

CASE STUDY

PROJECT DIRECTORS

BEN REIMER
BRENDAN HO
COLIN O'NEILL
KIET BUI

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Instructor: Myles Barlett
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01 ONTARIO PARK NAVIGATORS

OVERVIEW

Through a competition for the Design Exchange, we were tasked with improving on navigation within public spaces around Ontario. We worked in a group of four directors and had 3 design groups working for us to develop the concept into a summarized PDF format. For our project, our group identified the navigation of Ontario's Provincial Parks as a painful point of frustration for those with these needs.

PROBLEM

Ontario Provincial Parks can be difficult to navigate - especially for those with accessibility needs.

APPROACH

As a director group, we identified the problem space and a low-level conceptual solution for it before interacting with our designers. We then asked the designers to refine this concept to iterate toward a final product.

02 STAGES + OUTCOMES

STAGE ONE (PROJECT DEFINITION)

WE IDENTIFIED A GAP WITHIN...

During this stage, our director group kicked things off by establishing our team credo, charter, and completed a skills inventory. From there, we ideated on potential problems to work on, and unanimously agreed to tackle the problem space of navigating Ontario provincial parks.

WHAT ACTUALLY HAPPENED...

We decided the final product would be a mobile application that would increase usability for those with mobility and visual impairments at Ontario Parks.

WHAT WE LEARNED...

The project required a fair amount of conceptual process before moving onto the next phase. When we were given our first team we did not have a fully realized concept to give to them to develop.

HOW IT INFLUENCED OUR DECISION GOING FORWARD...

The next phase would be conducted by other designers, therefore this phase. Which could have been spent developing testing materials or even prototyping.

STAGE TWO (VISUALIZATION & PROTOTYPING)

We had designers conduct research into the proposed space to confirm our assumptions on the issues surrounding them as well as some mockups. The mockups however less so. There was a disconnect between our envisioned app and the first images we received.

WHAT WE AIMED FOR...

Validating our assumptions through research and a conception of how a solution pertaining to our idea would look like. Therefore, we wanted the first group of designers to give us some research that we can take forward as well as rough visualizations of a solution.

WHAT ACTUALLY HAPPENED...

What delivered was not backed up by research but it was instead built on assumptions. In terms of overall cohesiveness, the deliverables were disconnected and delineated from our original idea without solid rationale. This actually left us more confused. One significant conversation happened with a designer who enjoyed parks himself. He noted that at a personal level he felt against this app, that it was bringing phones into a place that people go to escape them.

WHAT WE LEARNED...

We learned that we should have processed our concept more in the first phase, as we had little direction to pass on to the first designer group outside of the desired research into parks and regulation surrounding them.

HOW IT INFLUENCED OUR DECISION GOING FORWARD...

We want to place more emphasis on a thoughtful solution backed up by thorough research. While we still want to give groups more freedom with their process, a more constant update process is needed.

STAGE THREE (ITERATIVE REFINEMENT A)

We had designers conduct research into the proposed space to confirm our assumptions on the issues surrounding them as well as some mockups. The mockups however less so. There was a disconnect between our envisioned app and the first images we received.

WHAT WE AIMED FOR...

Our goal of this stage, iterative refinement, was to build upon on the last.

WHAT ACTUALLY HAPPENED...

Our designers provided multiple style tiles, an improved user journey, personas, flow chart, and a medium fidelity app prototype. They went above and beyond what we expected.

WHAT WE LEARNED...

We learned that although the original development of the application was geared towards those requiring accessibility options, the user journeys and personas showed that as a whole there were many more applications for this specific application for park newcomers to help them feel more comfortable and plan their trips more effectively.

HOW IT INFLUENCED OUR DECISION GOING FORWARD...

The importance of giving them the freedom to take the brief and work with it. Finding the right balance between freedom and direction.

STAGE FOUR (TESTING)

WHAT WE AIMED FOR...

During this stage, designers were tasked to conduct usability tests on the interactive prototype completed by the previous designer team. Specifically, we wanted to validate the usefulness of our QR code functionality.

