Student Mobility Final Report

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Executive Summary

The Student Mobility team's objective is to foster a more responsive and usable transfer process among Ontario post-secondary institutions for transfer students.

Employing a user-centred design approach that places students' experiences at its core, our design solution aims to improve students' access to information and increase satisfaction during the process.This project is funded by the Ontario Council on Articulation and Transfer (ONCAT).

Our team conducted workshops with recent transfer students to understand their perspectives. Participants identified barriers to accessing resources as a key issue. We recognize that while technology is transforming how students pursue information, face to face interaction remains highly valuable for students. Our team has designed a mobile application - ONtrack. The application actively responds to students' expectations and needs by connecting them with the resources that will help them succeed

Problem Statement

How might we ensure students' timely access to essential information
while aligning their needs to the existing transfer process?

Student experiences are varied, with students pursuing post-secondary education at different periods throughout their lives as well as changing institutions and programs. Accessing and completing any kind of post-secondary education is difficult enough without having to face additional challenges from the academic transfer system.

The Student Mobility team has identified that the current solutions fail to meet the needs and expectations of the current generation of students, who consume information in a more dynamic, synthesized, and responsive manner in this data-intensive society.

User Research

From October to November 2018, the team conducted journey mapping sessions with students who had transferred between post-secondary institutions in Ontario. Out of 99 people interested in the study, 23 students participated, representing 20 institutions. Students were asked about their positive and negative experiences and the resources used while critically evaluating their effectiveness and helpfulness. The team concluded each workshop by asking what those students hoped to see in order to improve the experience of future transfer students.

*See Appendix B for the detailed user research protocol

23 Students

22 Transferred

20 Institutions

Workshops in:
Waterloo
Downtown Toronto
North York
Virtually

User Research Key Findings

The following is a summary of our findings from the journey mapping sessions. Responses from students who transferred from college to university through a pathway agreement (C > U), versus those who transferred between universities (U > U) have been noted. This report is organized chronologically by phases, however these phases can overlap or occur in variable order.

Definitions for the Purposes of this Report

Pathway students: students who transferred using a pathway agreement where credits from their sending institution map to degree requirements of their receiving institution.

Transfer advisor: staff member who deals with questions from incoming transfer students about any part of the transfer process. Association varies between institutions. Not all institutions have dedicated transfer advisors.

Academic advisor: staff member who provides academic counselling for specific programs or faculties within an institution. Sometimes called a student advisor or program counsellor.

Deciding and Researching

Students identified having difficulty knowing where to start, navigating resources and a lack of understanding of the overall process.

> *"I get things done mostly online."*
> *– Transfer Student*

Students prefer to find information online first, then contact transfer advisors with specific questions. Students who had friends or family at their receiving institution had an easier time finding information and adjusting. Most pathway (C > U) students found ONtransfer.ca to be very helpful, however most university (U > U) students did not use it or did not find it helpful.

Why do students transfer?

> *"I wanted to upgrade my credentials"*
> *– Transfer Student*

Reasons for transferring (C > U):

- Want to further/upgrade their diploma
- Issues with current program or location

> *"I wanted to live closer to home"*
> *– Transfer Student*

Reasons for transferring (U > U):

- Want to move closer to home
- Current program is not the right fit
- Do not like current school
- Another program interests them more
- Want better/other job prospects

Applying

Students find applying through OUAC and OCAS easy because they are familiar with these websites. After submitting these applications, students feel confused and anxious about their application; they want more follow up from institutions regarding the status of their application.

> *"One of the biggest hurdles was finding the right information."*
> *– Transfer Student*

Additional requirements vary by institution; students struggle to stay on top of deadlines and have to manage differing logins, emails, etc. Students would prefer to do all the application requirements through OUAC and OCAS.

They would also like an overview of the transfer process, including predictions of when they will receive responses (e.g. admissions, credit assessment, etc.).

> *"I talked to a transfer advisor at my new school, and they were really helpful."*
> *– Transfer Student*

Most students contact a transfer advisor at some point, finding them to be extremely helpful. Many students met with academic advisors at their new institution and found them to be helpful for degree planning, transfer credits, transfer credit mapping, new degree requirements and course registration.

Students often do not hear until months later that their transcript was submitted incorrectly and some schools require that students submit their transcripts twice, which is costly and stressful.

Pathway students (C > U) would like to see pathways displayed more prominently on institution websites.

Transferring Credits

Generally, there is a pattern that students who transfer within their first year are less concerned with how many credits will transfer at their receiving institution. Students who transfer after the first year and students who have completed a diploma (C > U) often make the decision of whether to (or where to) transfer based on the transfer credit assessment of their receiving institution.

> *"I had to keep calling and calling the school to get my credit assessment on time."*
> *- Transfer Student*

Students identified the lack of transparency and consistency in the credit transfer process to be a pain point.

> *"I know someone who got a credit transferred. But I didn't."*
> *- Transfer Student*

Students would appreciate more compassion in the credit transfer process, and a better understanding of how and why credit decisions are made. Some students were able to get assistance with transfer credits from their program's academic advisor.

Transition

Transfer students have mixed reviews about adjusting to their new institution.

> *"Did I make the right decision?"*
> *- Transfer Student*

> *"It was the best decision I made!"*
> *- Transfer Student*

Those who had friends and family at the receiving institution reported that the transition was easier. Students have difficulty accessing foundational support resources because these are marketed primarily to first year students. Students would like to see more student life follow-up at the receiving institution to ensure a smooth transition.

User Research Conclusions

We identified that students consider transfer advisors to be a valuable resource to navigate the transfer process. However, some students were unaware of or had difficulty contacting advisors. We also identified that students have difficulty navigating resources to find relevant information, while others struggled with an overload of resources, some of which were outdated. In an effort to find answers, some students turned to unofficial pages such as Reddit, which could provide misleading information. Some students found the institution websites and ONtransfer.ca helpful once they were able to connect with the appropriate information.

Our Proposed Solution : ONtrack

The Student Mobility team concluded that students experience challenges in finding the appropriate resources needed to facilitate a smooth transfer process experience.

ONTrack, A Mobile Application

Access to information should be efficient and easy to navigate. Our design solution seeks to guide students throughout their transfer process using a medium that fits into their existing patterns and caters to their needs and preferences for finding information, resources, and assistance. ONtrack will assist students during the transfer process by helping them anticipate future tasks and connecting them with the resources needed to complete them. It will also facilitate contact with transfer advisors, who are a valuable resource for students. This application will reduce the current barriers by allowing students to reach information, resources, and assistance more effectively.
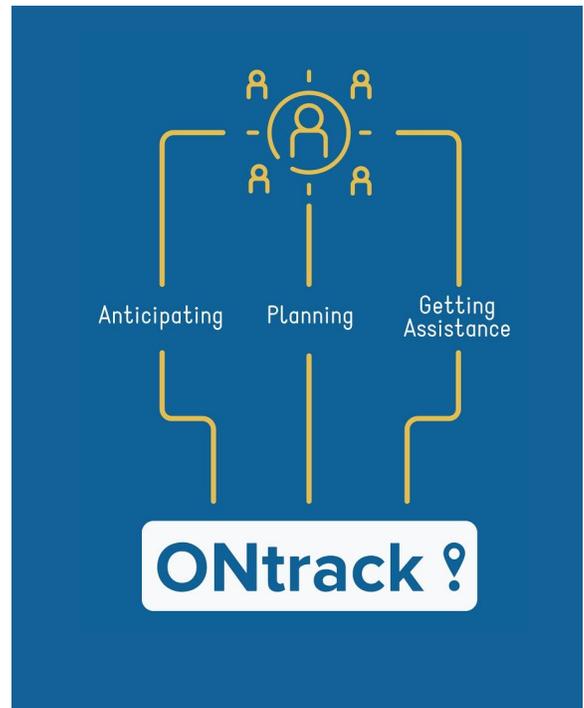
Core Features

App Features

This diagram shows the 3 core feature of ONtrack and the components of each.

