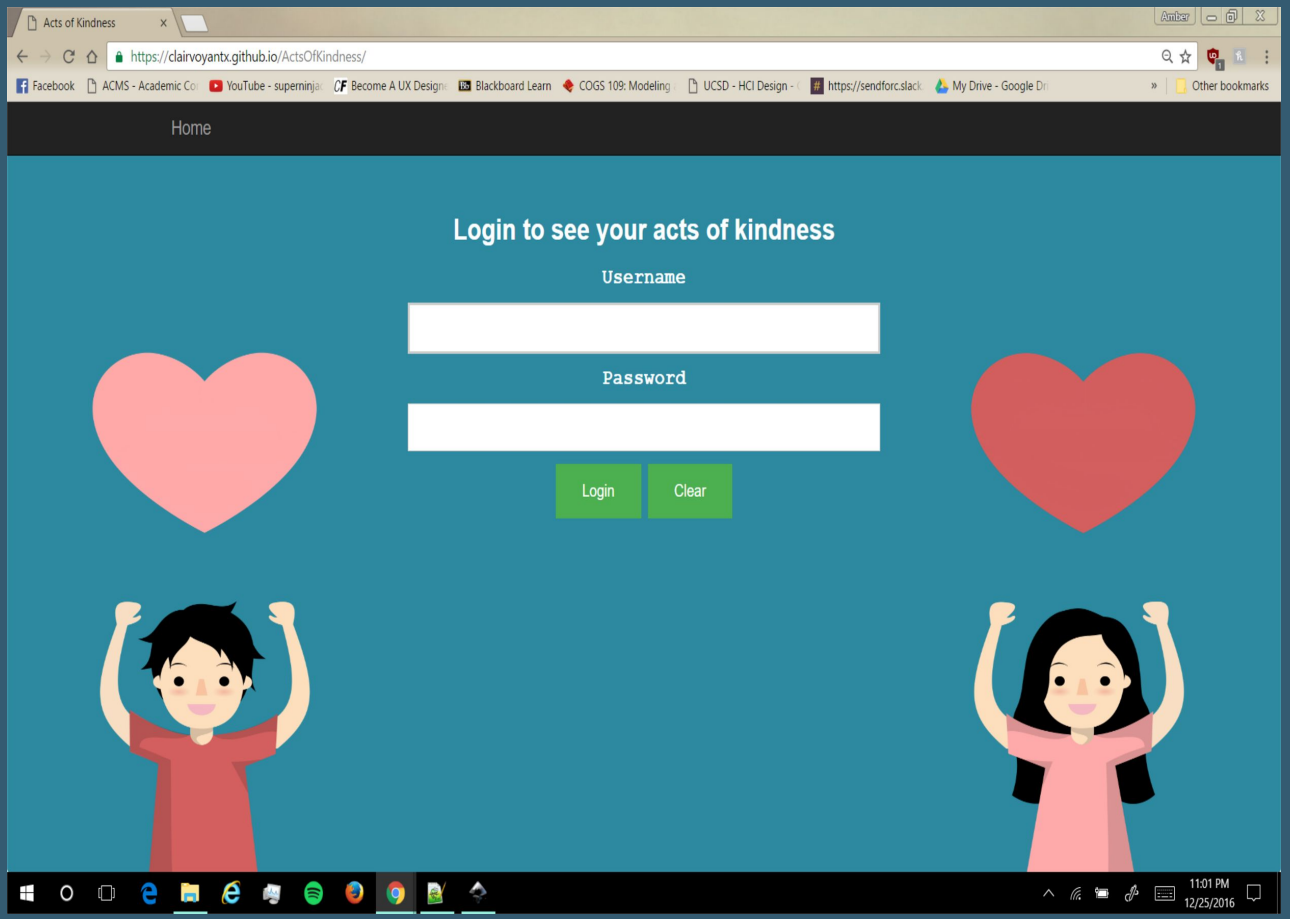
Acts of Kindness

Web Application



Project Members

Kristen Chan | Amber Tang | Steven Yang

My Roles

User Researcher
UX Designer
Data Analyst
Illustrator

Deliverables

Storyboards
Paper Prototypes
Wireframes
A/B Testing
Web Application

Tools

Pen & Paper
Balsamiq
Usability Heuristics
HTML/CSS
Inkscape
Google Analytics

The Story

Think back to the last time you did something nice for someone else. How did you feel? Is this something you would do again? Is there anything stopping you from bringing goodness to your friends, family, and community?

