

User Interface Research Report

DreamTune



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DreamTeam

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Introduction

The purpose of this research project was to gain a better understanding of how to design the final user interface with the goal that core tasks are frictionless and intuitive to complete. To meet this goal, we created two different initial designs for our lead generation solution. Both of these designs featured a web application with similar functionality, but varied in design. The two designs were tested, allowing participants to try out a variety of ideas and the team to gain useful feedback on them. Using these outcomes, we will be able to create a final design that will combine the best elements of each proposed initial design, while adjusting and accommodating for observations and suggestions from users.

Overview

We followed a process that focused on iteration when creating the design for our application. Below are the steps that we took from initial ideation, to the generation of recommendations to incorporate in our final design.

1. Describe views and functionality of web application
2. Sketch the initial views on an iPad
3. Create design #1 on Balsamiq wireframes
4. Create design #2 on Adobe XD
5. Create tasks for user tests on each design
6. Conduct 2 user tests for each design
7. Aggregate feedback into a report
8. Use feedback to iterate on designs
9. Combine designs into a final UI for our web application

Research Test Process

We devised a process to conduct our research tests on our proposed designs. This process, listed below, focuses on creating an environment where the participant is encouraged to be transparent and communicate their thoughts so we can make meaningful observations.

1. Introduce the project to the participant
2. Ask the participant for their consent to be involved and recorded
3. Give background context to the participant
4. Record the interactions between the facilitator and the participant
 - a. Through both screen capture and an iPhone
5. Run through core functionality tasks with the participant
 - a. Ask them to “think out loud” and describe expectations for clicking
6. Recap the users experience from the test
 - a. Ask if any particular task or functionality was challenging and why

Research Test Participants

	Age	Race	Major	Gender (Self Identified)	Disabilities
User1	24	White	Law	Male	None
User2	20	South Asian	Economics	Male	None
User3	20	Eastern Asian	Law, Ethics & Society	Female	Poor Vision
User4	22	Arab	History	Female	None

Research Study Script

"We are conducting user tests on our application for a class, would you like to participate? Do you consent to us recording your actions through the computer and with a camera in person? We will only use this information in our research report, and the data will stay within a private repository for our class."

Ok, so let's start with the context. You are working at a major Performance Rights Organization, who manages licensing deals to make sure that music being played in commercial settings is properly paid for by the corresponding tariff. There are different tariffs based off the characteristics of the venue, for example background music at a retail store will have a different rate as music used in a club."

Our application is designed to help you find venues which do not subscribe to music license services. An important part of this process is getting proof this location is streaming music in the venue. This helps us approach venues with concrete proof music was being played and therefore that they must subscribe to our service."

We are now going to lead you through a series of tasks to see if our user interface is navigable and intuitive for you to use."

This script is read before the research test by the facilitator.

Research Study on Design #1 (Balsamiq)

User Tasks

1. Login and view the dashboard
2. Review the status of a lead generation for a Cafe nearby
3. Find and describe the proof of illicit music streaming from this location
4. Update the status of the lead to reflect a successful sale of a tariff
5. Change the type of lead to a cafe and update it's square footage
6. Review the number of leads contacted last month
7. What day of the last month had the most leads contacted?
8. Which category of venue saw the most tariff revenue last month?

Observations

User 1:

Problems:

- Navigating back to the homepage was confusing
- Analytics were not clear and didn't give obvious conclusions
- Not sure what the dollar amount refers to
- Not sure what each section of the app means

Working Well:

- Clean and minimalist design
- Easy to find dense areas with numerous businesses
- Nice analytics

User 2:

Problems:

- Navigating back to the homepage was confusing
- Updating the status of leads generated was confusing
- Not sure what each section of the app means

Working Well:

- Clean and minimalist design
- Easy to find high valued leads
- Easy to see the breakdown of revenue over the past month

Research Study on Design #2 (Adobe XD)

