Low Fidelity Design	- Whole team	- In days 3 and 4, everyone should try and come up with their

			own thoughts and sketches (w/ layouts and components) - On day 5, we will meet and discuss pros and cons of each approach, settling on a final design
Day 5 - 7	- High Fidelity Design	- 2 designs - We will split off into 2 teams of 2 and 3 to each work on a high-fidelity prototype.	- In the 2 and a half days, we will use it o build 2 high-fidelity interactive prototypes which will be used for assignment 6

Design Goals & Outcomes

- Through this assignment, not only do we want to develop 2 high-fidelity prototypes for usability testing in Assignment 6, but we also want to gain a better understanding of the real-world design process. By the whole group being involved in the entirety of the design process, everyone will get a better understanding of how we can utilize user experience and research to collaborate and build functional designs.
- The high-fidelity designs will be feature level interactive prototypes with a fully defined user flows. We will extrapolate our final low- fidelity prototype and build 2 high-fidelity prototypes that closely aligns with our layout, component and content decisions.

Design Concept

Background & Fit

In summary, our project will have a two-pronged focus towards (1) tackling the transportation challenge by designing a carpooling application specifically tailored for UCLA students, and (2) embedding an events discoverability feature that lists student-run/student-verified volunteering & cultural engagement events. We aim to make cultural engagement and community service more accessible and to cultivate a culture of giving back to the multifaceted communities of Los Angeles and Southern California.

Problem Statement

One of the foremost challenges hindering meaningful engagement is transportation. Service activities often require students to travel off-campus, and the vast urban expanse of Los Angeles presents significant logistical challenges. Current transportation options, including ride-sharing services, are often unreliable and costly, leaving students in need of a more efficient and affordable solution. In addition, there lacks a centralized platform for students to discover events relating to cultural engagement and service on campus.

Goals

In response to this need, our proposed solution centers on developing a students-only carpooling application. This application aims to provide a streamlined means of transportation to service activity locations and foster a greater sense of community among students. While we acknowledge the limitations in altering the broader Los Angeles public transportation system, our platform seeks to simplify the process of reaching these vital off-campus locations – improving accessibility to community engagement activities and locations. We also plan to embed features that allow discoverability of events tailored to students, which will take the form of a scrollable list view and calendar view.

Business Objectives
- Partner with student organizations to curate event listings
- Partner with official organizations/NGOs to list volunteer opportunities/locations for cultural engagement (e.g. monthly CicLAvia events, beach cleanups, etc.)
- Gain user traction on the drivers & passengers side, creating a safe and student-oriented rideshare community

Assumptions

- Most students are technologically savvy and are accustomed to using mobile interfaces for ride-sharing/route navigation
- UCLA students are interested in engaging with their local community through volunteering and cultural events.
- Users will trust and feel safe using a carpooling service that is specifically tailored for UCLA students.
- Student-verified events will be reliable and accurate.
- User data and payment information will be kept secure, and users will trust the application with their personal information.

Product Specifications/Requirements

Mock-up sketches should include the following screens that highlight the user journey:
- Home screen
- Sign-up and login screens
- Profile page
- User chat/messaging feature
  - To coordinate rides/events with fellow users
- Event creation screen
- Feedback/Ratings popup

Ride-sharing Feature:
- Carpool creation and joining screens
- Search and filter options
- Ride and event details screens
- Notification center
- Screen for bus-pooling groups
  - Adding other people
  - Routes mapping
  - Meeting point designation
- Ride/event history screen

Event discoverability/explore Feature (incorporate A/B Testing):
- Explore screen (e.g. Instagram explore page, TikTok FYP)
- A-Version: Calendar view of events/upcoming rideshares spanning to
- B-Version: List view of upcoming events/rideshares within a quarter, separated by categories (e.g. Volunteering events, Fitness fundraising events, cultural engagement/diversity events)

User Persona

Overall Summary/General Persona:

- Young adults, college-aged students
  - Mostly car-less
  - Access to public transportation (TAP card)
  - Limited access to carpooling
  - Limited off-campus involvement

Common Characteristics and Demographic Details:

- **Academic Level:** Primarily 3rd and 4th year students.
- **Residence:** Mix of on-campus residents (living on the hill) and students in university/off-campus apartments.
- **Activities:** Involved in a variety of campus clubs and organizations, with a focus on cultural engagement, community service, and volunteer work.
- **Transportation Challenges:** Common issues include expense, convenience, and reliability of public transportation, as well as the inconvenience of missing events due to lack of transportation options.
- **Interest in Carpooling App:** All interviewees expressed interest in a UCLA student-focused carpooling app due to their transportation challenges and missed opportunities for events.

These personas provide a clear overview of the target demographic for the carpooling app, outlining their needs, challenges, and preferences regarding transportation options.

Transportation Challenges Faced by UCLA Students:

1. Cost of Transportation:

- **Observation:** All interviewees highlighted the financial aspect of transportation. Some mentioned that before receiving TAP cards, they found transportation in LA expensive, often resorting to costly Ubers.
- **Implication:** High transportation costs deter students from participating in off-campus events and activities, especially if they are frequent or located at a distance from campus. A cost-effective solution would greatly benefit the student community.

2. Reliability and Convenience:

- **Observation:** Some expressed dissatisfaction with the reliability of the bus service, stating that it is slow and sometimes unreliable. Others preferred personal vehicles due to concerns about the safety and convenience of late-night travel via public transportation.

- **Implication:** Unreliable and inconvenient transportation options affect students' willingness to attend events, especially those that run late into the night or are situated far from campus. A reliable alternative is essential to ensure students can travel safely and comfortably.

3. Limited Options and Missed Opportunities:

- **Observation:** Some interviewees shared instances where they had to miss events due to the lack of available transportation options.
- **Implication:** Limited transportation options directly translate into missed opportunities for students. This limitation restricts their social engagement, extracurricular involvement, and attendance at cultural or community events, impacting their overall college experience.

4. Late-Night Safety Concerns:

- **Observation:** Safety concerns related to late-night bus travel were highlighted, indicating that some students avoid public transportation during late hours due to personal safety worries.
- **Implication:** Safety concerns further limit transportation choices, especially for students who have commitments that extend into the late evening hours. A secure and trusted transportation solution is crucial to address these concerns.

5. Scams and Trust Issues:

- **Observation:** Negative experiences with scams in existing transportation solutions make students hesitant to participate. They emphasize the importance of a trustworthy platform.
- **Implication:** Trust issues and scams in existing transportation solutions make students hesitant to participate. A secure and transparent carpooling app with thorough background checks would instill confidence among users.

Conclusion:

The transportation challenges faced by UCLA students are multifaceted, encompassing financial constraints, reliability issues, limited options, safety concerns, and trust issues. Addressing these challenges through a tailored carpooling app can significantly enhance students' mobility, allowing them to fully engage in academic, cultural, and community activities without the hindrance of transportation limitations.

User Objectives

Use Case 1: Efficient Event-Based Carpooling

Objective: Enable students to find and join carpooling groups specifically tailored to cultural and community engagement events.

- Functionality:
  - Users can create carpooling events specifying the event details, location, and available seats.
  - Students can search and join existing carpooling groups based on event categories, date, and location.
  - The app sends notifications for upcoming events and available rides matching users' interests.
  - Secure in-app messaging allows communication between drivers and passengers regarding pick-up points and event details.
  - A rating and review system ensures accountability and trust among users.

Use Case 2: Safety and Verification

Objective: Ensure a safe and trustworthy environment for all users by implementing robust safety features and user verification processes.

- Functionality:
  - Implement thorough background checks for all users, verifying their UCLA student status and driving records.
  - Integrate a secure payment system for sharing ride costs within the app, reducing the need for cash transactions and ensuring fair contributions.
  - Allow users to report suspicious activities, ensuring prompt action against potential scams or inappropriate behavior.
  - Provide an emergency button within the app, connecting users to campus security services in case of emergencies during rides.