Deliverables included user task scenarios with a usability report, as well as three real-world application images.

WHAT ACTUALLY HAPPENED...

The user tests were of adequate quality, but the real world images were not. This was problematic as it meant they needed to be redone.

WHAT WE LEARNED...

Through the usability tests conducted, we gained several insights regarding the effectiveness of our solution.

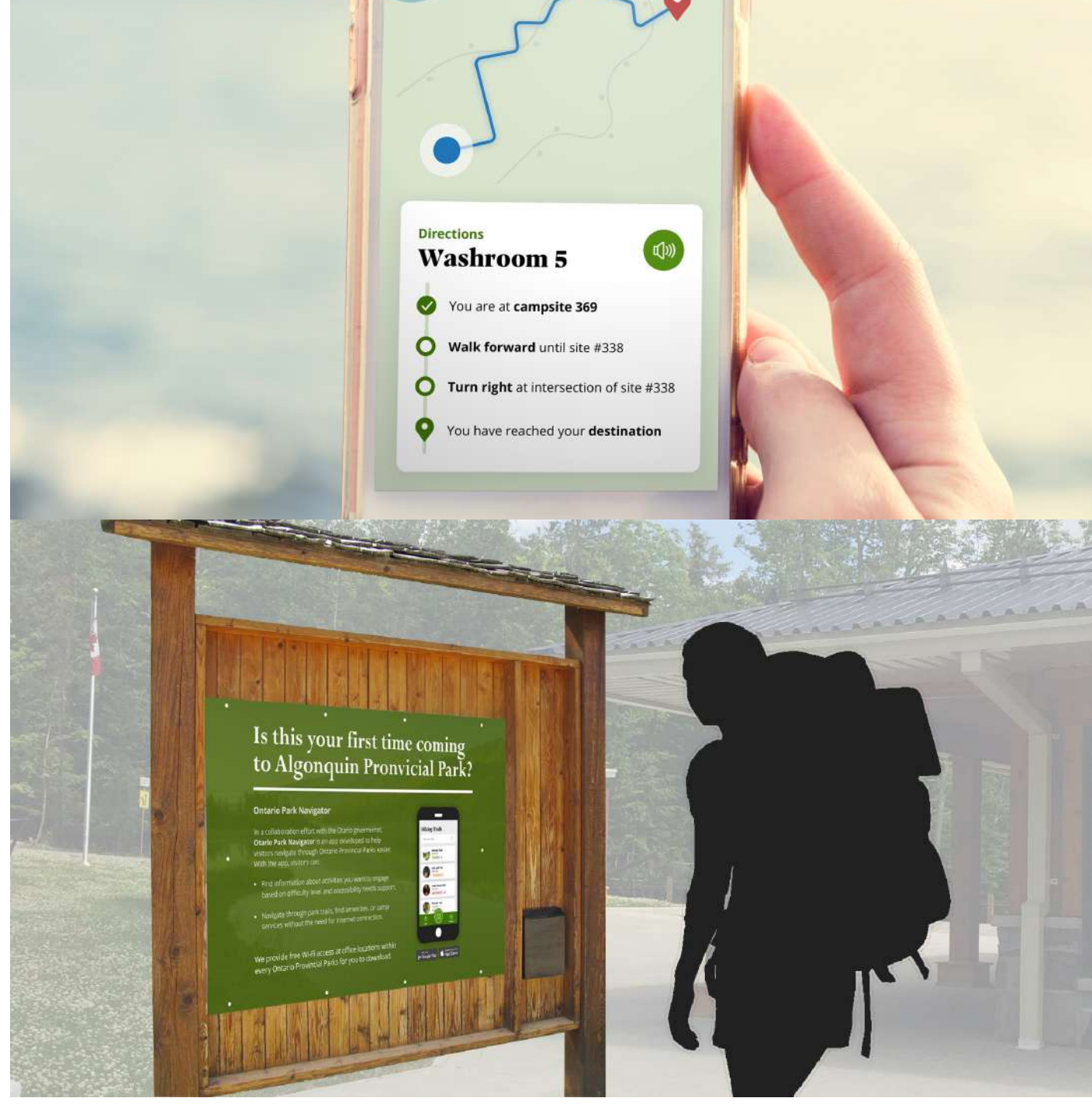
HOW IT INFLUENCED OUR DECISION GOING FORWARD...