User Tasks

1. Find all the hotels found by DreamTune in New York City (Go to Search and write query)
2. Add a new entry in Seattle
3. Pull up the History of Baroque Hotel (Hotels in NYC)
4. Pull up the legal email sent to Baroque Hotel
5. Send an Informative Email to Baroque Hotel
6. Baroque Hotel is not responsive to any automated requests. What is your next step?
7. Re-automate this location
8. Go to the Home Page
9. Go to the travel page
10. Open up more information about NYC Mills
11. Select Sarah Parmenter for this job and confirm a new booking. Assign her a spending limit of \$1000

User Questions

Search

1. What date was the legal email sent to the Baroque Hotel?
2. What does it mean to “Escalate to Human”?
3. Why is Escalate to Human red? Is something wrong?

Home

4. Describe the Home page (each of the boxes)
5. What does the Red X mean on the map?
6. What crucial information is missing from this display?

Flights

7. Who/when/where is the licensing rep travelling?
8. Is Current bookings necessary?
9. What does the purple star on some location cards mean?
10. What does the purple star on some people cards mean?
11. What dates is Sarah unavailable for?
12. What does Success Rate represent?

Response to Questions was paraphrased into Problems/Working Well section for each user.

Observations

User 3:

Problems:

- Text is too small
- Why do I care about Lead Sources
- Map:
 - Red Stickers mean places which I do not care about
 - Green stickers mean places which I should contact
- Income Graph:
 - Shows for a particular location
- Wanted to click on Bubble (instead of blue text) for more information about an event in history.

Working Well:

- Purple Sticker shows highest value places
- Purple Sticker shows best suited rep
- Purple stickers show potential for revenue
- Graph shows profit projections
- Found Locations, Pending Users, No Response

User4:

Problems:

- Text is too small
- Does not understand Lead Sources
- Graph shows the income of a SINGLE location
- Clicking on a map should just popup information. Not take you to weird screen
- Does not understand pending users
- Add small labels next to buttons
- Current Bookings seems like unnecessary information and should have its own screen.

Working Well:

- Purple Sticker shows highest value places
- Purple Sticker shows best suited rep
- Purple stickers show potential for revenue
- Search query easy
- Location History (Proof) easy

Conclusion

Summary of Results

Overall, we gained valuable feedback on specific design decisions that we made from our user tests. Each mockup had their positives and negatives, and we plan to combine both designs together for our final product. We learned from the user tests that we need to focus on making navigation easy by using large icons and text to indicate each view's specific functionality. We also learned that the core functionality of the application (finding leads) should be at the forefront of the user's visual field, without being cluttered by non-critical features. For example, the data analytics feature from Design #1 and the trip management feature from Design #2 will be cut from our final design. User feedback was positive on the dashboard design as they felt it gave them a good overview of how their lead generation goals are being met. Going forwards with creating the prototype of our application, we will keep in mind the principles of simplicity to not overly confuse our users, which we observed at moments during our tests.

Limitations

Our main limitation is that we conducted the surveys primarily on university students present at Gerstein library. This represents a studious segment of the population due both to the status of UofT and the fact that these students were studying at the library. The ages of the people we surveyed ranged from 20 years to 24 and due to our limited sample size, we didn't get to test our app on a wider demographic. A licensing representative is generally in their late 20's or early 30's. Furthermore, we didn't survey people who are familiar with the music industry or the job of license lead generation.

We would like to further iterate over our design with an older age demographic so we can understand the perspective of a licensing representative better. We would also like to survey people with disabilities and people from different cultures as we believe that the intuitive feel for the application will differ for each demographic and having all these different perspectives will help us make a more efficient and user friendly app.

An important insight we got from our surveys was while surveying an Asian woman who was new to Toronto and not very fluent in English (she was actually our 5th test user who we didn't include in our results due to the language barrier). We realised that there is fundamentally a subtle difference in what different cultures find intuitive when it comes to software applications. Although she could understand our instructions, she seemed unable to correlate them with the icons we chose to use. Therefore, we will have to extensively test how different individuals interact with our app and we would have to revisit this section everytime we decide to expand into a different market.