ONtrack	Anticipating Tasks	Reminder/Notifications
		"To-Do" List
	Planning for Tasks	Calendar Integration
		Time Blocking
	Assistance with Tasks	Online Resources
		Contacting Transfer Advisor
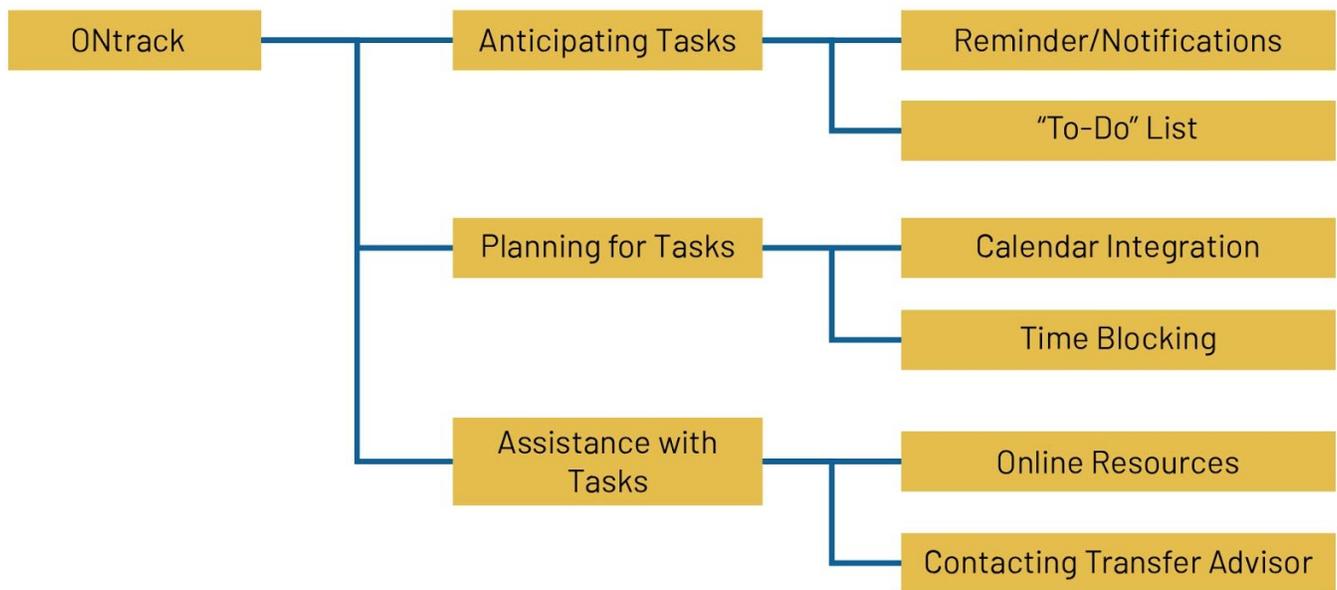
Link to the Interactive Prototype

To experience ONtrack, click the link below to access the clickable prototype.

http://bit.ly/ONTrackapp

Storyboard of the Features of the App

A filter feature for the visualization of tasks by individual institutions

Filtered to one university

Select advisor to contact
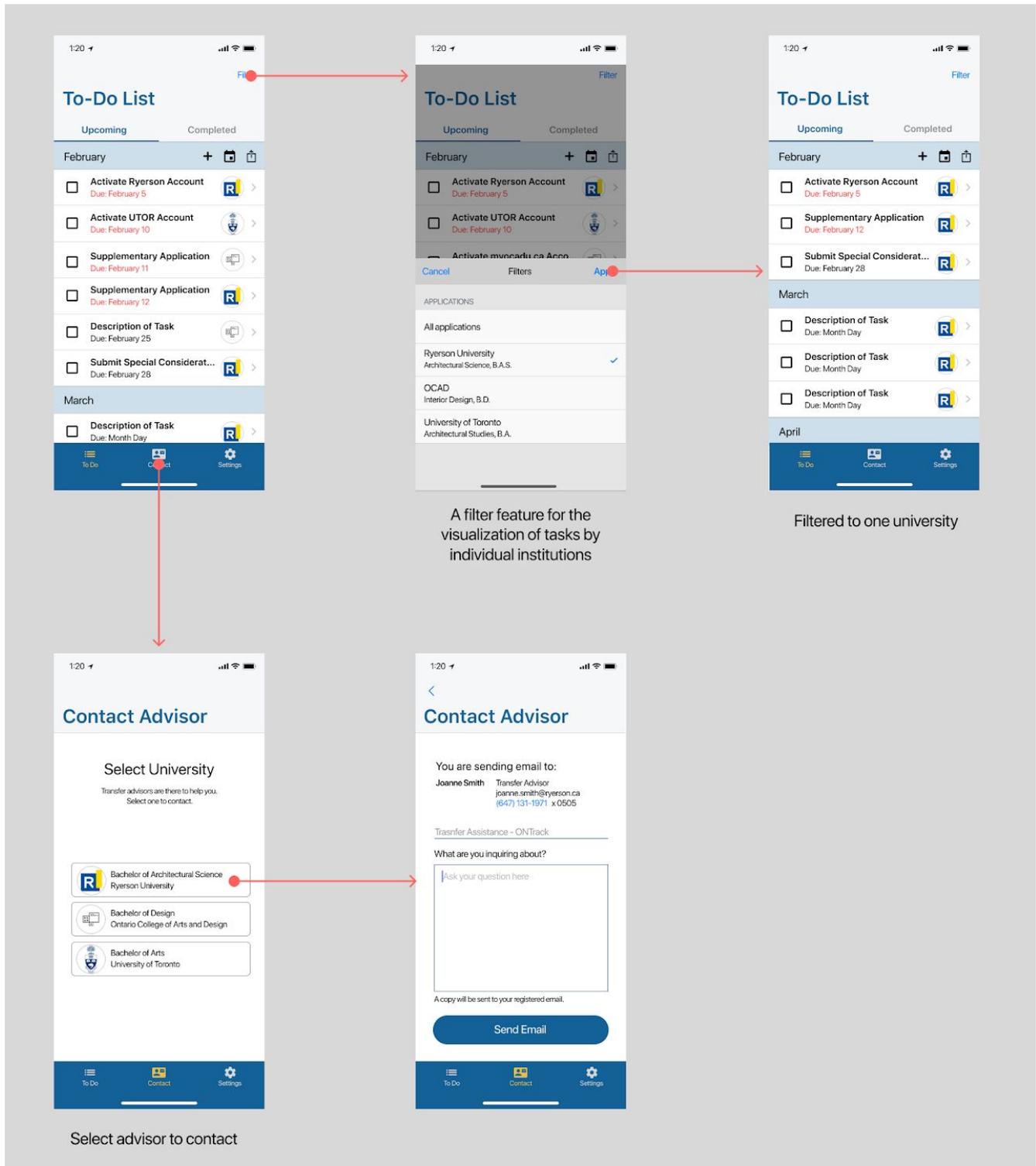
Calendar view that allows
exporting to other
productivity applications

