INFS 627 – Portfolio

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1. Problem Statement

Entering RESO for the first time can be overwhelming due to the sheer number of shops, restaurants and other attractions, especially if a language barrier exists. Many tourists and newcomers to Montreal face this challenge after hearing so much about RESO yet cannot seem to be able to navigate it properly. Further, older parts of RESO might be less accessible, which can be challenging to persons with mobility challenges. To that end, we present a reflection of the process of creating the “RESO Montreal” app to address the previous issues in this essay.

2. Formative Evaluation

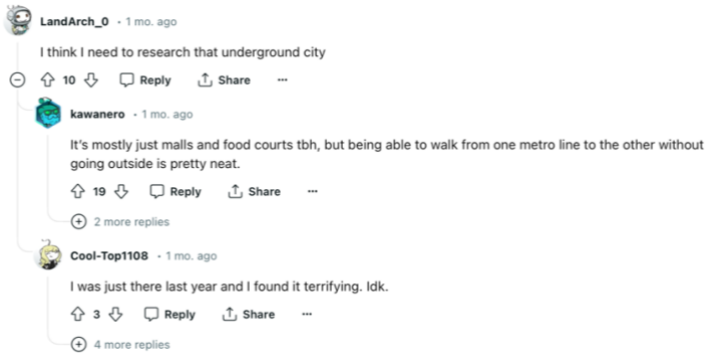
After reviewing the posts on Reddit and Tripadvisor concerning the underground tunnel, we found out that while the underground city enjoys widespread recognition, many newcomers, including new residents and visitors, struggle with its navigation. To address this issue effectively, we crafted a questionnaire and enlisted 20 newcomers to participate, dividing it into three key sections.

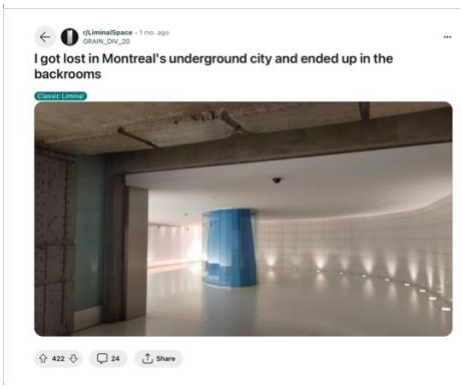
Firstly, we explored participants' prior experiences with the underground city. While all were aware of its existence, only three reported positive visits, with merely one using it for daily commutes.

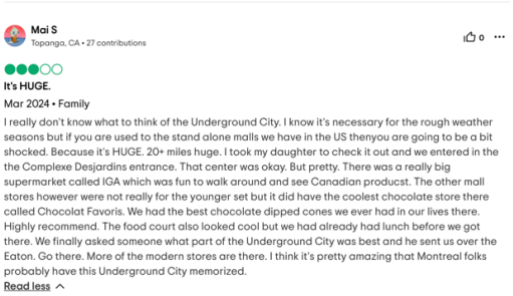
Secondly, we examined the challenges encountered while navigating the underground city. Eighteen participants selected the ambiguity of directional signage as the primary issue. Other notable difficulties included unfamiliarity with key landmarks, lack of information regarding emergency situations, and insufficient details about accessibility infrastructure.

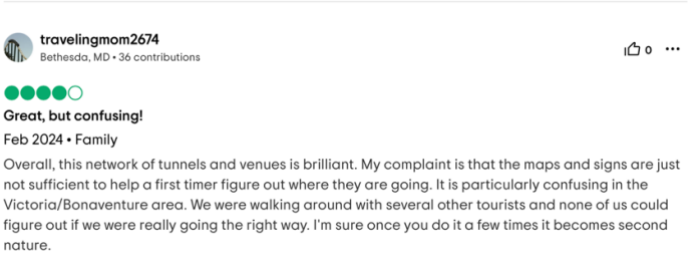
Finally, participants shared their expectations for an underground tunnel-focused app. Real-scene navigation emerged as the top priority, closely followed by real-time updates on service disruptions, recommendations for restaurants, attractions, groceries, and activities nearby, as well as information about accessibilities.