The insights implied that changes were needed to the overall UI, and QR functionality. A specific suggestion made was to use a chip reader, or passable gates rather than a QR code. These would lower the amount of effort a user would need to expend while navigating.

STAGE FIVE (ITERATIVE REFINEMENT B)

We took the work our designers had given us and built upon it ourselves. Our outcome was Ontario Parks Navigator (OPN), an app to help visitors navigate Ontario Parks. Accessibility needs are selected within the app, tailoring the experience to match each visitor's individual needs. Aware that mobile devices may have limited cellular service in many park areas, OPN also uses physical markers at key locations, such as entrances to trails, that can be scanned to update the visitor's location within the app.

We're relatively pleased with the final outcome.



A few of the final mockups used in our submission.

PHASE 1 - VISUALIZATION, PROTOTYPING & MATERIALS

- Research
- Visualization and low-fidelity prototypes
- Kiosk/product display and design & placement

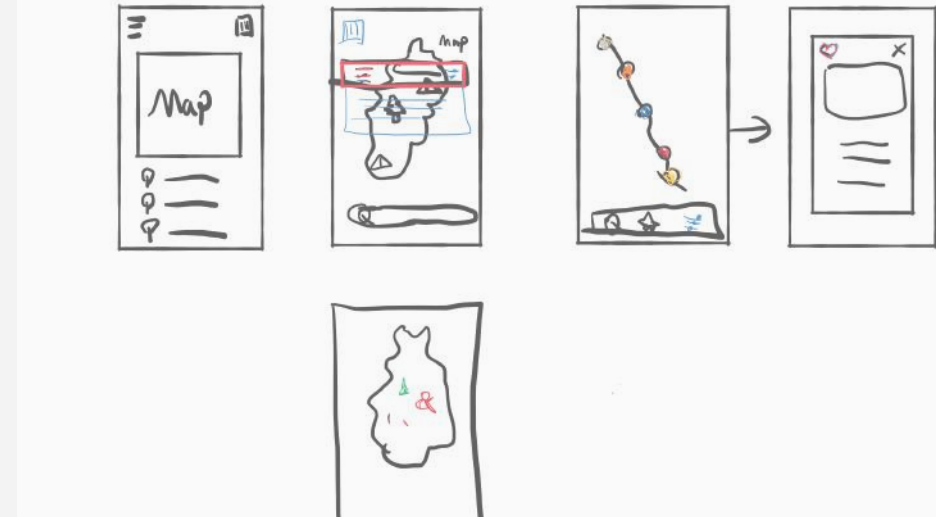
PHASE 2 - ITERATION & REFINEMENT

- Refinement of visualizations
- Polishing up the concept & prototypes, etc.

