OnTime

IMPROVING CMU'S TRANSIT EXPERIENCE

USER EXPERIENCE RESEARCHER

PROJECT SCOPE

In order to investigate the state of CMU's transportation system, my group mates and I employed a variety of research methods in order to get an understand the experiences of various members of the CMU community with the transit system.
In the early stages of the project, we created stakeholder maps, conducted interviews, and sequence modeling in order to establish baselines for our core user groups. We then conducted think-alouds, made affinity diagrams, and created storyboards to identify specific breakdowns in the student transit experience.

CLIENT

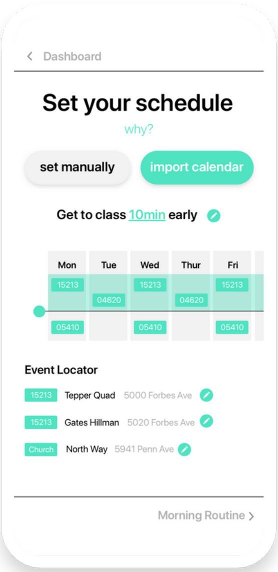
Carnegie Mellon University's transit system has seen a significant decline in ridership over the last fie years. The CMU Graduate Student Assembly tasked us with researching and identifying transit pain points and presenting a feasible solution.

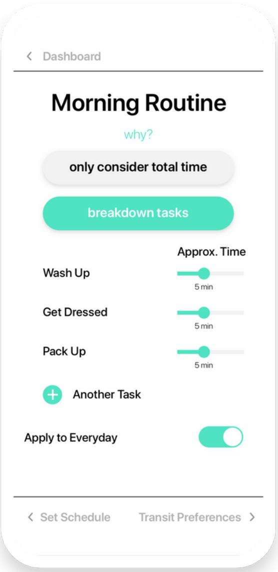
PROPOSED SOLUTION

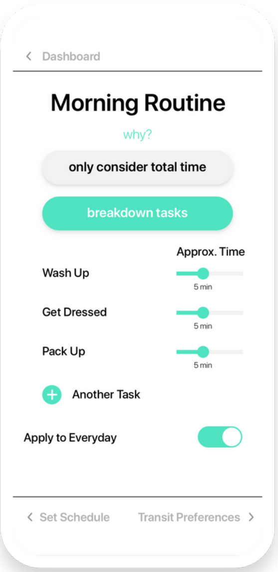
Based on our findings, we proposed features that we thought would be most beneficial to the user, and implemented them into high fidelity wireframes
OnTime is a mobile app that allows users to plan their daily commutes around their academic schedule and desired morning routine. OnTime prompts and encourages the user to plan out their morning routine, and find the best means of transportation for the user.
OnTime focuses on four key customizable features: morning routines, academic schedules, transit preferences, and notification preferences.

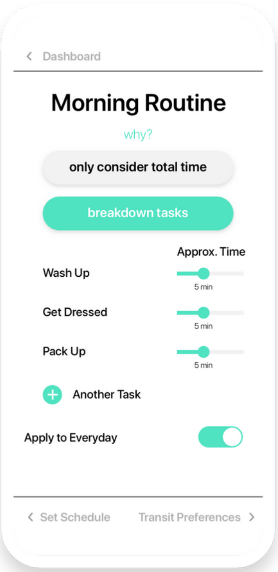
SKILLS UTILIZED

- Contextual Inquiries
- Think Alouds
- Affinity Diagraming
- Sequence and Flow Modeling
- Wire-framing
- Log data analysis
- User interface design
- Design walkthroughs









A&M Chess Camp

A WEB APP FOR REGISTERING CAMPERS AND HANDLING PAYMENTS

FULL STACK ENGINEER

PROJECT SCOPE

This multi-stage project began with designing the database from the ground up. In order to provide a proof of concept, the first iteration of the website focused on the logic of scheduling camps, instructors, and constructing a front end using MaterializeCSS.
The second phase of the project focused on building out a RESTful API that was capable of managing anonymous data pertaining to instructors and students.
The final phase of the project focused on adding a shopping cart system, administrative dashboard, and securing the website so as to only allow the proper access to the designated proper users.