A tab feature for the
visualization tasks by
Ongoing versus
Completed tasks
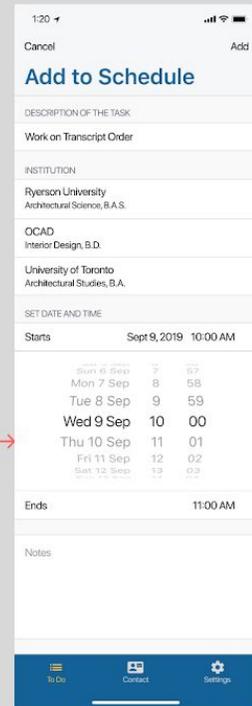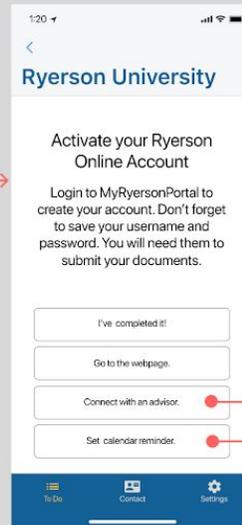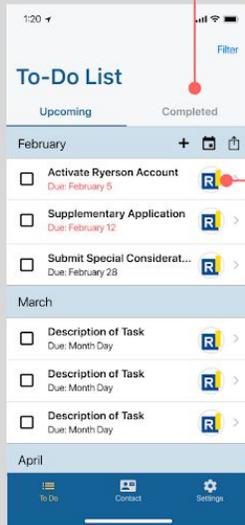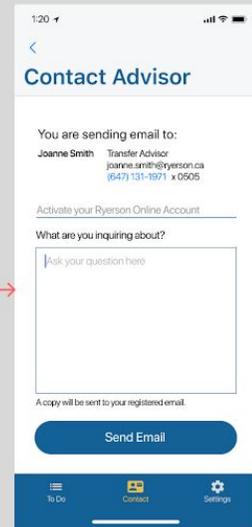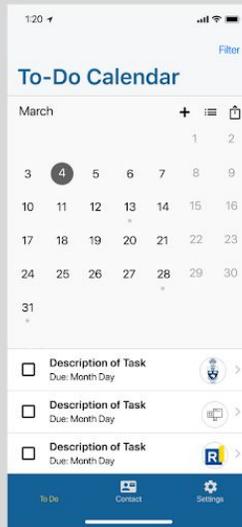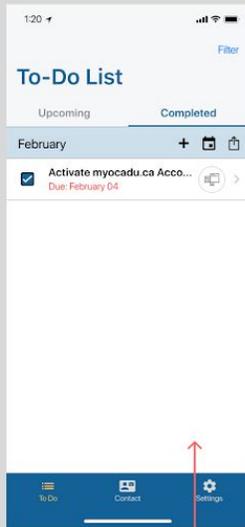
Filtered to one university

Filtered to one university

Link to Promotional Video

To watch the one minute video on the story of Alex, a transfer student, and how he uses ONtrack, click the link below to access the video.

https://drive.google.com/open?id=1jU3-rvpdeT8WOc6OOELiE9IhCl08X2Pp

Cycle of ONtrack

A Year in the Life of ONtrack

The diagram shows one transfer cycle of ONtrack, from preparing for users to collecting feedback for future improvements.

DATA	ONBOARDING	SUPPORT	FEEDBACK
August > September	September > January	January > September	September > October
Data collection from post-secondary institutions through smart AI (e.g. deadlines, required supplementary applications, off-campus housing resources, etc.)	Deadlines are published for the coming year.	Supporting users to: • Manage deadlines • Understand the overall process • Find appropriate resources • Connect with transfer advisors	Collecting feedback from users to improve future iterations of the application.

(ONtrack)

Integration

Integration with the Transfer System

ONtrack compliments the existing transfer system by guiding students to the most up to date information, resources and assistance. These partners direct students to ONtrack for support with their transfer.
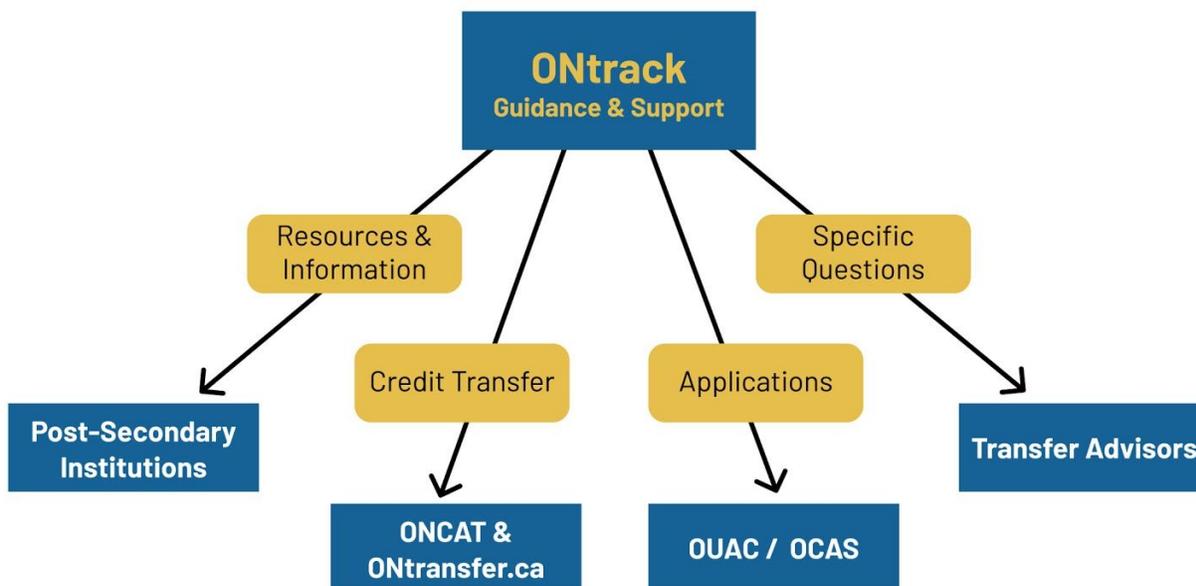
ONtrack Development

User Testing Protocol

During user testing, students were asked to interact with our clickable prototype and share their experience of navigating the different features of the ONtrack application. They were asked to provide feedback on the usefulness of the application for transfer students.

Students were given a scenario where they decided to transfer to another institution and after registering at OUAC they received an email invitation to download ONtrack. The app is advertised to send notifications for upcoming tasks, assist with time-management, and connect with the transfer advisors. Students were asked to interact with the prototype as if they have just downloaded it and opened it for the first time.

*See Appendix E for the detailed user testing protocol.

26 Students

3 Iterations

Workshops in:
Toronto
Waterloo
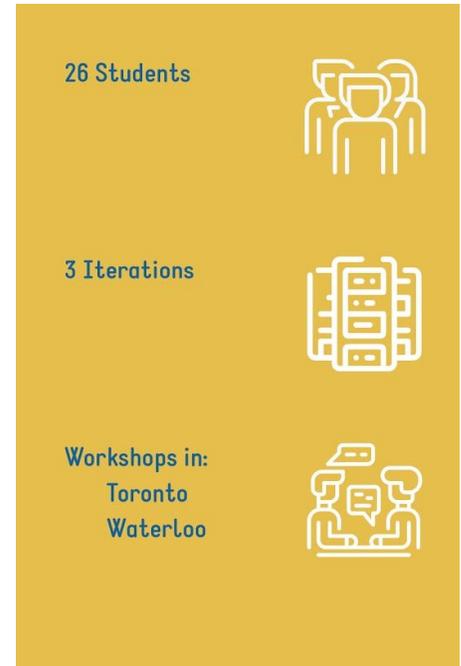
User Testing Findings

The following are the results of testing evolving iterations of our design solution. The final solution incorporated feedback from students who had completed a transfer and students who had not completed a transfer.

*See Appendix D for the User Research Findings Full Report.

CONTACT ADVISORS

The ONtrack's "Contact a Transfer Advisor" feature was the most appreciated by users. The presence of transfer advisors was made evident throughout the app.

"I like how advisors are very accessible. It's not replacing the human element and [the] talking to the human piece is not forgotten"

– Anonymous

USER INTERFACE

We improved the information hierarchy over several iterations through text size, boldness, and the use of colour. We used the iOS Human Interface Guideline as the basis of the design of the app's UI. We used natural language throughout the app, added original illustrations, and changed labels to reflect the users' mental model in order to create a welcoming atmosphere.

