

# Milestone 3

## Parley: Translation & Messaging

<https://github.com/Booker-M/Parley>

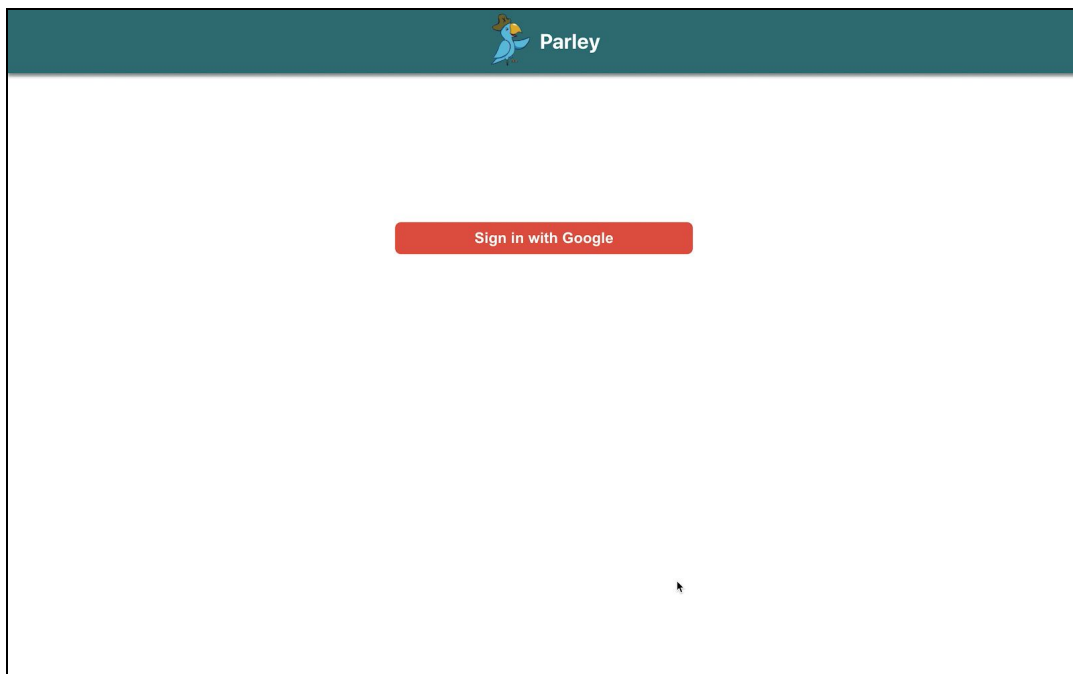
Andrew Seaman, Booker Martin, Kaitlyn Behrens, and Taylor Flanagan

## The Prototype

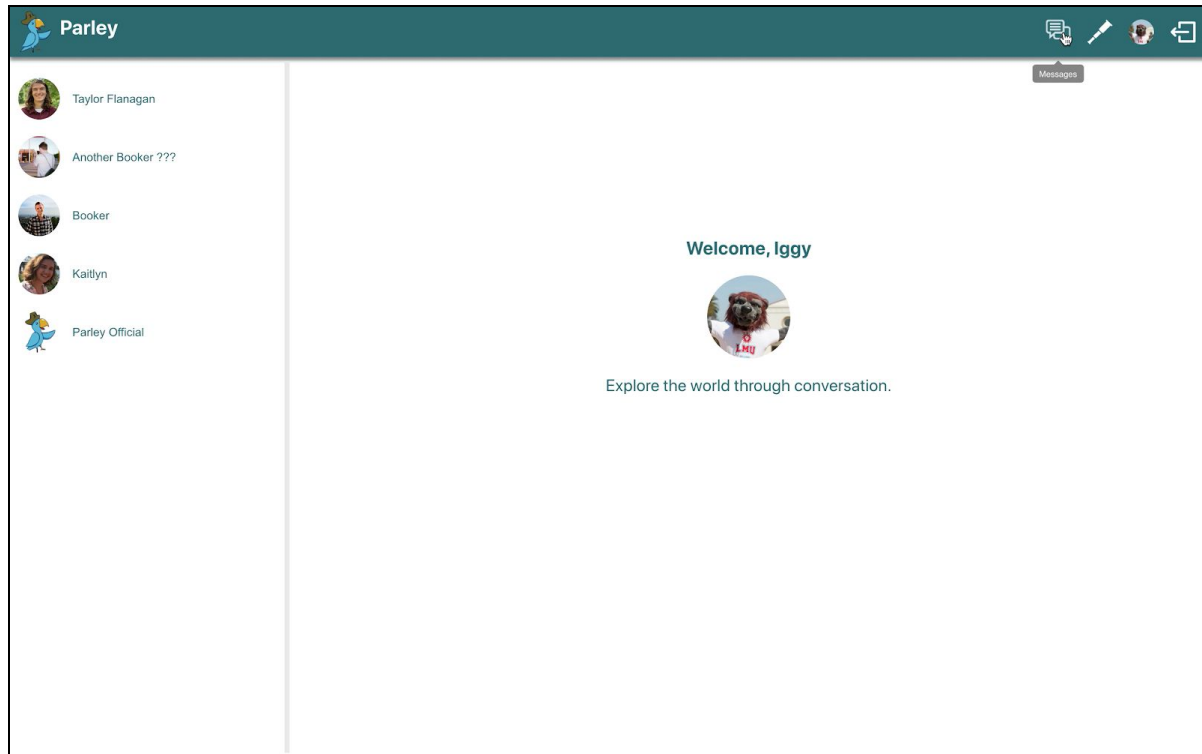
Our functional prototype can be found at <https://booker-m.github.io/parley/#/>. Follow the system walkthrough below to see how it functions!