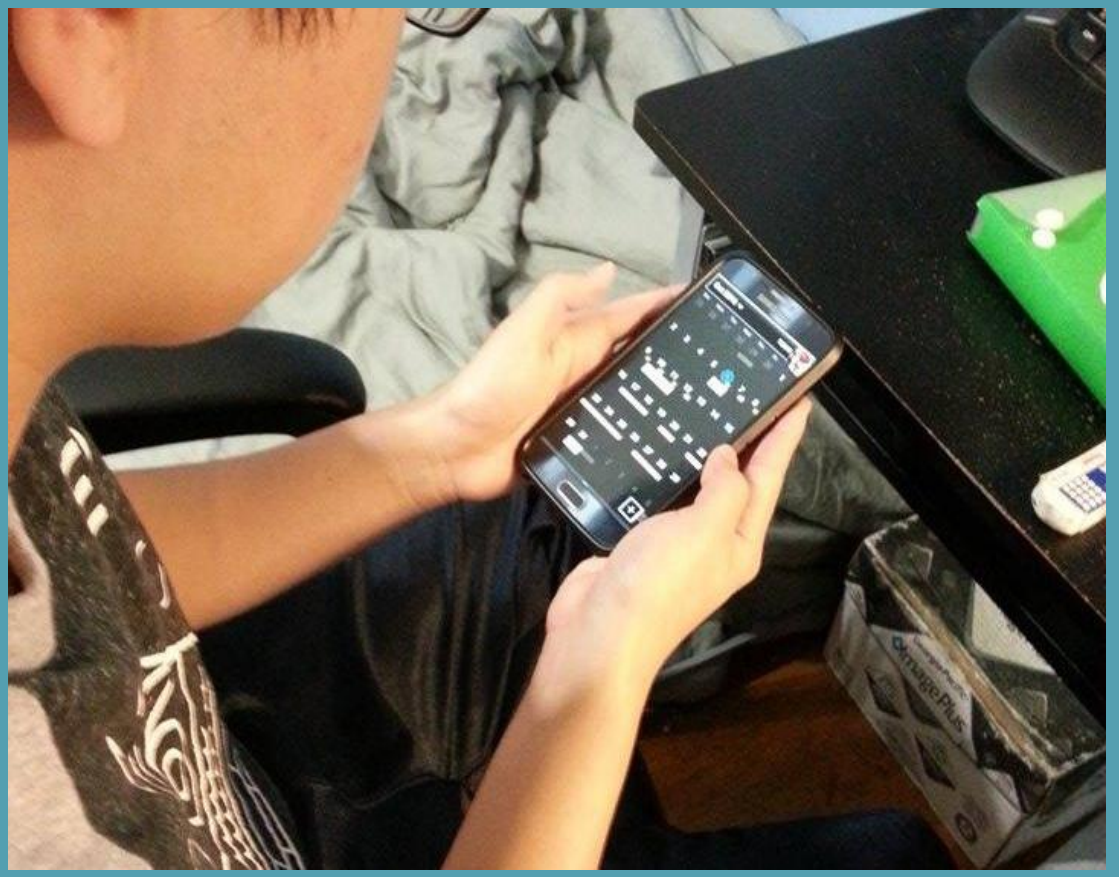
Acts of Kindness is a web application that emerged from my team's Human-Computer Interaction Design course at UC San Diego. Our team's constraints were to apply a human-centric approach towards developing a functional, personal informatics application that helps people establish goals and keep track of their acts of kindness.