Use Case 3: User-Friendly Interface and Navigation

Objective: Create an intuitive and easy-to-navigate interface for seamless user experience.

- Functionality:
  - Implement a simple registration process, allowing users to sign up using their UCLA credentials for quick verification.
  - Intuitive event search and filtering options based on categories, dates, and locations, enabling users to find relevant carpooling opportunities easily.

- - Provide real-time updates on ride availability, event details, and participant statuses.
    - Integrate GPS for easy navigation, guiding drivers and passengers to designated pick-up and drop-off points efficiently.
    - Include a feedback system allowing users to rate and review both drivers and passengers, enhancing the overall community experience.

Use Case 4: Event Organizer Collaboration

Objective: Facilitate coordination between event organizers and attendees, ensuring seamless transportation planning for off-campus events.

- **Functionality**:
    - Allow event organizers to create dedicated carpooling groups for their events, ensuring attendees can find rides specific to the event.
    - Provide event organizers with tools to track attendance and transportation needs, enabling efficient event planning.
    - Implement a communication platform for organizers to send event updates and transportation-related announcements to attendees.
    - Offer a bulk invitation system, allowing organizers to invite attendees to join the carpooling group directly from their event management interface.

By addressing these use cases and objectives, the carpooling app for UCLA students will provide a comprehensive solution, catering to the specific needs and expectations of the stakeholders and users. The interface will focus on simplicity, security, and effective event-based transportation coordination, enhancing the overall transportation experience for the UCLA student community.

User Journey

Solution to Initial User Concern

User downloads our app to look for a carpool.

- Our app will most likely attract UCLA students looking to either carpool with someone for an event, or share their ride with someone else. Often, these students have a location in mind.
- These students will likely be attracted to the app due to the consistency of information and safety mechanisms in place on the app, as opposed to using the public Facebook group.

Successful Carpool Experience

Successful Carpool Experience

- The students successfully carpool to their desired location using our app. They benefited from the consistent information required by our user interface. To ensure their safety, they asked their friend to create a profile on the app and "friend" them, hence being able to track their location.

- While using the app successfully to experience carpooling in a more convenient and safe way, they discover the calendar events feature while browsing our user interface. They also discover many interesting possible trips with available seats.

Exploratory phase

Student starts exploring the calendar feature

- Once students start browsing the calendar feature, they slowly get exposed to more activities and regions in Los Angeles that they didn't know existed.

- Along with some other friends, they sign up to carpool to a new region in LA that they haven't previously visited.

Frequent Use
The student begins to frequently use this app to discover new places in LA.
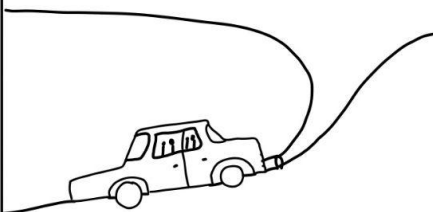
- The student successfully explored a new region in LA through the last trip and now regularly use it to plan new, exciting trips regularly.

- They also meet new people on campus through the carpooling process that they ordinarily would not have met!

Sign Up & Login Screen

Start Screen

9:41

UC POOL

TRAVEL TOGETHER

Travel with other students
in your UCLA community

Create Account

or sign in

Existing Login

9:41

←

Let's get back to
Sharing

Login with a registered
UCLA email

G _____

NEW ACCOUNT

9:41   .ııl 96 🔋

←

Let's start building
a Community

Register Now:

G _____

CREATE PROFILE

9:41   .ıll 96 🔋

←

👤 John Doe
    [Sophomore] ▽

Status

[Driver]   [Passenger]

SOCIAL MEDIA

[📷] [in] [X] [+]