TO-DO LIST

The user testing sessions prompted major changes to the to-do list and the task feature of the app. Reflecting the users' expectations for an overview of all upcoming tasks (rather than one at a time), the to-do list was introduced. From the to-do list, students are able to click into a more detailed task page. Rather than having a separate calendar, the to-do list is presented in the calendar view. Furthermore, we added filtering options for each program application. We integrated a feature to export the to-do list to the student's current productivity applications, such as Outlook or Google Calendar. All our participants expressed interest in non-academic task notifications. Therefore, we have decided to automatically turn this feature on, with the option to unsubscribe in the settings.

Through different iterations, we also made the following changes:

- Informed users that a copy of the email will be sent to the student before sending the email, instead of after as a pop-up confirmation
- Added a subject line with an option to edit it in order to make emails more personal
- The contact information of the transfer advisors is displayed, as students were actively seeking this information

Usability of ONtrack (Using System Usability Scale)

Scale: 1 - Strongly Disagree -------------- 5 - Strongly Agree

Attractiveness of ONtrack

I think that I would like to use this app frequently.

23 responses
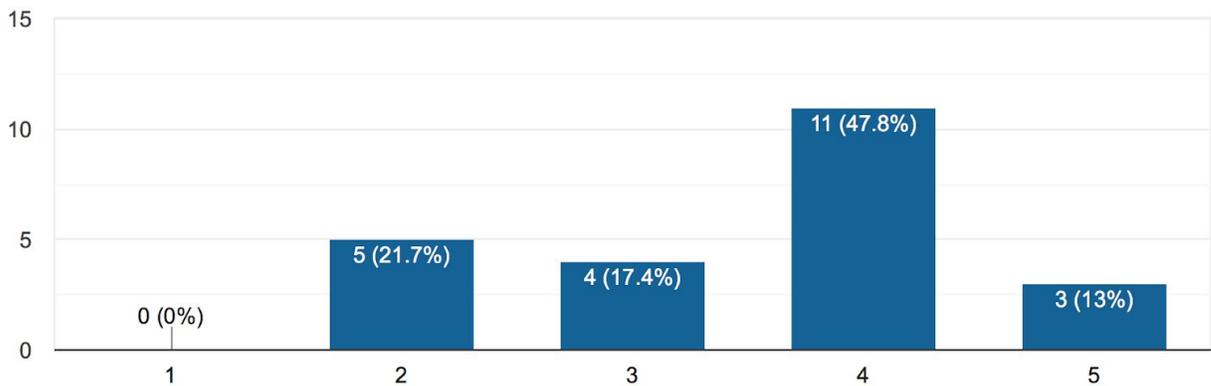
Easiness of Usage

I thought the app was easy to use.

23 responses
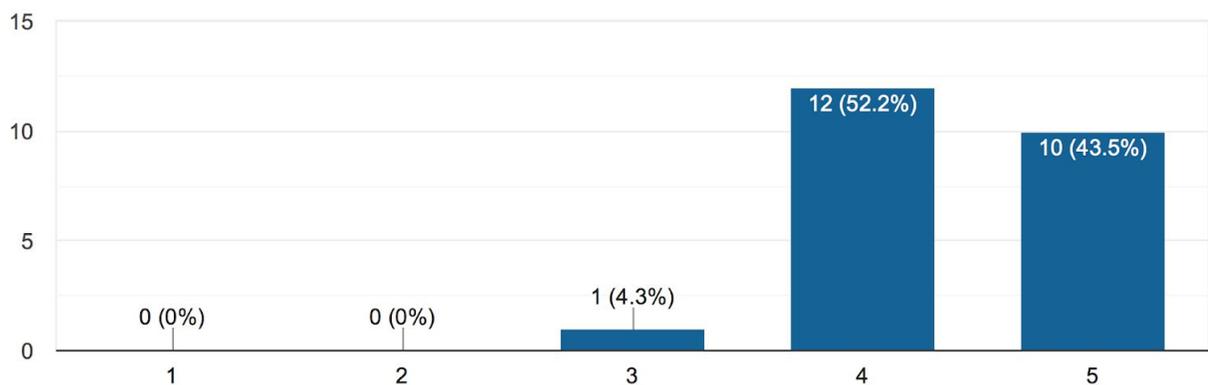
Integration of ONtrack

I found the various functions in this app were well integrated.

23 responses
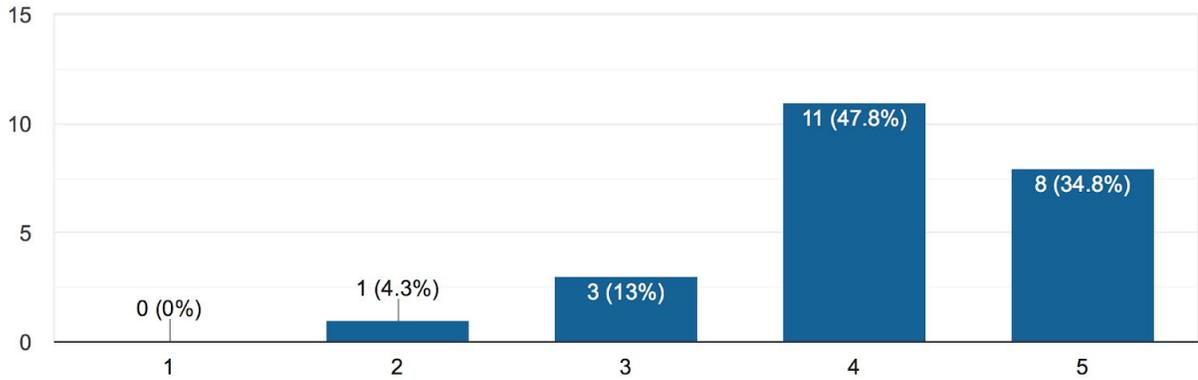
Helpfulness of ONtrack

If I had the app when I was transferring, it would have been very helpful.*

7 responses
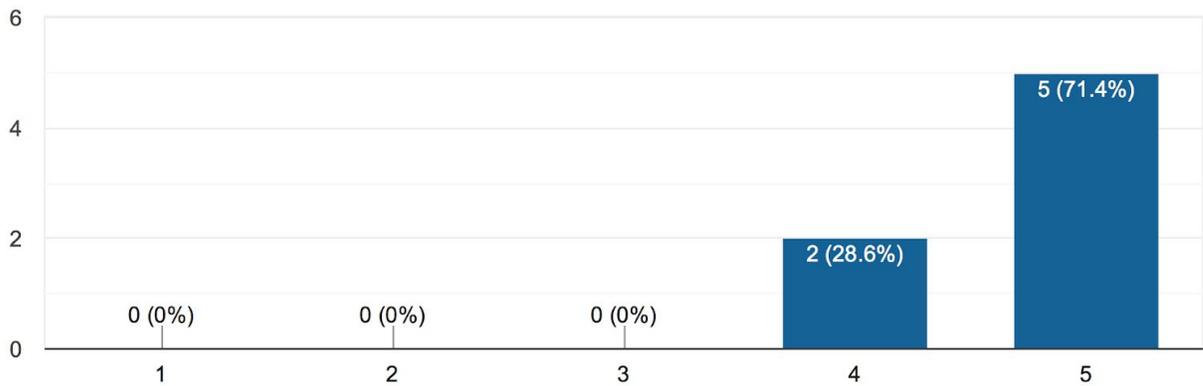
Next Steps - Research, Design, and Development

Scalability Plan

- Short-term goals - from August 2019 to September 2020
    - ONCAT will conduct a review of the transfer process in Ontario's post-secondary institutions
        - Collect information on post-secondary institutions transfer systems: deadlines, process, staff involved in transfers, student facing points of contact, etc.
    - Promote ONtransfer.ca to make it more visible
        - Collaborate with OUAC/OCAS more to promote ONtransfer.ca services
    - Implement student feedback in the redevelopment of ONtransfer.ca
- Medium-term goals - from September 2020 to September 2023
    - Make regular updates that align with the needs of current students so that ONtransfer.ca is reliable and helpful
   - Two options moving forward:
        - Overhaul of ONtransfer.ca: changing interface of the web, making the information more accessible and making their website more phone-friendly
        - Develop the ONtrack app: begin development and testing of a mobile application that incorporates the key features students have identified as priorities
- Long-term goals - from July 2021 to August 2025
    - Integrate the ONtrack features (such as reminders/notifications, task overview and calendar, direction to information and assistance with tasks, and contacting a transfer advisor) into the ONtransfer.ca updates; or
    - Create the ONtrack App
        - IT department creates the interface for the app
        - Develop and test AI to find links to the proper resources and pages
        - A contact from each post-secondary institution reviews the links to the data needed (Refer to Appendix H) and ensures information is correct
        - The information in the links is updated periodically to ensure accuracy for users

Other Opportunities for ONCAT and Institutions

The following are solutions, opportunities and new ideas that we heard from students during our user research. For more information on students desires and challenges, refer to the Research Findings Report (Appendix D).