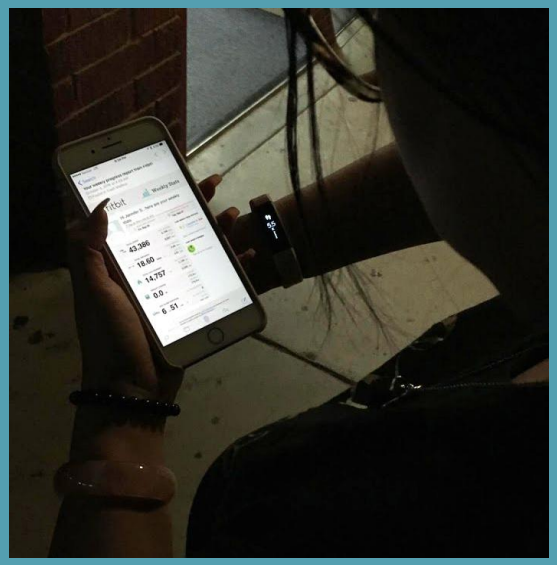
My responsibilities for the team included conducting user interviews, making and evaluating paper prototypes, creating low-fidelity mockups, facilitating user testing for feedback, analyzing and interpreting A/B testing results, and developing a visual brand for the project.

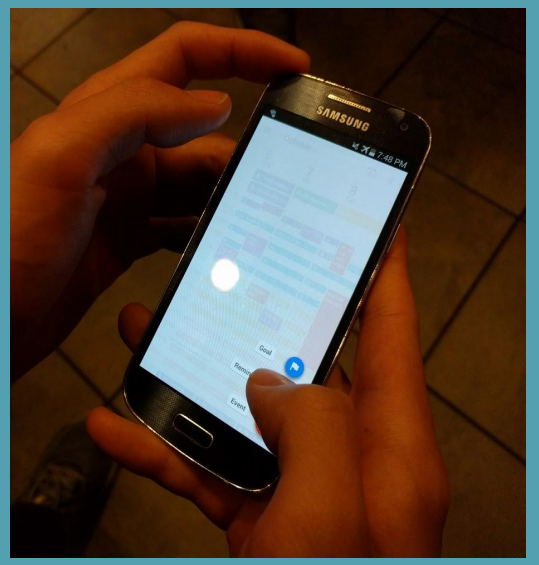
Play around with the web application here!

Knowing our Users

Our team was assigned to create a unique personal informatics application that could not center around finance, diet, fitness, travel, or time management. In order to learn more about our users' end goals and motivations, our team went out to conduct 9 interviews and contextual observations of individuals who already use personal informatics tools.







Design Challenge

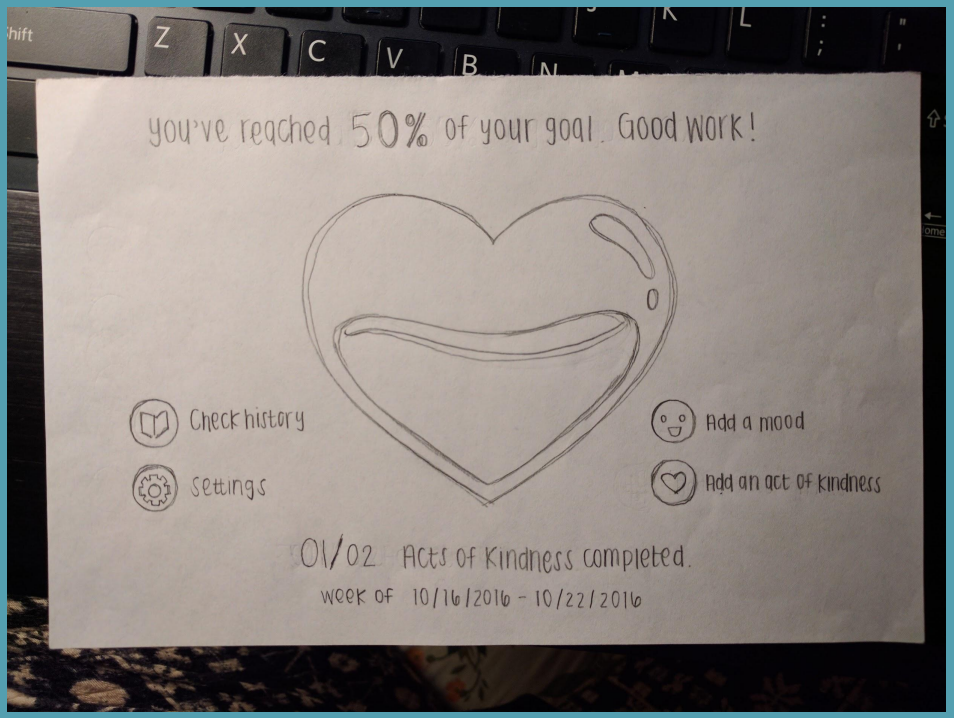
From our interviews, our team learned that our users actively engage with their personal informatics tools to invoke some change in their lives.