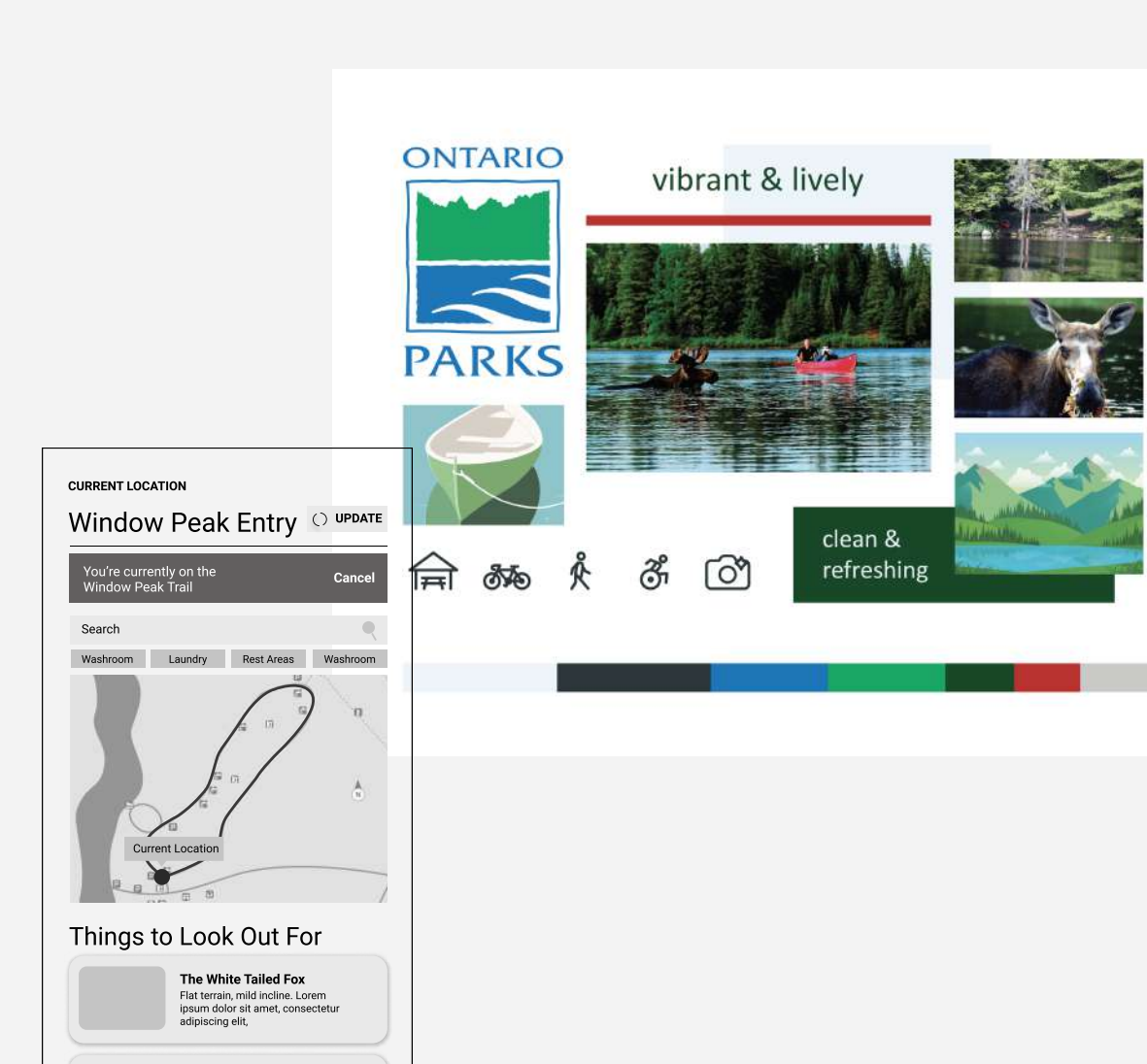
PHASE 3 - USER TESTING, FEEDBACK & REVISIONS

- High-level testing of concept
- Usability testing
- Revisions and improvements based upon feedback

Rough production plan we set during our initial meeting.



Assets created by the 1st designer team. We didn't end up using them.