Appendix



Figure 1: Still Image from User1 Test on Design #2

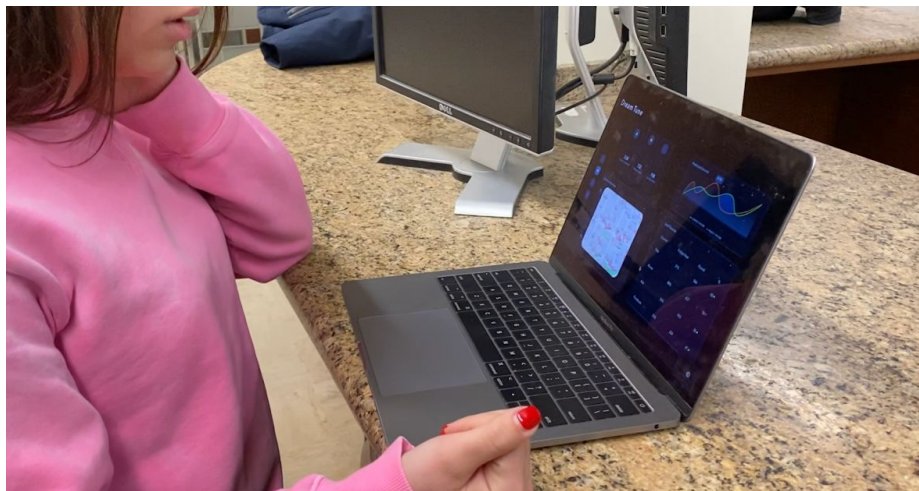


Figure 2: Still image from User2 Test on Design #2

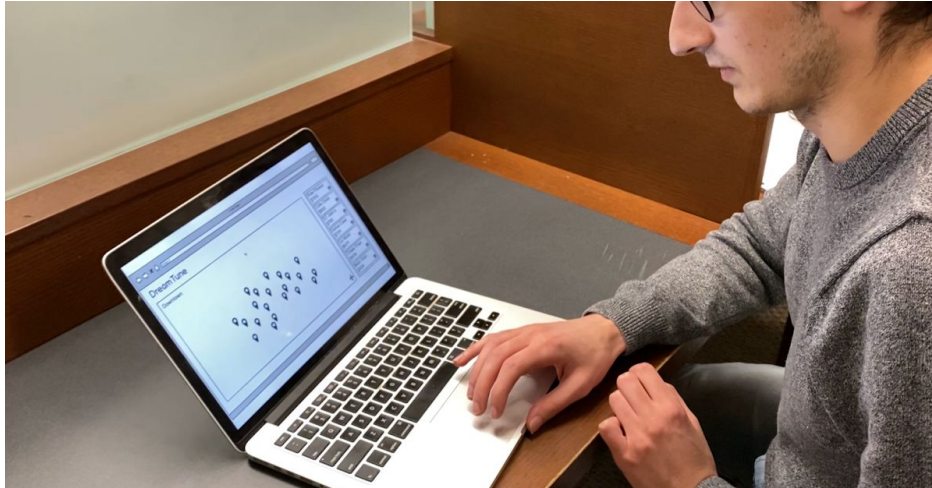


Figure 3: Still image from User3 test on Design #1