CONTACT INFORMATION

Phone Number
(xxx) - xxx - xxxx

Email
_____ @ucla.edu

Emergency Contact

Alice Doe   (xxx) - xxx - xxxx

[Create Profile]

PROFILE PAGE

9:41   .ıll 5G 🔋

←   ✏️

John Doe

[Sophomore]

Passenger Rating   [★ 5.0]

SOCIAL MEDIA

[📷] [in] [X] [+]

CONTACT INFORMATION

Phone Number
[(xxx) - xxx - xxxy]

Email
[_____ @ ucla.edu]

Emergency Contact

Alice Doe   [(xxx) - xxx - xxxy]

[⚙ Settings]

[Save Changes]

HOME PAGE

9:41   .ıll 5G 🔋

Good Morning,
John

New
Trip

🚌 Take the Bus!

🚗 Hop in a Car!

Create an Event

ACTIVITY

Upcoming

📍 _____
Nov 3, 6:44 AM   ⊙ ★ 5.0

Past

📍 _____
Nov 3, 6:44 AM   ⊙ ★ 5.0

📍 _____
Nov 3, 6:44 AM   ⊙ ★ 5.0

📍 _____
Nov 3, 6:44 AM   ⊙ ★ 5.0

🏠   🔍   🧾   👥   ⚙

CHAT PAGE

9:41   .ıll 96 🔋

←   CHAT

👤	Rider #1	>
👤	Driver #1	>
👤	Rider #2	>

It's quiet in here

z ᶻ ᶻ

🏠   🔍   📄   👥   ⚙️

MESSAGE PAGE

9:41   .ıll 96 🔋

←   👤   RIDER #1   📞

Today

+   [_____] ⊳

🏠   🔍   📄   👥   ⚙️

CREATE EVENT PAGE

9:41 .ıll 56 🔋

← CREATE EVENT

Add Title

📅 Sunday, Nov 5
🕐 All - Day   ⬤
    6PM - 7PM

Host   ORG / NAME

Attendees   _____ ,
            _____ ;
            _____ ;
                    :

Location   _____
            _____

Description _____

Looking For [Carpool] [Buspool] [Passengers]

        [POST EVENT]

🏠 🔍 📑 👥 ⚙️

FEEDBACK (DRIVER POV)

9:41 .ıll 56 🔋

←

RATE YOUR
PASSENGERS

👤 Bob
☆ ☆ ☆ ☆ ☆

👤 Bobby
☆ ☆ ☆ ☆ ☆

👤 Bobbette
☆ ☆ ☆ ☆ ☆

[Submit]

🏠 🔍 📑 👥 ⚙️

FEEDBACK   (PASSENGER POV)

9:41   .ill 5G 🔋

←

RATE YOUR
DRIVER

👤 Bob
☆ ☆ ☆ ☆ ☆

Leave a Thank You:
$ _____

Send a Message:
_____
_____
_____

Submit

🏠 🔍 🧾 👥 ⚙

Find Event Page

3:41 .ıll 76 🔋

🔍 Dockweiler Beach Cleanup

| SATURDAY Dec 13 | MSU Dockweiler Beach Cleanup |

ORG: Melissa Student Union
LOCATION: Dockweiler Beach
ADDRESS: 12000 Vista del Mar Playa del Rey, CA
TIME: 8:30 AM - 3:00 PM
DESCRIPTION: _____

| WEDNESDAY Dec 22 | Beach Cleanup w/ USAC |

ORG: USAC
LOCATION: Dockweiler Beach
ADDRESS: 12000 Vista del Mar Play
TIME: 6:00 AM
DESCRIPTION: _____

Can't find event?
Try our ADVANCED SEARCH

🏠 🔍 📑 👥 ☀️

Add an Event Page

3:41 .ıll 76 🔋

MSU DOCKWEILER BEACH CLEANUP

DATE: 12/13/23
ORG: Melissa Student Union
LOCATION: Dockweiler Beach
ADDRESS: 12000 Vista del Mar Playa del Rey, CA
TIME: 8:30 AM - 3:00 PM
DESCRIPTION: _____
_____