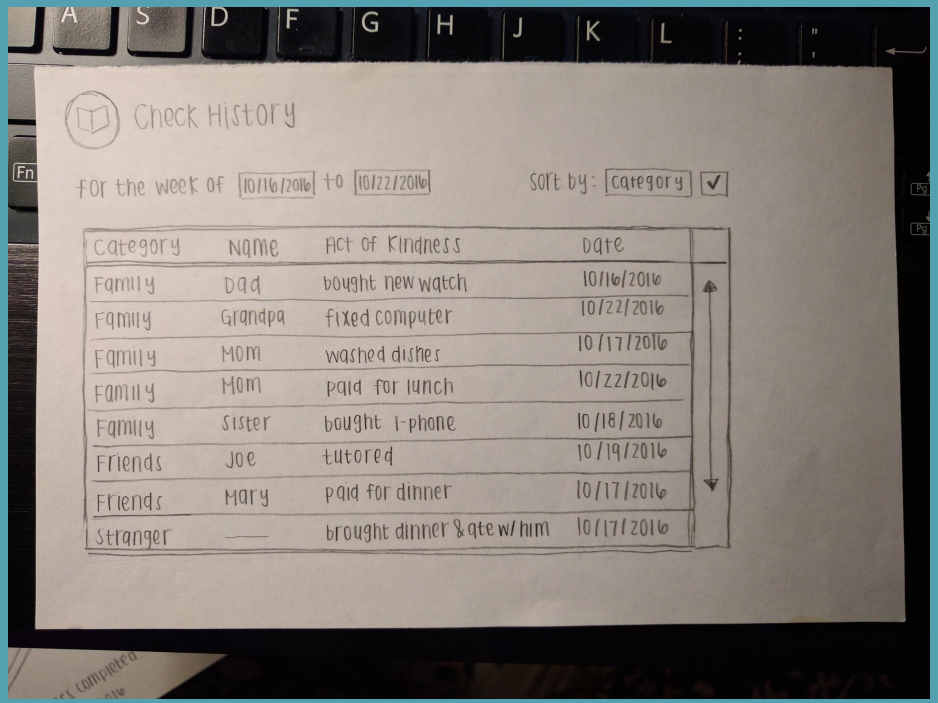
Our users want the ability to reflect on their progress and be empowered to do something new or keep up with good habits.

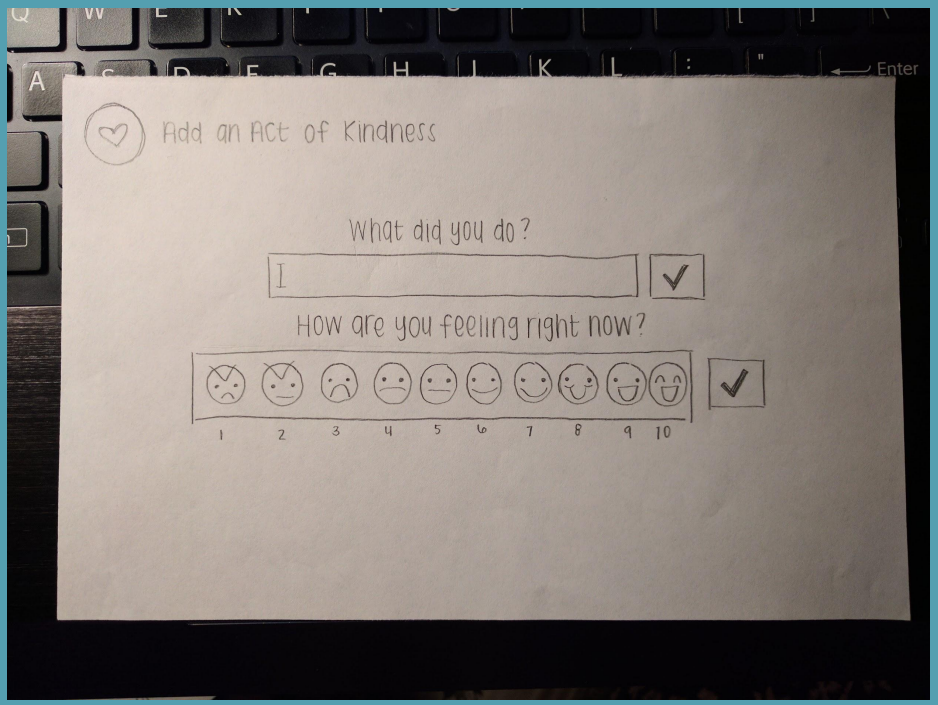
After a brainstorming session of 10 different ideas, our team settled on a multifaceted approach to tracking people's moods with their acts of kindness because we wanted people to be inspired by themselves to help others.

