

Interim Report, July 2020
Nikhil Dharmaraj
Software Engineering Intern, Ameelio

I've spent the last fifteen weeks doing part-time software engineering internship work for [Ameelio](#), a nonprofit organization that aims to create the first-ever free digital communication platform between incarcerated people and their loved ones. The team is based out of New Haven, CT, but I have been completing all my work remotely due to COVID-19 (specifically, I've completed all my internship work either in Saratoga, CA, or Incline Village, NV). As Ameelio was only founded this year, over the past few months, there have been lots of exciting new features that I have had the privilege to witness and work on.

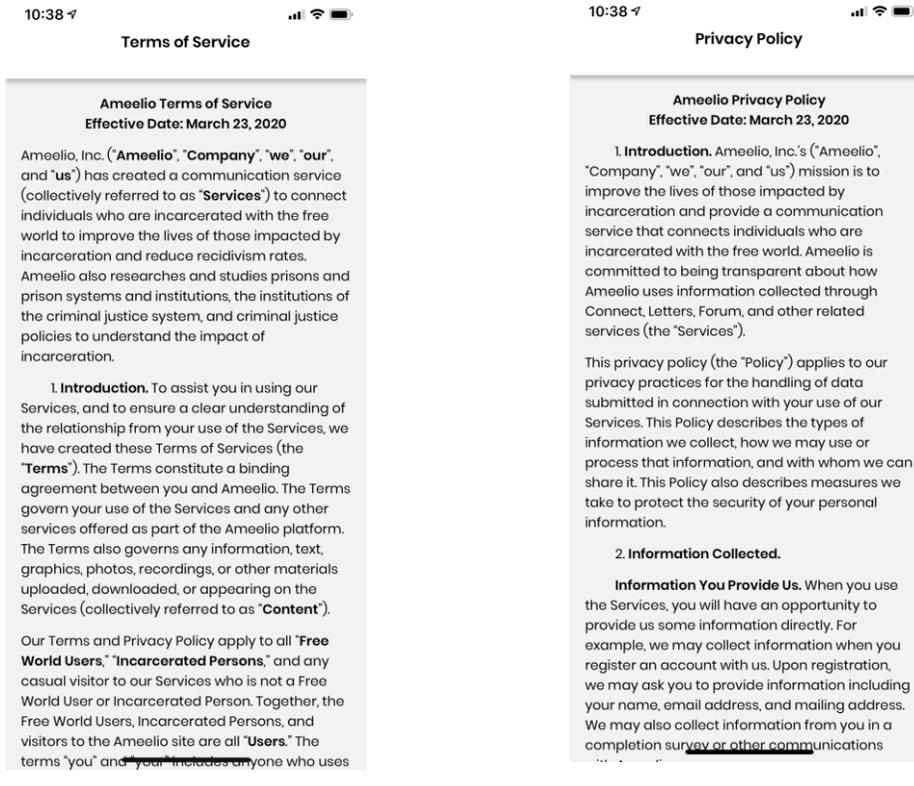
As a starter task for my internship, I spent the first month of my time working with the Nationwide Inmate Locator team. Given that incarcerated people are shuffled around facilities often, finding the exact address of a loved one in prison can be incredibly difficult. Therefore, as a part of the mission to establish a convenient means of contact between incarcerated people and free loved ones, this team aims to create a seamless, searchable nationwide database of every incarcerated person and their facility address — specifically by writing programming--a Python crawler--for each state. Each crawler automatically scrapes its respective state's Inmate Records website and inputs the relevant information into a database. Personally, I first wrote and completed the crawler for the state of Mississippi, and then I did so for the state of Pennsylvania (each of which took around two weeks to write).¹ To build the searching functionality for these crawlers, I employed two Python libraries, Beautiful Soup and Requests.

At the start of June, I also took a quick hiatus from engineering work to aid the social media team. Given the momentum that the Black Lives Matter movement picked up, our team at Ameelio felt obligated to join the conversation, as our work around mass incarceration is directly linked to systemic anti-Blackness and structural racism. Given that I had been doing a lot of protesting and reading work at the time, I took it upon myself to flesh out an Ameelio #BLM Resource guide for our social media pages, linked in an Instagram post [here](#). This guide included readings, organizations, watchings, and action items for our followers to engage with; more broadly, the hope was for our followers to join us in making a lifelong commitment to dismantling systemic anti-Blackness.

After that, in mid-June, I moved on to working with the Letters Mobile team. Currently, Ameelio's functionality is all web-based on [Ameelio.org](#), which can be inconvenient for users looking to send letters on the fly. Thus, this team works to build a mobile version of our letters application (wherein loved ones can easily type and send letters to incarcerated loved ones),

¹ Note: the revisions for the Pennsylvania crawler ended up being taken over by a fellow software engineer at Ameelio, as I moved on to work with the mobile team.

using React Native, Typescript, and Redux. The primary task I've completed over the last 1.5 months working on the Mobile team is finishing the "Terms of Service & Privacy Policy" screens. I formatted and coded text from two lengthy legal Google Documents into readable, scrollable screens on a mobile device. Figures 1 & 2 depict the final versions of these screens. In the next few days, the mobile app will go live on the app store!



Broadly throughout the course of my internship so far, I have been able to pick up many new technical skills — everything from debugging complicated bugs in Git to learning about React Native style objects to deploying the Python Requests library. Additionally, I have had the chance to supplement my interest in social justice with on-the-ground experiences, hearing success stories of users and compiling educational resources. These skills have bolstered my growth as both a technologist and an advocate. Over the next few weeks, I'm looking forward to doing more work with the Letters Mobile team in React Native, collaborating more with other teams to pick up other skills, and immersing myself more in the stories of the people impacted most by mass incarceration.

Overall, I am incredibly grateful to JJCF for funding this opportunity; it means the world to me to be able to do this work at the exact nexus of technology and social justice that inspires me!