DRIVER'S FOR THIS EVENT:

DRIVER: CONNOR SMITH
AVAILABLE SEATS: 2
+ Add Ride

DRIVER: DAVID LAM
AVAILABLE SEATS: 0

DRIVER: EMMA LEW
AVAILABLE SEATS: 4
+ Add Ride

🚌 6 people are bussing!
see bus group

🏠 🔍 📑 👥 ☀️

Advanced Search Page

3:41 .ıll 76 🔋

ADVANCED SEARCH 🔍+

EVENT: _____

ORGANIZATION: _____

DATE: [/ /]

ADDRESS: _____

LOCATION: _____

[+ 🔍]

🏠 🔍 📑 👥 ☀️

Bus share group page

BUS SHARE

bus to...

🔍 Search event

9/01	Beach Cleanup w/ MSU Location: Dockweiler Beach • 5 people in this group
8/23	DTLA Canned Food Drive Location: Downtown Los Angeles Loaves + Fishes • 3 people in this group

+ Create bus group

BUS SHARE

Beach Cleanup
w/ MSU
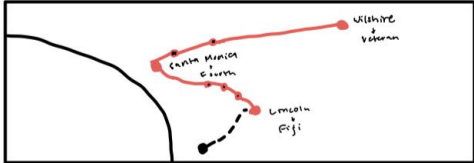
DATE: 12/13/23
ORG: Melissa Student Union
LOCATION: Dockweiler Beach
ADDRESS: 12000 Vista del Mar Playa del Bay, CA
TIME: 8:30 AM - 3:00 PM
DESCRIPTION: _____
BUS ROUTE:

720 🚌 > 🚶 2 min > 3 🚌 > 🚶 10 min

Meeting spot: Lazy Daisy @ 7:00 AM
Members of Group:

🧍	🧍	🧍
Alex	Sam	Emma

+ Join Bus Group

3.41 .ıll 76

< Notifications

Push Notifications

Pause all notifs ☐

Messages ☑

Open Seats ☑

New Event ☑

Change in Event Detail ☑

Driver/Passenger Rating ☑

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3.41 .ıll 76

Event + Ride History

🔍 Search History

9/01	Beach Cleanup w/ MSU
8/23	DTLA Canned Food Drive
8/15	Run to Feed the Hungry
6/22	FMRR Children's Book Drive
6/21	

🏠 🔍 📃 👥 🔆

DISCOVERABILITY (Version A) WEEKLY

9:41 .ill 3G 🔋

← EXPLORE

NOVEMBER

SUN	MON	TUE	WED	THU	FRI	SAT
⑤	⑥	⑦	⑧	⑨	⑩	⑪

‹ ⟩

VETERAN'S DAY

‹ | BEACH CLEAN UP 🕐 6:00 - 7:00 | ___ 📍 ___ | ___ 📍 ___ | ⟩

LOOKING FOR PASSENGERS

📅 BEACH CLEANUP
👤 ⭐ 5.0 ___   Capacity: 4   💬

📅 DOWNTOWN LA
👤 ⭐ 4.5 ___   Capacity: 2   💬

LOOKING FOR DRIVERS

📅 BEACH CLEANUP
👤 ⭐ 5 0 ___   Baggage: None   💬

🏠 🔍 🧾 👥 ⚙️

Discoverability Weekly (Version B)

3.41 .ill 3G 🔋

← Explore

Upcoming Events This Winter Quarter!