Low Fidelity

We created low-fidelity paper prototypes to flesh out the general functionality of our idea and had individuals critique our early designs using Nielsen's usability heuristic evaluations to determine noticeable improvements on user flow.

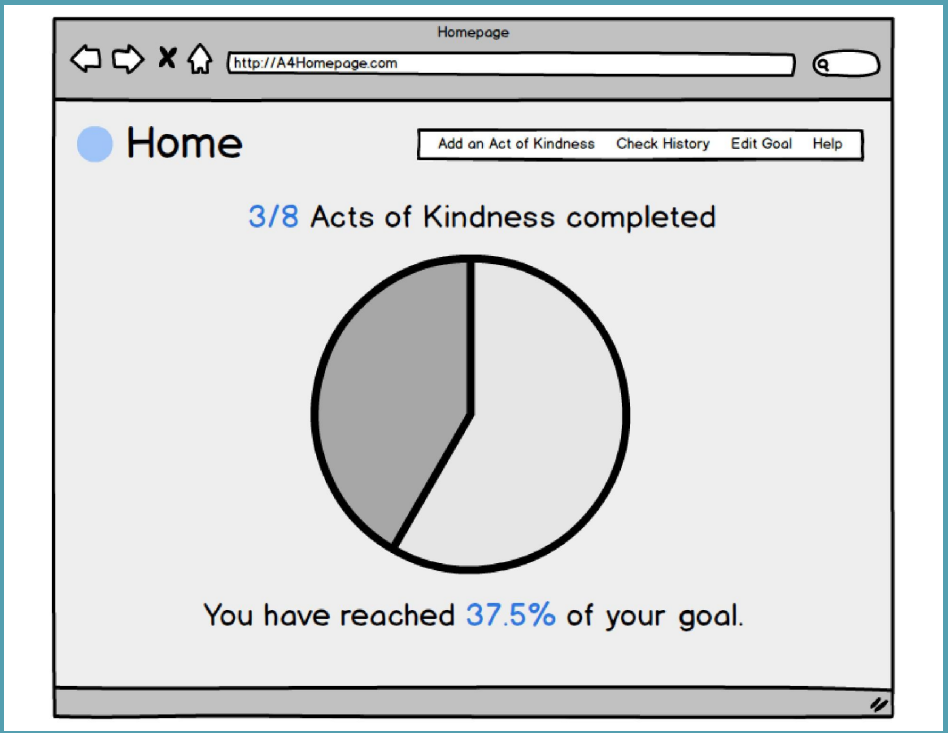






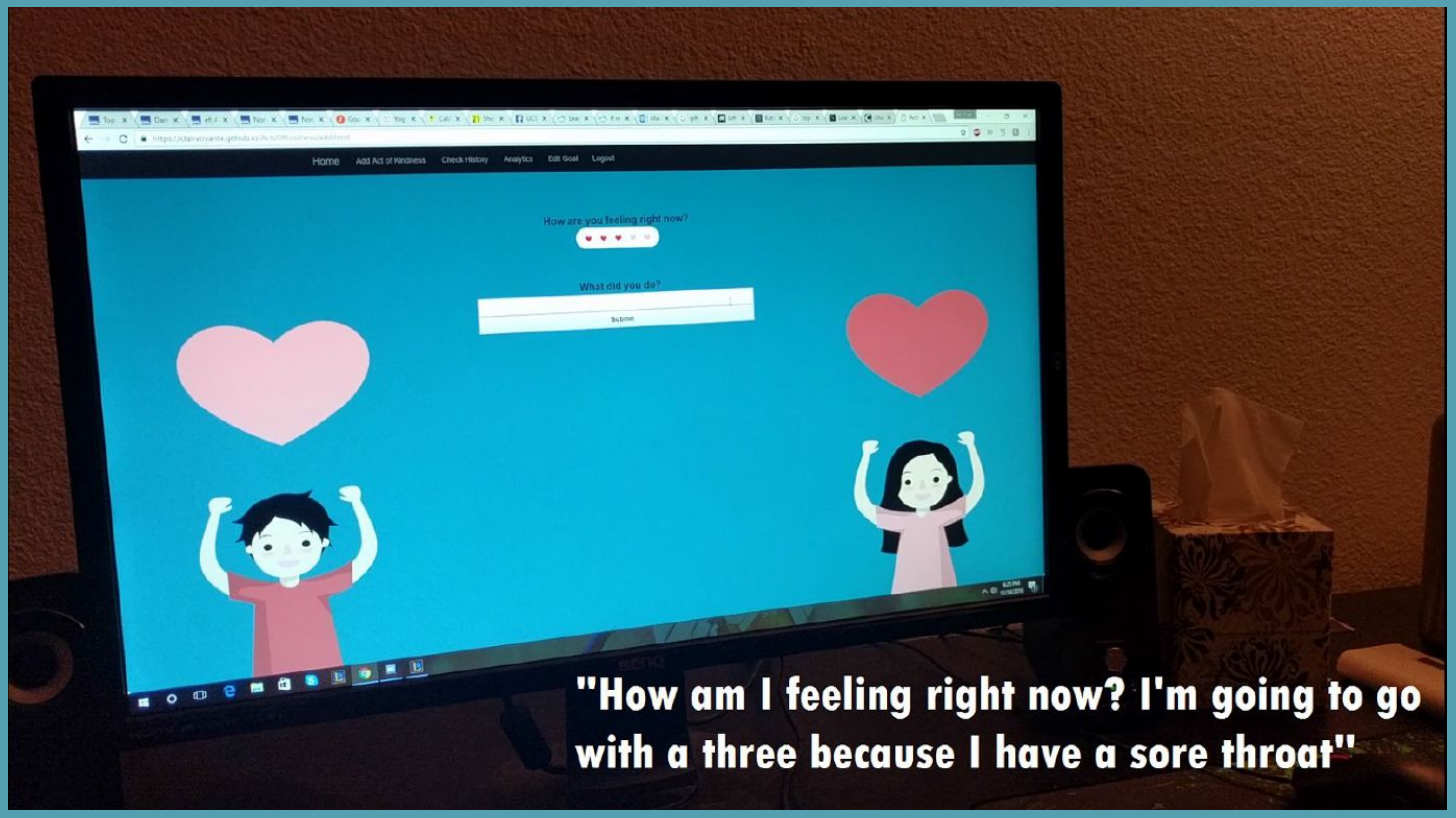
Wireframes

Our team then created wireframes using Balsamiq and interactive prototypes with HTML/CSS navigational links to explore the initial information hierarchy