- Discussions and Reviews

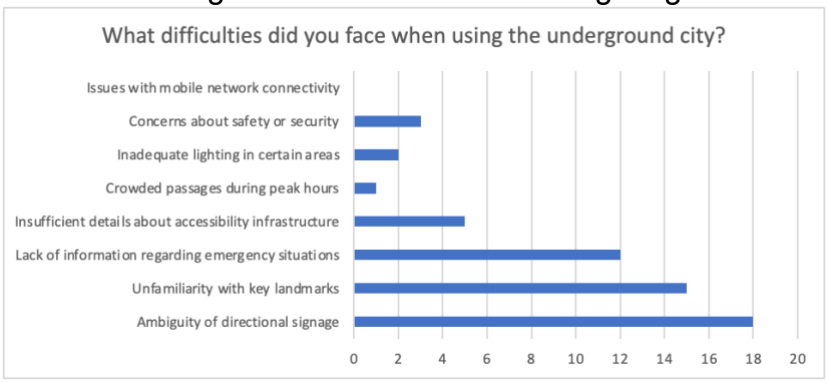




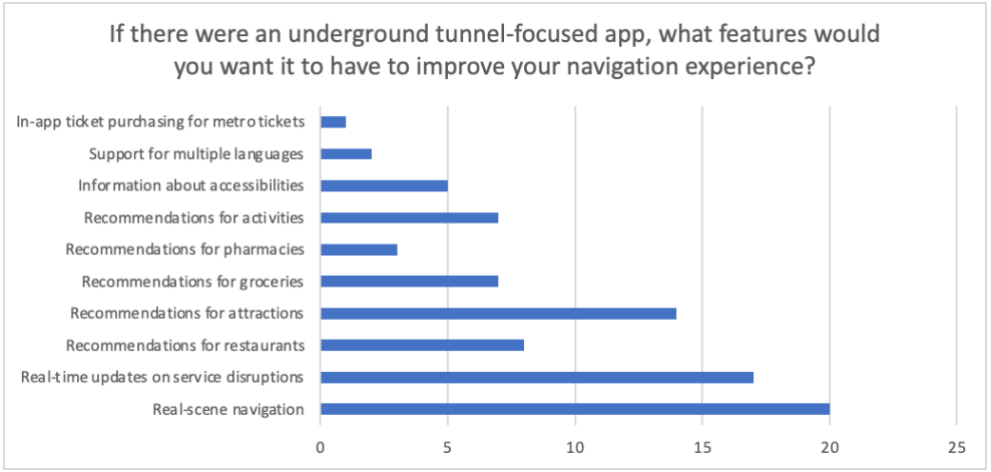




- Challenges encountered while navigating the underground city



- Expectations for an underground tunnel-focused app



3. Persona, scenario, and storyboard

Persona

Alex: A tech-savvy young professional and first-time visitor to Montreal, seeks to explore local attractions and cuisine without getting lost, making him a prime candidate for using the navigation app, Reso.

Scenario

On a snowy day in Montreal, Alex decides to explore the city's vast Underground to visit a popular restaurant. Facing the complex network, he uses the Reso app to navigate efficiently, utilizing its features like points of interest, providing navigation, and real-time updates.

Storyboard

Beginning: Alex stands at the entrance to the subway station and uses Reso on his phone, an app that displays nearby attractions and the best routes, as well as a live map.

Middle: Inside the subway station, Alex follows the app's directions. He successfully navigates through the bustling corridors and stores, and passes other landmarks highlighted by the app.

End: Alex navigates his way from the subway to the Montreal street near the restaurant. He's smiling and pleased with the directions Reso provided, which made his journey smooth and enjoyable despite the inclement weather and unfamiliar surroundings.

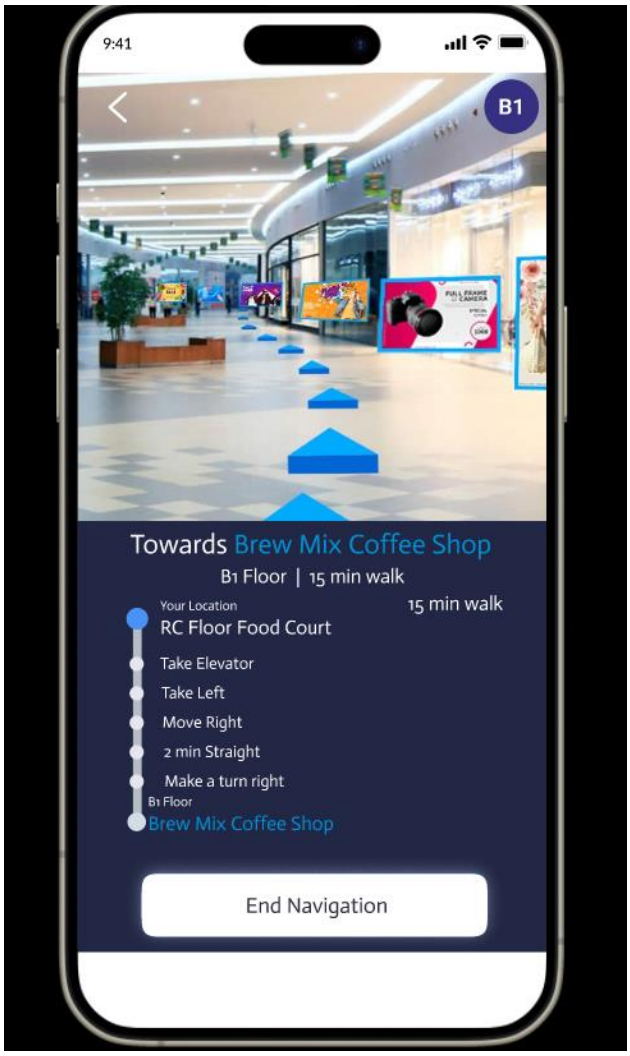
This storyboard not only captures the utility of the Reso app but also emphasizes Alex's positive user experience, which is essential for demonstrating the app's effectiveness in real-world scenarios.