VOLUNTEER

9/21	Canned Food Drive w/ CCAS 113 Location: Dockweiler Beach • 11 people in this group

8/10	Glendale Library Puppet Show Location: Downtown Los Angeles Loaves +Fishes • 3 people in this group

CULTURAL ENGAGEMENT

12/31	Day of the Dead Ritual Location: Venice Beach • 5 people in this group

FUNDRAISING

11/15	LMT Beach Fundraiser Location: Dockweiler Beach • 21 people in this group

🏠 🔍 🧾 👥 🔆

Detailed Information Architecture

1. User Registration and Profile Management:
   - *Registration Process:* Users sign up using their UCLA credentials for quick verification.
   - *Profile Creation:* Users input essential information such as name, profile picture, and vehicle details (if applicable).
   - *Verification Process:* Thorough background checks are conducted to verify UCLA student status and driving records.
2. Dashboard:
   - *Personalized Dashboard:* Upon logging in, users are greeted with a personalized dashboard displaying relevant information.
   - *Nearby Drivers/Passengers:* The home screen displays drivers and passengers picking up or in proximity for easy connections.
   - *Notification Center:* Important notifications, including event updates and ride availability, are centrally located.
3. Carpooling Interface:
   - *Create a Trip:* Users can create a carpooling trip, specifying details like date, time, and destination.
   - *Search for Trips:* Users can search for existing trips based on destinations, including both events and general locations.
   - *Auto-detect Events:* The system auto-detects events based on user inputs, enhancing trip suggestions.
4. Destination Categories:
   - *Categorized Destinations:* Destinations are categorized, including specific events and general locations (e.g., Downtown LA).
   - *Trip Details:* Clicking on a destination/event displays all drivers and passengers associated with that trip.
5. Driver/Passenger Listings:
   - *Listing Display:* When clicking on a destination/event, the app displays a list of drivers and passengers seeking rides.
   - *Contact Feature:* Users can contact drivers/passengers directly through the app for coordination.
6. Safety and Verification:
   - *Background Checks:* A secure process verifies user identities, UCLA student status, and driving records.
   - *Secure Payment System:* Integration of a secure payment system for ride cost-sharing within the app.

- *Emergency Button:* An emergency button connects users to campus security services in case of emergencies during rides.
- *Reporting Feature:* Users can report suspicious activities for prompt action against potential scams or inappropriate behavior.

7. User Interface and Navigation:
   - *Intuitive Navigation:* Simple and easy-to-navigate interface for a seamless user experience.
   - *Real-time Updates:* Users receive real-time updates on ride availability, participant details, and proximity alerts.

8. Frequent Use and Social Interaction:
   - *Regular App Use:* Users regularly use the app to plan and join carpooling trips.
   - *Social Interaction:* Enhanced social connections as users coordinate rides with others in proximity.

By shifting the focus to a carpool-centered interface and eliminating the event creation feature, the revised architecture aligns with the feedback and preferences. The inclusion of auto-detection for events, destination categorization, and proximity-based suggestions aims to create a more streamlined and user-friendly experience for the UCLA Carpooling App, emphasizing the core functionality of facilitating ridesharing among the student community.

Plan For Usability Testing

Usability Assessment Process: Our three-step testing plan aims to gather comprehensive feedback on our app's design by obtaining different perspectives on transportation needs and assessing usability through common scenarios. By conducting both individual interviews and focus groups, our approach enables a thorough examination of user experience, facilitates improvements of our design, and ensures that our final product aligns with the diverse needs and references of our target users.

Part 1: Interviews

Overview: In the first phase, we will conduct one-on-one interviews with UCLA students in a welcoming and distraction-free environment. Interviewees will be provided with consent for recording. Open ended questions will explore their transportation needs and ride-sharing experiences, and participants will engage in tasks based on common scenarios. The insights gathered will serve as a foundation for refining the app's design to better cater towards our user's preferences.