Figure 4: Still Image from User4 Test on Design #1

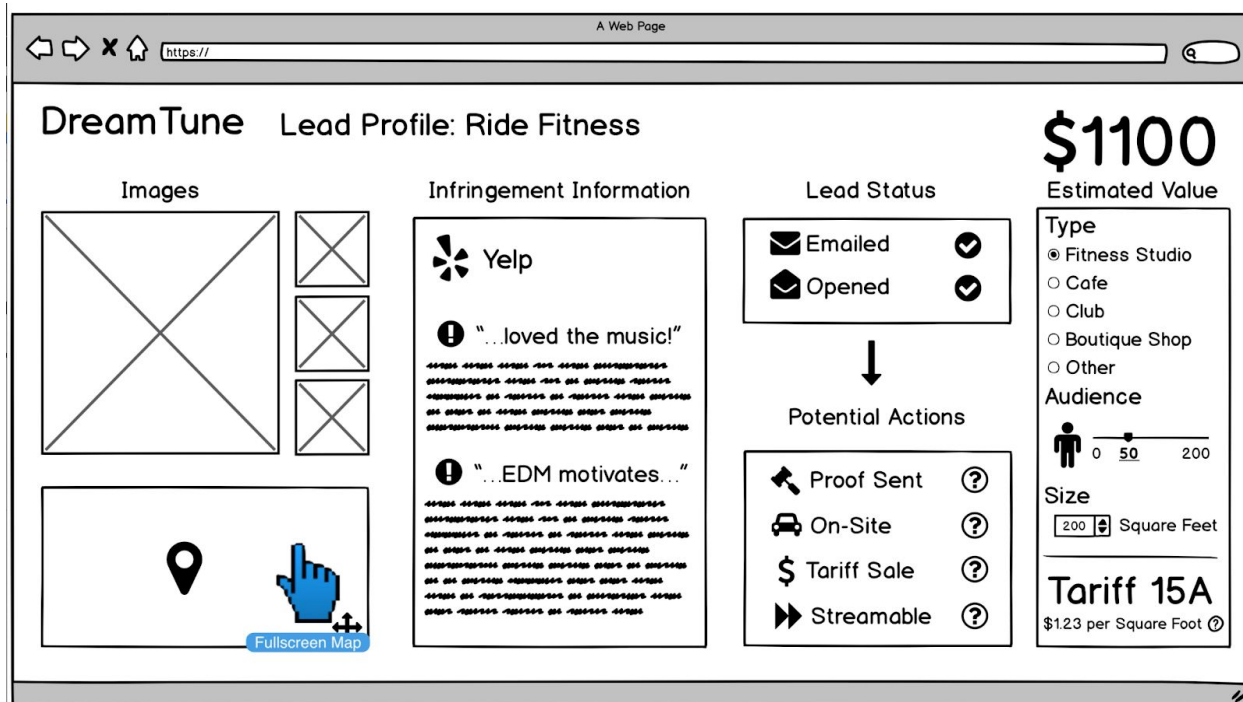


Figure 5: Still Image screen captured during user test on Design #1

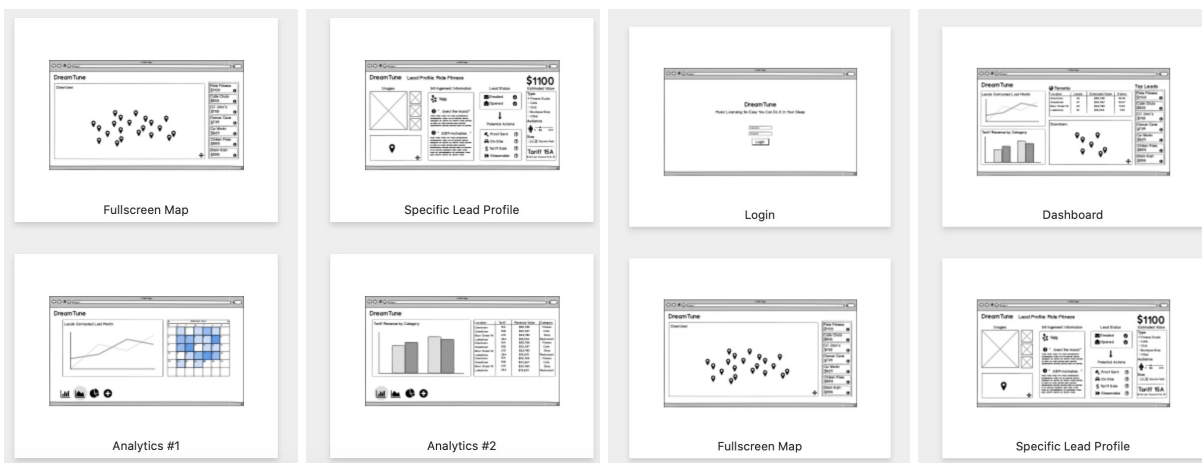


Figure 6: Overview of Design #1 (PDF in Github)