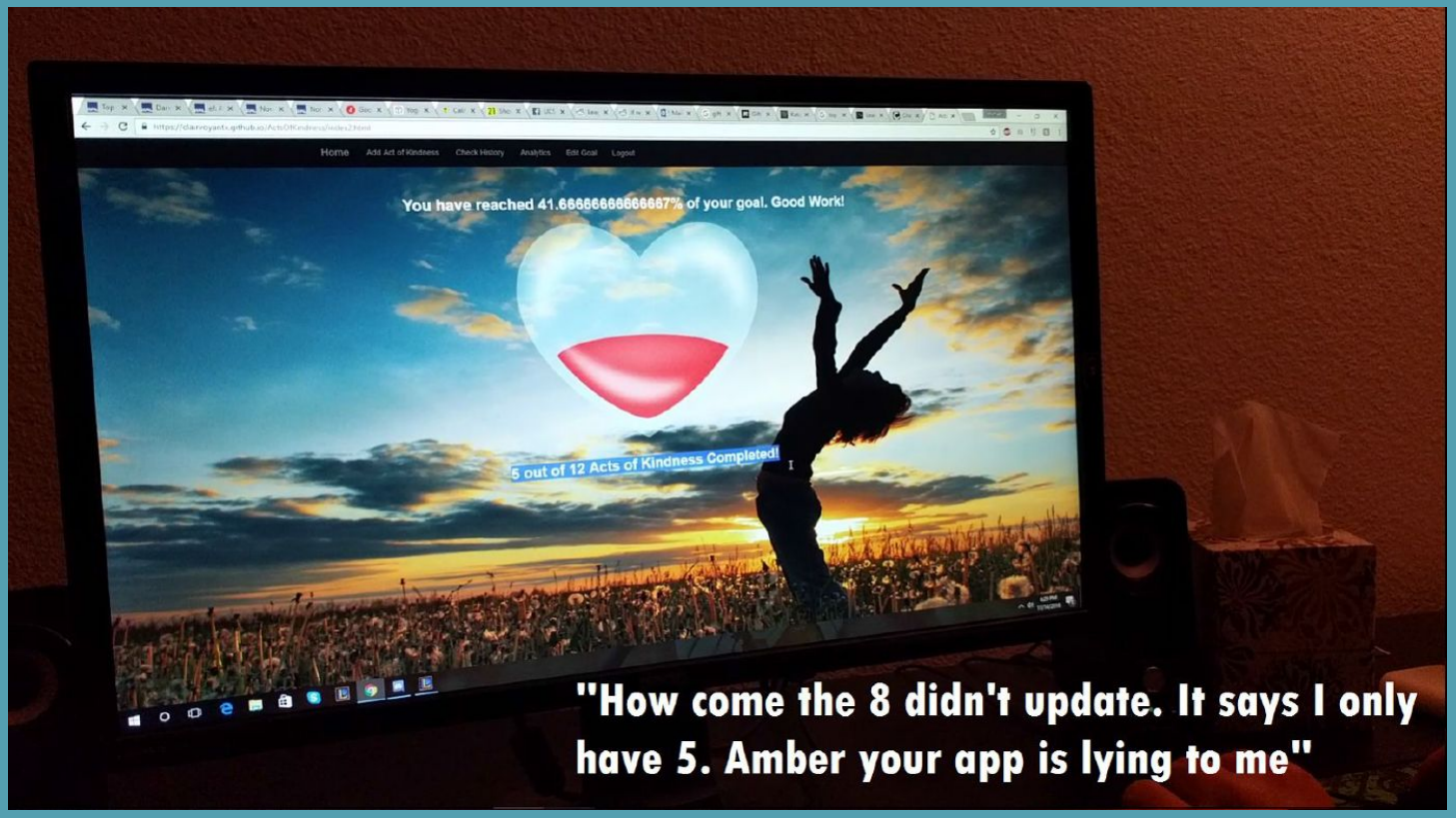
User Testing

After my team members worked out the full functionality of our web application, I was in charge of prototype testing with 3 individuals. I had my participants explore the application with think-aloud protocol to better understand how information from our application was being conveyed



What we Found

There was a major discrepancy in how our users interpreted the information we wanted them to input and a few bugs with the functionality of the application. Two of the three participants also wanted the ability to clear their history because the pre-filled information seemed confusing during the testing.



A/B Testing

After having fixed the appropriate bugs and our application's wording to align with that of our users, our team wanted to determine whether the clear form functionality was one that our users really needed in order to use the application. Our team tested this using A/B testing to see if there was a statistically significant difference between users who had the functionality and those who did not. I helped with the data analyzation and interpretation. We found that there was no statistical significance, however we recognized that we had a small sample size.