Students would like to see:

- Increased access to transfer advisors as points of contact and "connectors" to other resources.
- Improved information "searchability" on institution websites.
- A step-by-step guide online for how to navigate the transfer process, and then the opportunity to contact transfer advisors for clarifying questions. Students generally prefer to contact transfer advisors by email.
- Direction to academic advisors at the receiving institution to deal with issues such as transfer credit mapping, transfer credit mistakes, course registration, etc.
- More information on ONtransfer.ca, particularly for university transfer students.
- A transfer advisor who is not bound by any institution and could answer students questions about transferring more generally.
- More pathways for all kinds of study (including online, part-time, etc.).
- Encouragement for institutions to interact directly with each other (e.g. regarding transcripts).
- Prioritizing credit assessments to ensure they are sent prior to or with an offer of admission.
- Comprehensive assistance with housing (but not a PDF which will quickly become outdated).
- A more personable transfer process

- More support during the transition at the receiving institution. Suggestions included a Student Life Liaison, a Transfer Club or peer mentoring (refer to Appendix D).
- More follow-up communication after applications have been submitted regarding the status of the application, remaining requirements to be completed, upcoming deadlines, reminders for these requirements, etc.
- All requirements integrated into OUAC/OCAS rather than each institution having an individual differing systems.
- Encouragement for institutions (that do not already do so) to recognize combined transfer credits to meet learning objectives of equivalent courses.
- More university recognition of college transfers over high school students (more post-secondary experience, more independent, lower average grade drop than high school, etc.).
- Adaptability for contacting transfer advisors (e.g. virtually by Skype, etc.) for those students who wish to meet face-to-face but are living in another city.
- A portal or system to see an overview of transfer flow (e.g. documents and processes) from one institution to another – like package tracking for shipping products..

Conclusion

Our design solution comprehensively addresses key challenges faced by today's transfer students. The user-centred design process placed students at the centre of the design process to reveal how the transfer system could be changed or improved for future students. The research and suggestions in this report represent the lived student experience of transferring between institutions in Ontario.

With the dynamic and technology based nature of today's post-secondary landscape, students expect a more responsive, adaptive and efficient transfer system. The proposed solution, ONtrack, by the Student Mobility team is a tool that connects students with the resources they need to navigate the transfer system in Ontario and successfully change post-secondary institutions.

As students move through post-secondary education, the transfer system must encourage their desires to pursue diverse opportunities without posing barriers. These systems and processes should reflect the needs and values of the students they serve at their core.

Student Mobility Final Report Appendices

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Appendix A - Recruitment Screener

The following screener questions will be asked in form of a google form:

- Are you over 18 years old?
    - ___Yes
    - ___No *<If no, thank them for their time>*
- Are you currently pursuing studies in an accredited academic institution?
    - ___Yes
    - ___No *<If no, thank them for their time>*
- Have you transferred from an institution outside of Ontario?
    - ___Yes *<If yes, thank them for their time>*
    - ___No
- Have you transferred programs within the same institution?
    - ___Yes
    - ___No

Appendix B - User Research Protocol

Participants:

> Students who have completed a transfer process between two or more institutions in Ontario

Number of Participants:

> 25

Length of Activity:

> 1 hour

Items in the Tool Kit:

- Procedure worksheets for each researcher
- Camera
- Sticky notes (different colours)
- Notebook or recording device
- Pencils
- Pens
- Markers
- Journey Handout

Research Question:

What was the overall student experience with the transfer process?

Summary of the Activity

Students will be asked to share their transfer journey from beginning (the moment they considered transferring) to the end. They will be asked to plot their experience on a journey line. They will then be asked to highlight positive and negative aspects of the process using colour differentiated sticky notes.

Instructions:

1. Greet the participant(s)
2. Give the participant a brief overview of the lab and the project.
3. Icebreaker.
4. Hand out and discuss the consent forms and get permission to document the session.
5. Turn the documentation devices ON.
6. Hand out the journey map worksheet.
7. Ask the student to tell us about their transfer journey from beginning to end, and map it on the handout provided however they feel is appropriate. Use as many sheets as needed. Encourage the participant to talk out loud as they fill in the map.
8. Hand out pink sticky notes, and ask the student to comment on pain points in the process.
9. Hand out yellow sticky notes and ask the student to comment on positive points in the process.
10. Debrief. Ask participants if they have any questions or concerns about their experience.
11. Complete demographic and gift card survey.

Probing Questions

These questions will be used to move the conversation along and to point indirectly to the topics of interest.

- Where did you look for help?
- Did anything stand out?
- Did you transfer credits? Can you tell me about that process?
- If you could, how would you change the transfer process?

Background Information From Each Participant

- Did you transfer within your institution or between institutions?
- When did you start at the new program (month, year)?
- Between college and university or from a university to another?
- How many courses did you intend to transfer?
- How many of those courses were you able to successfully transfer?

General Topics of Interest (Data to be collected, not asked):

- What resources were used (ONCAT, ONtransfer.ca, institutions, faculty, etc.)?
- What resources were most useful/valued?
- What resources were least useful/valued?
- What steps were taken?
- Where did students seek advice?
- What frustrated students?
- What did students find easy and intuitive?
- Should the credit transfer request be handled/processed/evaluated digitally or manually?

Appendix C - User Research Script

<u>Introduction & Greeting:</u>

Hello. I'm [moderator]. Thank you for taking the time to participate in this study. How are you doing today?
Today, you're going to help us get a better understanding of the student transfer experience. Before we begin, I would just like to emphasize that we are conducting this workshop to hear your personal experience so there are no wrong answers. We want to know your thoughts on the experience, what you liked, disliked, or found confusing. You are also allowed to stop the study at any time.

_1-on-1:_ I'd like you to think aloud, voicing your thoughts as often as you can. Since thinking out loud can be an unfamiliar process, during the interview I might remind you to share your thoughts.

If you have questions at any point, please don't hesitate to ask. Do you have any questions so far? [note-taker] & [observer] are here to help me take some notes and observe the proceedings. To analyze the data with most unbiased approach, we will audio record the interview. The audio recording won't be shared with anyone except the people working on the project. **Are you okay with this?**

We will also take photographs to document the session. The photos may be used to present research findings to the stakeholders. **Are you okay with this?**
(**_If not_**: would you be ok with being photographed from an unidentifiable position?)

[Give consent form, photo release form for participant to sign.]

Alright, let's get started with an icebreaker.

<u>Icebreaker:</u>

[Turn recording device on.]

Please introduce yourself. You can share your current program and one interesting fact about yourself. (maximum 10 min, 2 min per participant).

Great, thanks for sharing (everyone). We're going to move onto the interview.

<u>Journey Mapping Session:</u>

We are going to be doing an activity called journey mapping.
[Hand out the journey map worksheet and pens.]

I would like you to write about your transfer journey from beginning to end, and map it on this handout. You can write anything you feel is appropriate. You can use as many sheets as you need.

One on one: As we mentioned before, we would like to encourage you to voice your thoughts as you go through this process.