- Recruitment: 10-15 students currently attending UCLA. Diversity in participants' backgrounds (year, major, hometown, age, living situation, etc.) will be recruited to ensure varied perspectives.
- Setup: The one-on-one interviews will be conducted in a welcoming and comfortable environment (conference room, classroom, etc.) free of distractions. The interviewer will ask participants for consent to record the interview and will proceed if consent is granted.
- Structure: Participants will be told the purpose of the interview (gather feedback and improve app's usability), provided with an overview of the interview process, and asked to think aloud as they interact with the app.
- Questions: Participants will be asked open-ended questions about their transportation needs and ride-sharing experiences (e.g. What are your thoughts on Los Angeles public transportation? What are your means of transportation?)
- Scenarios: Participants will be presented with the app and asked to perform a task based on common scenarios (e.g. Try to find a ride to the Rose Bowl on November 18, 2023). Participants are encouraged to think aloud as they interact with the app and share their observations and challenges.
- Follow-up question: After interacting with the app, participants will be further questioned about their overall experience with the app.

Part 2: Focus Group

Overview: After collecting insights from the initial interviews, the second phase of our usability testing aims to refine our app design based on the constructive feedback we obtained through the structured interviews. Interviewees from Part 1 will be asked to participate in a comprehensive focus group where they will engage with the updated app design, providing feedback on its usability and comparing it to the original version of the app. This collaborative evaluation of our design will ensure that our refinements align with user expectations and enhance the app's usability.

- Re-Assessment: App design will be altered and adjusted based on participant's feedback from the interview portion.
- Re-Engagement: Participants will be asked to come back (on a different day) for a focus group and presented with the updated app design.
- Interaction: Participants will interact with the updated app.
- Group discussion: Collectively, participants will be asked to compare the updated app to the old design and provide constructive feedback and suggestions.

Part 3: Evaluation

Overview: The last phase of our usability testing process analyzes the feedback we accumulated from both the one-on-one interviews and the focus group to identify remaining issues and compile valuable suggestions from the differing perspectives of our participants. These insights will allow us to implement necessary changes to our design and further refine the overall user experience. This final step is essential in delivering an app that meets the expectations of UCLA students by fostering a user-centric and highly effective platform.

- Data analysis: Analyze the feedback from the interviews and focus groups, and identify common themes, issues, and suggestions.
- Iteration: Based on the data analysis, implement necessary changes to further refine and finalize the app design.

High-Fidelity Prototypes

https://www.figma.com/file/84at8MBPEiWyzxgGIxesEG/DH-110---West(will)?type=design&node-id=5%3A2&mode=design&t=Q4eS31ObcH6UjKFx-1

Preview:
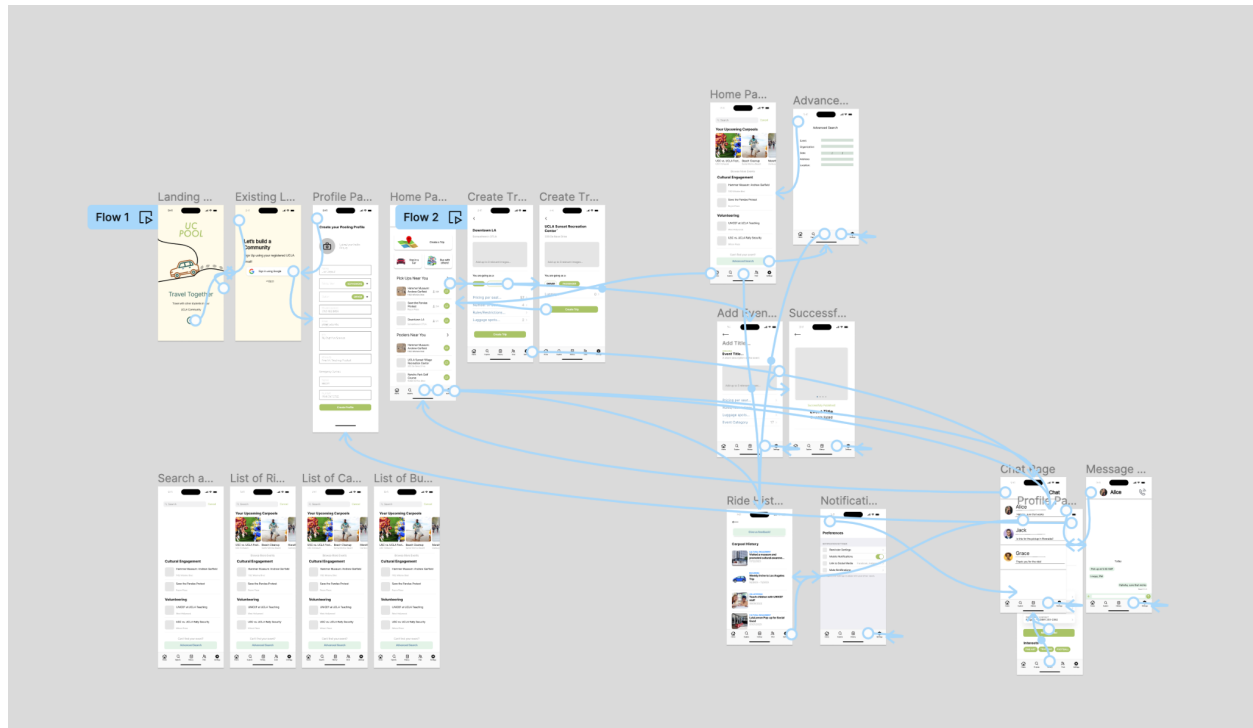
In response to the feedback received during the evaluation of our low-fidelity prototypes, significant design changes have been implemented to enhance the focus on carpooling functionality and improve overall user experience. The following points outline the rationale behind these modifications:

1. **Shift in Emphasis from Events to Carpooling:**
   - Feedback indicated a preference for emphasizing the carpooling aspect rather than events.
   - Consequently, the decision was made to discontinue the creation of events pages.
   - Exploring the possibility of auto-detecting events based on user inputs during trip creation to streamline the process.

2. **Modification of Ratings Screen:**
   - The feedback highlighted concerns regarding the use of star ratings, likening it to popular ride-sharing applications like Uber.

- In response, the ratings screen has been redesigned to move away from the conventional star-based system, ensuring a unique and distinctive user interface.
- We have replaced this with a single optional feedback button within the ride history section in order to move away from the ridesharing rating consensus and provide an avenue for more qualitative feedback.

3. Categorization by Destinations:
- To align more closely with the carpooling theme, the concept of categorizing trips has shifted from events to destinations.
- Destinations now encompass both specific events and general locations (e.g., Downtown LA), thereby enhancing the platform's carpooling-centric functionality.

4. Enhanced Information Display for Destinations:
- Clicking on an event or destination now reveals a comprehensive display showcasing all available drivers and passengers actively seeking rides.
- Users are provided with the means to contact these drivers or passengers directly, fostering improved communication and coordination.

5. Proximity-based and Chronologically-ordered Recommendations on Home Screen:
- Given the removal of the ride history from the home screen, the layout has been reconfigured to present information about nearby drivers and passengers.
- Utilizing proximity-based algorithms, the home screen now offers real-time updates on individuals picking up or awaiting rides in the user's vicinity, enhancing the efficiency of trip coordination.
- We have added a date component on the events in order to accommodate college students' busy schedules and allow higher urgency events to be shown first.

6. Mobile-only Interface
- After briefly confirming with user data on the expectations of our solution, we stuck with the mobile interface due to several reasons
  - Convenience of having the all-in-one carpool application in a mobile format
  - Association with current ride sharing applications such as Lyft, Uber being on mobile, thus serving as a more relevant view

- ○ Messages feature being more intuitive to have in a mobile interface, although alternatives such as Facebook groups are also made available in a desktop/web-format, most users indicate that they think of your phone/text messaging conversations to take place on a mobile phone for similar carpooling purposes, as it is easy to shift from different applications such as maps, etc.

These design changes are informed by a commitment to refining the platform's usability and ensuring a seamless and intuitive experience for users engaged in carpooling activities. The iterative design process, guided by user feedback, has been instrumental in shaping a more tailored and user-centric high-fidelity prototype.