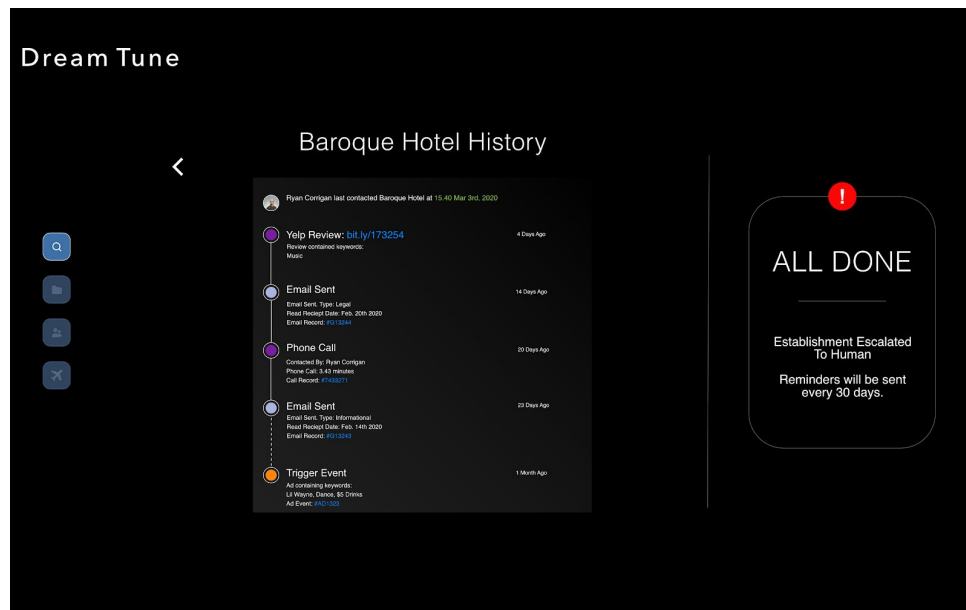


Figure 7: Still Image screen captured during user test on Design #2

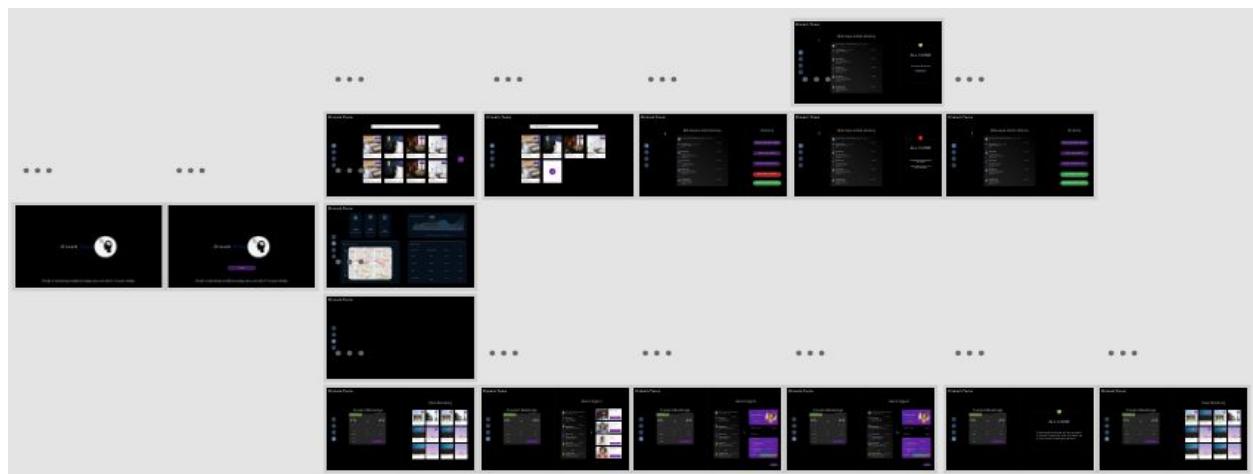


Figure 8: Overview of Design #2 (PDF in Github)