(Check responses against topics of interest and guide student to elaborate on those areas)
Questions for Elaboration

- Where did you look for help?
- Did anything stand out?
- Did you transfer credits? Can you tell me about that process?
- If you could, how would you change the transfer process?

[Hand out blue sticky notes.]
Now that you have your journey map in front of you, I want you to use these *blue sticky notes* to indicate positive points in the process. Elaborate: what made these experiences positive.
(**Group:** Let's share some of those experiences! [sharing] If anyone would like to add anything to their map you can do so now.)

[Hand out pink sticky notes.]
Now, use these *pink sticky notes* to indicate any pain points in your journey. Write about anything frustrating, you didn't understand or you were unsatisfied with. Elaborate: what made these experiences difficult?
(**Group:** Does anyone want to share their thoughts? [sharing] If anyone would like to add anything to their map you can do so now.)
Rate these challenges: what you'd like to see improved first, with 1 being your top priority.

[Hand out green sticky notes.]
Finally, you will use *green sticky notes* to write how you think the process could be improved. You can write any idea/solution you have that could make a specific experience point better. We would also encourage you to add any other comments you feel are important.

Debrief:
Thank you so much for walking us through your experience. Do you have any questions concerning the journey mapping session?

To end our session, please fill in the Background Information page. Keep in mind that your journey map will be anonymized and will be made unidentifiable.
[Hand out additional Background Information pages]

Thank you for taking the time to participate. Have a great day. You will be receiving your $25 Amazon gift card from eCampusOntario in approximately __ days.
[Turn recording device off.]

Appendix D - User Research Findings Full Report

The following is a summary of our findings from the journey mapping sessions. Responses from students who transferred from college to university through a pathway agreement (C > U), versus those who transferred between universities (U > U) have been noted. This report is organized chronologically by phases, however these phases can overlap or occur in variable order.

Definitions for the Purposes of this Report

Pathway students: students who transferred using a pathway agreement where credits from their sending institution map to degree requirements of their receiving institution.

Transfer advisor: staff member who deals with questions from incoming transfer students about any part of the transfer process. Association varies between institutions. Not all institutions have dedicated transfer advisors.

Academic advisor: staff member who provides academic counselling for specific programs or faculties within an institution. Sometimes called a student advisor or program counsellor.

Deciding and Researching

Key Findings

The most common reasons we heard for students deciding to transfer were wanting to move closer to home (U > U), not liking their current program (U > U) and wanting to upgrade their diploma (C > U). Students identified having difficulty knowing where to start, navigating resources and a lack of understanding of the overall process.

Students prefer to find information online first, then contact transfer advisors with specific questions. Students who had friends or family at their receiving institution had an easier time finding information and adjusting. Most pathway (C > U) students found ONtransfer.ca to be very helpful, however most university (U > U) students did not use it or did not find it helpful.

All Findings
- Reasons for transferring (C > U):
  - Want to further/upgrade their diploma; or
  - Issues with current program or location (e.g. expenses)
- Reasons for transferring (U > U):
  - Want to move closer to home – most common (however, some of these students identified that they did not want to live at home during their studies);
  - Current program is "not the right fit" – second most common;

- o Do not like current school;
- o Heard about another specific program that interests them more; or
- o Want to change programs due to future job prospects
- Students often don't know where to start, and begin the research process by Googling how to transfer. Students may also begin by contacting an advisor at their current institution.
- Most students identified that instructions were unclear, confusing and hard to find.
- Students primarily consult institution websites when searching for information on transferring.
  - o Most students found (a variety of) institution websites to be challenging to navigate. Common complaints included:
    - ▪ Buried information;
    - ▪ Unhelpful navigation loops; and
    - ▪ Information that conflicted with personal communications (email, phone, etc.).
  - o Institution websites are geared to high school applicants, and transfer students have difficulty finding information that is relevant for them.
- Most students prefer to find information independently first, and then contact transfer advisors with specific questions.
  - o Most students prefer email correspondence with transfer advisors.
- When students cannot find the information they are looking for, they often turn to "unofficial" sources, such as Reddit, Facebook, Yconic, etc.
- Students generally had an easier and better transfer experience if they knew:
  - o Another student (friend or family member) at their prospective program or institution;
  - o A friend or family member in city of their prospective institution; and/or
  - o Another student who had completed a similar transfer.
- Students asked these connections questions about the new institution's environment, Residence, the campus, city, course registration, unique program requirements, etc.
- More pathway students (C > U) found and used ONtransfer.ca than university (U > U) students.
  - o (C > U): Many students found it helpful, however some identified that information for their pathway was out of date.
- (U > U): Many students did not use ONtransfer.ca, and of those students who did, most did not find it to be helpful. Almost all students identified that it did not have any or up to date information on their transfer credits.

Applying

Key Findings

Students find applying through OUAC and OCAS easy because they are familiar with these websites from high school. After submitting these applications, students feel confused and anxious about their application; students want more follow up from institutions regarding completing requirements and the status of their application. Additional requirements vary by institution; students struggle to stay on top of deadlines and manage differing logins, systems, emails, etc. from prospective institutions. Instead students would prefer to do all application requirements (including supplementary applications, forms,

etc.) through OUAC and OCAS. Generally, students would like an overview of the transfer process, including predictions of when they will receive responses (e.g. credit assessment, acceptance, etc.).

The majority of students contact transfer advisors at some point in their transfer, and students find transfer advisors to be extremely helpful. Many students also met with an academic advisor (or program counsellor) at their new institution and found them to be very helpful for degree planning, expected transfer credits, transfer credit mapping to new degree requirements and course registration.

Transcripts were another key pain point; students often do not hear until months later that their transcript was submitted in an incorrect format and many schools require that students submit their transcripts twice, which is costly and stressful. Overall, pathway (C > U) students would like to see more information on pathways and information more prominently displayed on institution websites. Students had difficulty finding pathway information. Below is an in-depth summary of findings we gathered for this stage.

All Findings
- Students like using OUAC and OCAS because they are familiar.
- Following submitting applications, students felt confused and concerned about the status of applications, for the following reasons:
  o The institution did not acknowledge receipt of the application.
  o The institution acknowledged receipt of the application and sent no further communication for months.
  o See also: Transcripts (below)
  o Generally, students want more follow up communication (after they have applied) regarding the status of their application and requirements they have not yet fulfilled.
- Students struggle with supplementary applications and requirements (after applying through OUAC/OCAS) because:
  o They do not know that there are additional requirements;
  o They do not know when the deadlines are;
  o They struggle to keep track of different deadlines, systems, logins, emails, etc. for different institutions.
- Students would like to see all requirements merged into OUAC/OCAS so that there is a single system to deal with their transfer.
- Advisors
  o The majority of students interacted with a transfer advisor at some point during their transfer process. Transfer advisors helped with:
    ▪ Understanding the overall process;
    ▪ Answering specific questions (often transfer students have unique circumstances);
    ▪ Clarifying supplementary requirements;
    ▪ Application status follow-up.
  o Overall, students find transfer advisors to be extremely helpful.
  o Some students had difficulty contacting a transfer advisor for the following reasons:

- Did not know about transfer advisors;
- Could not find the transfer advisor's contact information;
- Did not know whether to contact the current or prospective institution's advisor.
  - o Students would like to see transfer advisors act as points of connection to other staff supports and resources.
  - o Students who spoke with an academic advisor (program counselor) at their new institution generally found it to also be very helpful. Academic advisors helped with:
    - Predicting transfer credits and correcting credits that had been incorrectly assessed during admissions;
    - Course selection and pre-requisites;
    - Mapping completed (transferred) credits to new degree requirements;
    - Degree planning (courses needed to graduate and schedule for completing degree).
  - o Some institutions *require* that transfer students meet with an academic advisor.
  - o Some students who did not meet with an academic advisor faced challenges with mistakes in credit assessments or credit mapping towards degree requirements.
- Transcripts
  - o Institutions have very specific requirements for how transcripts should be received. Students find it hard to accommodate and keep track of these differences.
  - o Students often do not hear that they have submitted documents in an incorrect format until much later in the process, and much closer to the deadlines for submitting these documents.
    - Document processing takes a long of time. Students sometimes do not have enough time or feel stressed about getting documents submitted on time.
  - o Many schools require transcripts be sent twice (at the time of application and again after final marks are released).
    - Many students were not aware they were supposed to submit their transcripts again, and struggle to get their documents submitted by the deadline.
    - Students are frustrated that they must pay to have transcripts sent twice.
- Students (C > U) would like to see:
  - o More information on pathways;
  - o Pathway information more prominently displayed on institution websites;
  - o More information earlier on (e.g. around high school) on pathways for GED students.
- Transfer deadlines are limiting – students who decide they want to transfer early (e.g. around September/October) often have to wait a full year before they are able to change institutions.
- Students want a general timeline for deadlines for requirements, as well as predictions of when they will receive their credit assessment, acceptance/refusal, etc.
- Students struggle to manage different application requirements for each institution with their current studies and maintaining their desired grades.
- A few students identified the cost of transfer as a barrier. They also identified the minimum number of applications as a pain point: often transfer students have a clearer idea of where they would like to transfer to, and do not want to pay for 3 (OUAC) or 5 (OCAS) applications.

Transferring Credits

Key Findings

Generally, there is a pattern that students who transfer within their first year are less concerned with how many credits will transfer to their prospective institution. Students who transfer after first year and students who have completed a diploma (C > U) often make the decision of whether to (or where to) transfer based on the transfer credit assessment of their prospective institution. Students identified the lack of transparency and consistency in the credit transfer process to be a pain point. Students would appreciate more compassion in the credit transfer process, and a better understanding how and why credit decisions are made. Some students were able to get assistance from their program's academic advisor.Below is an in-depth summary of findings we gathered for this stage.

All Findings

- Students have mixed reviews of their credit transfer experience.
    - Some students identified not getting as many transfer credits as they had hoped as a pain point in the process, others were happy with the process and how many credits they received.
- Generally, there is a pattern that students who transfer within their first year are less concerned with how many credits will transfer to their prospective institution. Students who transfer after first year and students who have completed a diploma (C > U) often make the decision of whether to (or where to) transfer based on the transfer credit assessment of their prospective institution.
- Because students in upper years are very concerned with getting their credit assessment prior to making a decision, the following are issues that many upper year students identified as pain points in the process:
    - Students must constantly follow-up on the credit assessment and push the admissions department to complete it prior to the deadline to accept an offer;
    - Students do not get a transfer credit report before the deadline to accept an offer (not institution policy to do so);
    - Students receive conflicting messages regarding their transfer credits.
- Inconsistency and lack of transparency
    - Students generally seem to distrust the credit transfer process (perhaps due to having heard "horror stories" of those who were prevented from graduating due to transfer credits being improperly applied to degree requirements).
    - Students do not understand why others who have made similar or identical transfers are granted different credits.
    - Students would like more compassion from institution staff when dealing with credit transfer. Students identified receiving no response, unkind responses and feeling "brushed off."
    - Generally, students who spoke with academic advisors about their credit transfers had a clearer idea of why credits were not granted or failed to map over to their new degree. Academic advisors often correct mistakes in the credit transfer process.
- Misinformation about path to graduation (C > U)

- Several (C > U) students experienced a miscommunication or outdated information about their projected path to graduation
- Students would like to be able to amalgamate multiple credits to cover the learning objectives of an equivalent required course.
  - Some institutions do this, some either do not offer this or students are not aware that it is an option.
  - This a pain point for pathway (C > U) students in particular.

Transition

Key Findings

Transfer students have mixed reviews of adjusting to their new institution. Those who had friends and family at the receiving institution generally reported that the transition was easier. Students have difficulty accessing foundational support resources because they are primarily marketed at first year students. Overall, students would like to see more student life follow-up at the receiving institution to ensure a smooth transition. Some students would prefer to have a transfer student specific orientation, and some would prefer to join the first year orientation.

All Findings

- Transfer students have a harder time accessing foundational guidance and resources at their new institution (such as counseling/mental health support, academic support, career guidance, etc.) because:
  - These resources are primarily marketed to first year students (e.g. through Residence) and transfer students often merge into upper years or choose not to (or are not permitted to) live in Residence;
  - Similar resources have different names at different institutions (e.g. Centre for Student Development and Counselling versus Student Success Office); and
  - Students do not know what resources are available to them.
- Orientation: Students want the option of a separate orientation for transfer students or attending first year orientation.
  - Most institutions did not offer a transfer student orientation.
  - Students do not want a transfer orientation combined with other groups (such as international exchanges) who have very different experiences.
- Many students identified having difficulty adjusting to their new institution initially, due to:
  - Age/experience gaps with peers, feeling awkward;
  - Difficulty making friends (particularly those who transferred into upper years);
  - Loneliness or isolation;
  - Differing expectations or workload (C > U);
  - Difficulty with different processes and systems (e.g. for course registration);
  - Difficulty accessing resources; etc.
- Students would like to see a general student life "follow-up" for transfer students to ensure this adjustment is going ok.
- Several students suggested similar solutions: a Student Life Liaison, a Transfer Club or peer mentoring to help students:

- o Adjust to their new environment;
  - o Encourage transfer students to get involved;
  - o Make friends who are their own age;
  - o Discuss issues and challenges that are specific to transfer students;
  - o Meet other transfer students and foster stronger transfer communities.
- Some pathway (C > U) students had a difficult transition from college to university due to the differing workloads, expectations, etc.
  - o Students are interested in peer mentoring that is sensitive to the unique situation of transfer students (often older or mature students who already have some post-secondary experience).
- Many students who are transferring from one city to another experience difficulty with finding housing.
  - o Those who move to cities they are more familiar with or have contacts there (friends or family) have an easier time finding housing.
  - o Students need enough time after receiving and accepting an offer to make arrangements to move (if necessary). Some students had difficulty getting responses from their applications in time to make housing arrangements.
  - o Students struggle with knowing where to find an appropriate, safe neighborhood when they are unfamiliar with the new city.
  - o Many students use Facebook to find housing.

Student Mobility: Transfer Student Experience Map

Nikole Hidalgo McGregor, Roya Matsui, Christina Park, Angelina Pletneva

LEGEND
- Optional, case by case basis (dashed box)
- Various possibilites (solid box)
- Ongoing, until achieved (circle)
- Non-linear, Variable order (wavy arrow)

	Information Seeking		Preparing			Transferring
	Realizing	**Researching**	**Applying**	**Transferring Credits**	**Accepting Offer**	**Adapting**

Actions

- Low academic performance
- Time to graduate
- Research job prospects
- Talk to advisors
- Discuss options with family/friends
- Visit prospective school website
- Visit prospective school
- Submit application on OUAC/OCAS
- Order transcript
- Submit supplementary documents
- Find requirements on the university website
- Wait for credit assessment
- Submit course syllabi
- Receive results of credit assessment
- Follow up
- Wait for acceptance
- Receive Offer of Admission
- Attend orientation
- Select courses
- Look for housing
- Apply for OSAP
- Make new friends

Thoughts

- I want to upgrade my credentials.
- I don't like my program.
- I want to live closer to home.
- I get things done mostly online.
- I have a lot of questions about the new institution.
- University websites are a usability nightmare.
- One of the biggest hurdles is finding the right information.
- Information is not face-on. It's very hard looking for it.
- Dealing with an actual person is very helpful.
- You apply for credit transfer online yourself and it is a disaster.
- I had to keep calling the school to get my assessment in time.
- I know someone who got a credit transferred. But I didn't.
- What am I supposed to be doing now?
- I was in another city. I needed to know whether I was moving, soon.
- Did I make the right decision?
- It was the best decision I made!