CLIENT

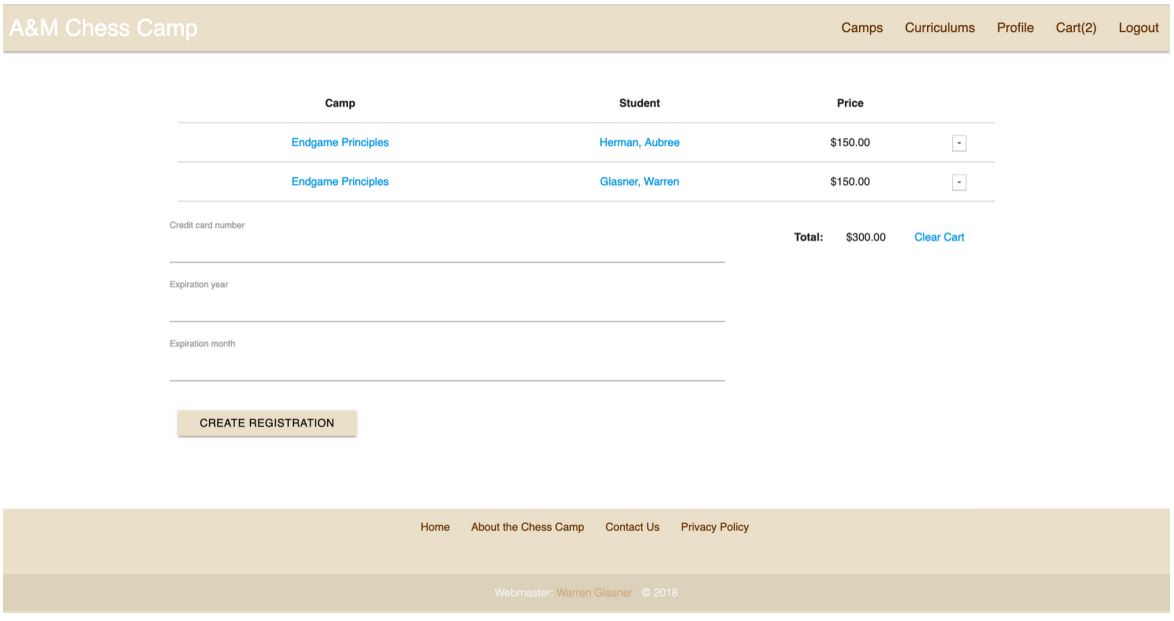
The A&M Chess Camp is currently using a register-by-mail system to manage their camp signups, and distributing flyers to advertise their curriculum offerings. They also desired a way for camp administrators to manage students and instructors, and give instructors profiles for parents to view.

PROPOSED SOLUTION

The proposed solution offers a great deal of accessibility to families, instructors, and administrators. Families are able to manage a profile page, manage their children, register for camps, and pay using a credit card. They are able to view descriptions of camp curriculums and instructor profiles. Administrators can keep track of data pertaining to instructors, parents, and students, and have the ability to manage camps, curriculums, and student registrations.

SKILLS UTILIZED

- Database design
- Unit testing
- Data modeling
- Wire-framing
- UI kit integration
- Front end testing



ReEntry412

A WEB APP FOR TRACKING COMMUNITY OUTREACH

FULL STACK ENGINEER

PROJECT SCOPE

In Allegheny county, it has been a known problem that the largest indicator of incarceration is the exposure to violence itself. There has been a lot of existing work and resources to help tackle this problem, from companies providing basic employee training to dedicated housing for returning citizens to keep them out of jail. In addition, organizations send out street outreach workers in order to reach out to returning citizens from within their own community to help provide these resources. NewEra412 finds it difficult to reliably track the progress of citizens interacting with the provided resources.