Group	Page Views
Test A (redesign)	9, 2, 23, 8 ,32, 8 ,5, 16, 33, 6 ,2, 14
Test B (original)	27, 16, 23, 19, 10, 38, 8, 25, 10, 33, 9, 5, 15, 18

Group	n (# people)	x (avg page views)	s^2 (variance)
Test A (redesign)	12	13.16	104.75
Test B (original)	14	18.29	90.78

$H_0: x_1 - x_2 = 0$
$H_A: x_1 - x_2 != 0$

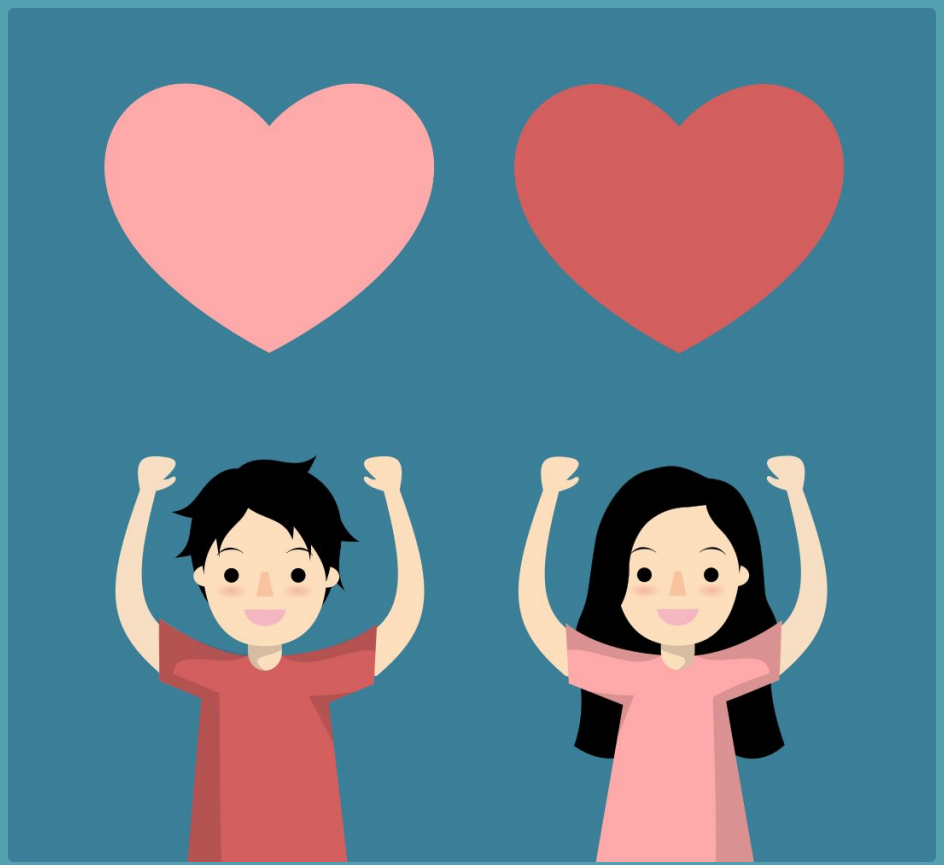
$SE = SE = sqrt[(s_1^2/n_1) + (s_2^2/n_2)] = 3.9$
$DF = (n_1 - 1) + (n_2 - 1) = 11 + 13 = 24$
Alpha = .05

$$t = \frac{(\overline{x_1} - \overline{x_2}) - (\mu_1 - \mu_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

T-statistic = = (5.13-0) / 3.9 = 1.32
P-value = .199287

Illustrations

The final steps of our project was to create a consistent visual branding. I helped to create the background and the heart that updates based off of the user's completed goals using vector based software.



The End

Through Acts of Kindness our team explored design methods and picked up some front-end development skills. We were also able to bring an idea to life and encouraged a few individuals to think about their altruistic acts. However, in the end, I still feel like Acts of Kindness has room for some serious improvement which were brought on by our team's time constraints and personal abilities. After this course, I definitely want to improve on my own coding abilities, not just for personal growth, but to better understand the sheer amount of work that goes into creating products from start to finish and the fine details in between.