Feelings

- Stressed
- Isolated
- Desperate
- Uncertain
- Overwhelmed
- Hopeful
- Motivated
- Familiar
- Stressed
- Confused
- Anticipation
- Worried
- Anxious
- Worried
- Optimistic
- Excited
- Nervous
- Awkward
- Lonely
- Uncertain
- Happy

Pain Points

- Lost sense of belonging (U-U)
- Cannot transfer during the semester and need to wait until September
- Poor UX of university website
- Misinformed about path to future program
- ONtransfer.ca is outdated
- Hard to meet advisors in person when living in a different city
- Cost of applications
- Unclear supplementary requirements
- Managing multiple deadlines, processes and forms between applications and course work
- Unclear instructions
- Lack of transparency and consistency
- Credit results not meeting expectations
- Unclear processing timeline
- Credit assessment received after deadline to accept offers
- Error and misunderstanding in assessment and evaluation
- Unclear timeline hinders other decisions and arrangements
- Different timelines for each application
- Finding housing remotely
- Not being given first-year information about new school
- Finding student resources
- Retaking similar courses

Touch Points

(in-person / digital)

- Academic Advisors
- Friends & Family
- Campus Tours
- Current Students
- Transfer Advisors
- Email
- Online Forums
- ONtransfer.ca
- Institution Website
- OUAC
- OCAS
- Institution Website
- Credit Transfer Office
- Other Transfer Students
- Transfer Advisors
- Email
- Academic Advisors
- Friends & Family
- Social Media
- Social Media
- Student Advising
- Institution Website
- Current Students

Appendix E - User Testing Screener

The following screener questions will be asked in form of a google form:
- Are you over 18 years old?
  - ___Yes
  - ___No *<If no, thank them for their time>*
- Are you currently pursuing studies in an accredited academic institution?
  - ___Yes
  - ___No *<If no, thank them for their time>*

Appendix F - User Testing Protocol

Participants:

    Current students of an accredited academic institution in Ontario

Number of Participants:

    28

Length of Activity:

    45 min

Items in the Tool Kit:

- Figma prototype
- Camera
- Notebook or recording device
- Pens
- Sticky Notes
- Component Diagrams
- Feedback grid

Features to Be Tested

- Tasks and calendar overview
  - Calendar integration
- Reminders and notifications
- Contact a transfer advisor
- Direction to information to assist with tasks
- General navigation tools

Procedure

Students will be asked to interact with our clickable prototype and to share their experience of navigating the 4 features of our application: reminders/notifications, task overview and calendar, direction to information and assistance with tasks, and contacting a transfer advisor.

Students will be asked to provide feedback on questions such as:

- Is the feature helpful?
- Is there any information or features that were missing or could be expanded upon?
- Was the experience intuitive?
- Are the features valuable and useful?
- What is the most valuable feature?
- What do users believe to be the purpose of the application?

Instructions

1. Greet the participant.
2. Give the participant a brief overview of the lab and the project.
3. Give the participant a brief overview of the application's purpose.
4. Hand out and discuss the consent forms and get permission to document the session.
5. Give the participant the Figma prototype and allow them to click through the application.
6. Ask the participant to fill out the feedback grid.
7. Discuss the feedback grid and asking probing questions.

8. Encourage the participant to revisit the app
9. Complete SUS Questionnaire.
10. Debrief. Ask participants if they have any questions or concerns about their experience.
11. Complete demographic and gift card survey.

Probing Questions

a. Would you use a feature that allowed you to integrate the deadlines into your existing calendar?
b. Would being able to schedule time slots to do tasks in your existing calendar be helpful?
c. What do you believe is the value/purpose of the app?
d. How often would would want to be reminded/prompted to complete tasks?
e. What is your preferred method to contact an advisor? (in person, phone, email, etc.)
f. What do you think is most valuable about the app?
g. Is there anything that is less useful that you think the app could eliminate?
h. Is the app intuitive the navigate?

Appendix G - User Testing Script

Introduction & Greeting:

Hello. I'm [moderator]. Thank you for taking the time to participate in this user testing session. How are you doing today?

Today, you're going to help us test an app that we designed based on the user research conducted last October and November. Before beginning, I would like you to know we are conducting this session to hear your experience using this prototype app. There are no wrong answers. We want to know your thoughts on the app: what you like, dislike, or find confusing. You are also allowed to stop this testing at any time.

So to begin with, we would like to ensure that you fit the profile of our potential user. Are you currently a student attending a post-secondary institution in Ontario?

(if no, thank them for their time.) Thank you for confirming.

1-on-1: I'd like you to think aloud, voicing your thoughts as often as you can. Since thinking out loud can be an unfamiliar process, during the interview I might remind you to share your thoughts.

If you have questions at any point, please don't hesitate to ask. Do you have any questions so far?

[note-taker] & [observer] are here to help me take some notes and observe the proceedings.

We will also take photographs to document the session. The photos may be used to present research findings to the stakeholders. **Are you okay with this?**
(***If not***: would you be ok with being photographed from an unidentifiable position?)

[Give consent form, photo release form for participant to sign.]

Alright, let's get started with an icebreaker.

Icebreaker:
Please introduce yourself. You can share your current program and one interesting fact about yourself. (maximum 10 min, 2 min per participant).
Great, thanks for sharing (everyone). We're going to move onto the interview.

App Testing Session:
We will begin by sharing a scenario:

You are currently in your final year of Diploma in Interior Decorating at Sheridan College and will graduate coming April. Immediately upon graduation, you are considering to further your education by attending a University for a Bachelor's degree. So, using the OUAC application portal for transfer students, you have applied to following three universities:

1. Bachelor of Architectural Sciences at Ryerson university,
2. Bachelor of Design in Environmental Design at OCAD University, and
3. Bachelor of Arts in Architectural Studies at U of T.

When you completed the application, you receive an email invitation to download this app: OnTrack. The app is advertised to send on-time notification of upcoming tasks, assist with time-management to complete the required tasks, and help you connect with the transfer advisors.
You have just downloaded and opened the app for the first time:

[Hand out the device loaded with the clickable prototype.] + [Hand out Feedback grid]

One on one: As we mentioned before, we would like to encourage you to voice your thoughts as you go through this process.

Please use this feedback grid to write down notes as you are using the app.

Post Session Survey

- Would you prefer accessing these features on mobile or desktop?
- From 1-10, with 1 being the lowest, how likely are you to download this app?
- From 1-10, with 1 being the lowest, How likely are you to use a webpage with this features?
- Do you set pop-up notifications on your computer?
- Would you like to set up email notifications?

<u>Debrief:</u>

Thank you so much for walking through the app with us. Here is 10 usability survey of your overall experience with the app. **[Hand out Testing End Questionnaire pages]**

Do you have any questions concerning the user testing session?

To end our session, please fill in the Background Information page. This information is collected to distribute the giftcard to you. **[Hand out additional Background Information pages]**

Thank you for taking the time to participate. Have a great day. You will be receiving your $25 Amazon gift card from eCampusOntario in approximately 2-4 weeks.

Appendix H - Information Needed from Institutions

- Deadlines
  - Admission process
  - Supplementary requirements
  - Special consideration letter
  - Transcripts
  - Transfer credit process
  - Orientation dates
  - Accept offer
- Information for contacting transfer advisors
  - Primary institution transfer contact
  - Contact who is listed on ONtransfer.ca
  - First and last name, phone # and extension, email address
- List of all programs (for drop down menu)
- List of all faculties (for drop down menu)
- Financial Assistance information
  - Scholarships and bursaries
  - OSAP
- Housing
  - Residence
  - Off-campus housing
- Logo from universities and colleges
- List of services (for student services alerts)
  - Housing
  - Health and dental plan
  - Test center
  - Writing center (etc.)
- Welcome package
  - Similar to a first year

Partnerships

For the best development of ONtrack, we suggest the following organizations for partnerships with ONCAT and ONtransfer.ca:

- ❏ Ontario Universities / Transfer Advisors
- ❏ Ontario Colleges / Transfer Advisors
- ❏ OUAC
- ❏ OCAS