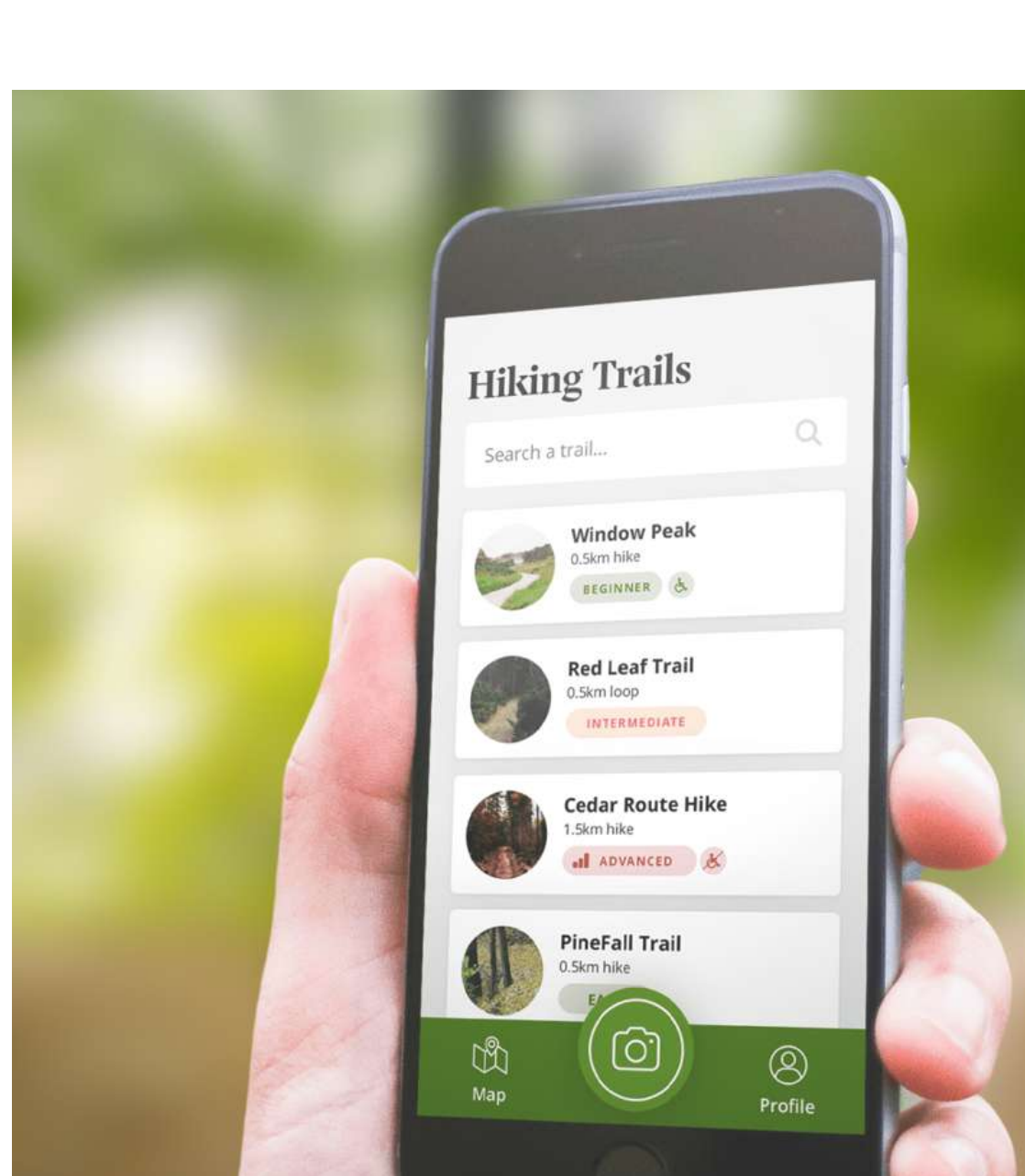


The second designer team provided us with clear direction, including moodboards, wireframes, and personas.

TASK #2 - INSIGHTS

SUCCESS RATE	TRAILS & DESCRIPTIONS	OVERALL EXPERIENCE
5/3 users completed the task successfully, but with frustration	Some users found the multi-step process of finding the directions to be confusing. Some users reported that, if the location had to be manually updated very frequently, they likely would not be interested in using the app.	Some users didn't like the lack of context on the signs with the QR codes. Some users found that the app didn't integrate well into their hiking experience. Some users wanted the app to update their location automatically, instead of manually.
Average inclusiveness rating: 1.8/5 Average ease-of-use rating: 2.7/5 Average enjoyment rating: 2.7/5	2/3 users found the markers and directions to be untrustworthy for first-time visitors. 2/3 users found the directions fairly easy to use, similar to Google Maps. 1/3 users expressed sadness that the app would disorient them from the experience of hiking and of enjoying nature.	Users liked that they didn't need to type anything.

We received useful insights for our solution from the third design team.



One of the final mockups we created.