4. Prototype overview

Introducing our mobile application prototype for the Montreal underground, the Reso. Our design philosophy is rooted in simplicity and user empowerment. The start screen is a reflection of the iPhone's home screen, featuring an easy to recognize app logo that symbolizes accessibility and familiarity.

We’ve chosen a minimalist approach, with the Reso’s signature blue color palette, to create an inviting atmosphere that encourages exploration. The interface is deliberately clean, with minimal text, to cater to a diverse user base, ensuring that language barriers do not hinder the experience. Simple, interactive map symbols guide users through the underground, replacing the need for excessive text and promoting a sense of confidence in navigation.

Our primary objective is to alleviate the common fear associated with underground travel—getting lost. By making the majority of screen elements interactive during the search, we provide a seamless and intuitive journey through the app, mirroring the ease of a well-guided commute. By having a live first-person navigation for everyone, including for individual with physical mobility issues, we further reduced the chances of getting lost. This design ensures that the app is approachable and straightforward for both first-time visitors and newcomers alike, as well as for everyone else.



In essence, our prototype is designed to make traversing the Montreal underground a stress-free and enjoyable experience, leveraging the power of familiar interfaces and intuitive design.

The Figma prototype can be visualized under https://www.figma.com/file/HR9pqN0eq1nhDU3KKtNgTt/INFS-627%3A-prototype?type=design&node-id=50%3A2&mode=design&t=50fhJqGB7OrRH5n4-1.

5. Feedback

Evaluation of the Prototype

The prototype was assessed through presentations and discussions, focusing on its design, functionality, and accessibility features.

Key Findings

- Design Quality: The prototype reflects a clear visual design and suggests careful consideration of user interface details.
- Accessibility Considerations: The discussions highlighted the prototype's approach to accessibility. The accessibility features could be enhanced by adopting a more nuanced understanding of different users' needs. This suggests a shift from a binary view of accessibility to a more user-specific approach.
- Clarity in Communication: There was some confusion during the presentation about whether the prototype was intended to incorporate augmented reality (AR) features. This indicates a need for clearer design of the navigation pages to ensure all functionalities and intended user experiences are easily understood. The misunderstanding about the AR functionality was unexpected and highlighted the importance of improving how the prototype's features are communicated.
- User Engagement and Data Accuracy: The prototype can include an additional feature that allows users to report inaccuracies in the information, with the system then displaying the corrected data. This feedback points towards a potential improvement in user engagement and data reliability, making the system more interactive and accurate over time.

6. Redesign

- Enhancing Clarity on AR Features: Add clear icons and tooltips to highlight AR features in the interface, ensuring users are aware of these functionalities from their first interaction.
- Refining Accessibility Features: Add a new customizable accessibility filter that allows users to specify personal preferences like 'avoid stairs' or 'avoid elevators', which the system will adapt to in real-time.
- Interactive Feedback Mechanism: Add a "Report" button for users to submit corrections on outdated or incorrect information, enhancing data accuracy through community involvement.
- Communication and Onboarding: Improve onboarding processes, including tutorial videos and guides to clearly explain each feature, avoiding any potential confusion about the system's capabilities.

7. Conclusion

To conclude, this essay has documented our journey in creating the Reso Montreal app. Detailing the steps of the formative evaluation process, described the persona, story board, and scenario, gave an overview of the prototype, provided the feedback process, and finally how we would design in it differently if we were to do it again.