CLIENT

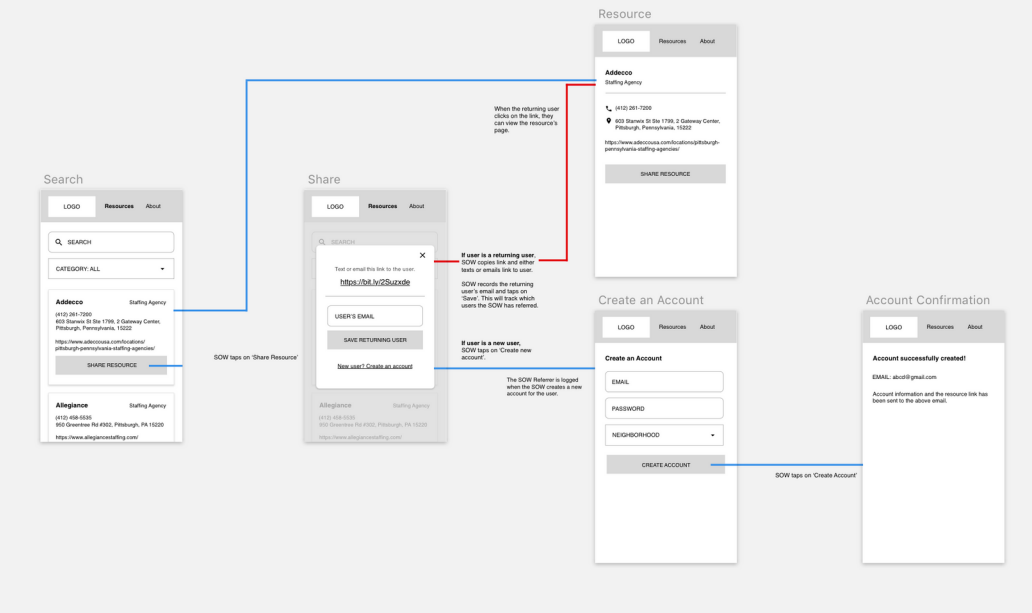
NewEra412 is a program of ReEntry412, a volunteer-led nonprofit dedicated to helping previously incarcerated individuals return to society after leaving prison.

PROPOSED SOLUTION

For reentrants and street outreach workers (SOWs), our mobile web application aims to provide a list of relevant resources based on a number of factors, including location, resource availability, and of course the actual relevance of the resource to the person's need. Our system will center around a mobile application geared towards assisting these SOWs in the field. The key features that will be implemented include contact management, program resource management, and data collection/reporting. In this way, SOWs would be able to easily share and manage resource information amongst Pittsburgh citizens.

SKILLS UTILIZED

- Database design
- Unit testing
- Data modeling
- Wire-framing
- Use of a frontend framework
- User Interface evaluation



IS Graduate Statistics Redesign

A WEBSITE FOR PRESENTING GRADUATE CAREER STATISTICS

WEB DESIGNER

PROJECT SCOPE

The Information Systems program, like most programs at Carnegie Mellon, currently advertises its post-graduate career information in PDF format. This meant that there was no degree of interaction between consumers of the data, and the data itself. Desired key features were given to us by the Information Systems faculty, being that the website should be responsive, and feature new and effective ways to highlight the achievements of Information Systems Graduates. They also desired some way to keep track of alumni in a database.

PROJECT DESCRIPTION

The Information Systems program is looking for teams to overhaul its website, and add in higher degrees of interactivity and functionality for users.

PROPOSED SOLUTION

Our proposed solution for this project is a responsive website focusing on multiple types of data representation, including geographical representations, salary comparisons, information on continuing education, and the top employers of Information Systems graduates. It also features a searchable graduate database, featuring contact information and place of employment.

SKILLS UTILIZED

- Database design
- Responsive web design
- Data modeling
- Wire-framing
- Use of a frontend framework
- User Interface evaluation