## System Walkthrough

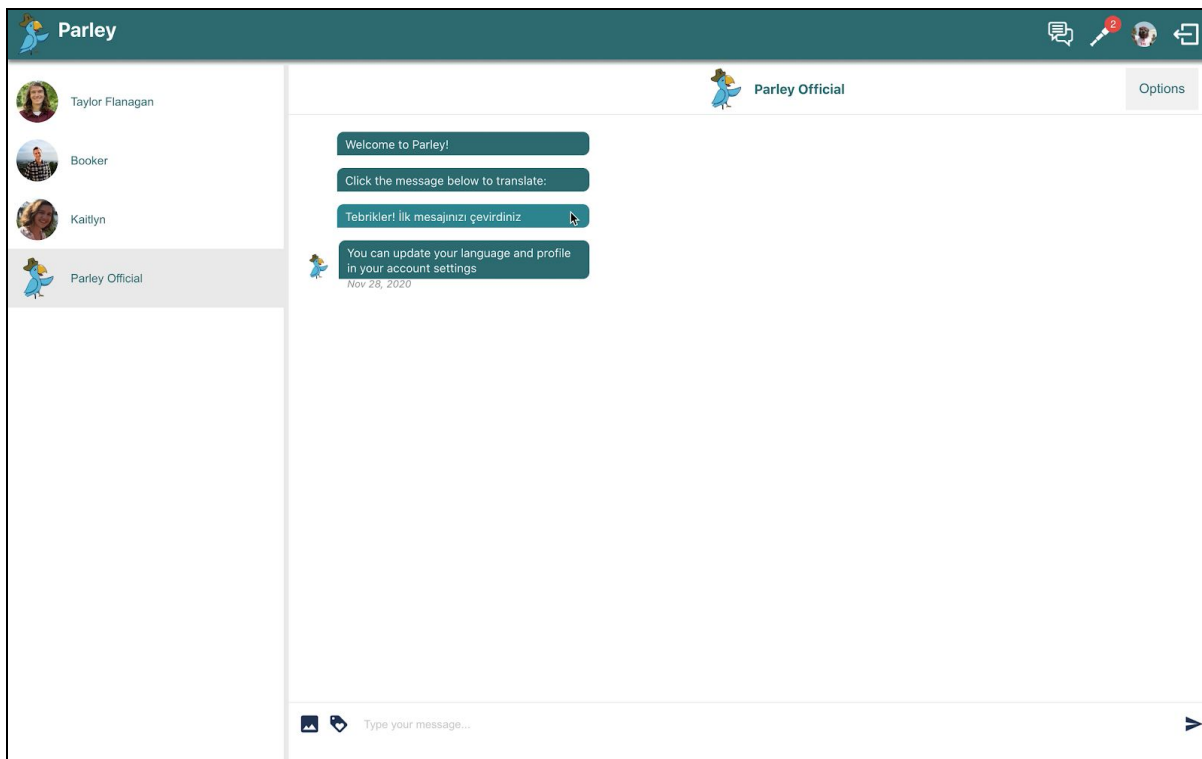
Participants begin using Parley by starting at the login page. The page prompts the participant to sign in with Google in order to make an account. In the future, we would likely incorporate the student version of Parley into the login as well by asking students to sign in with their school account so that teachers would be able to monitor their usage for extra safety.

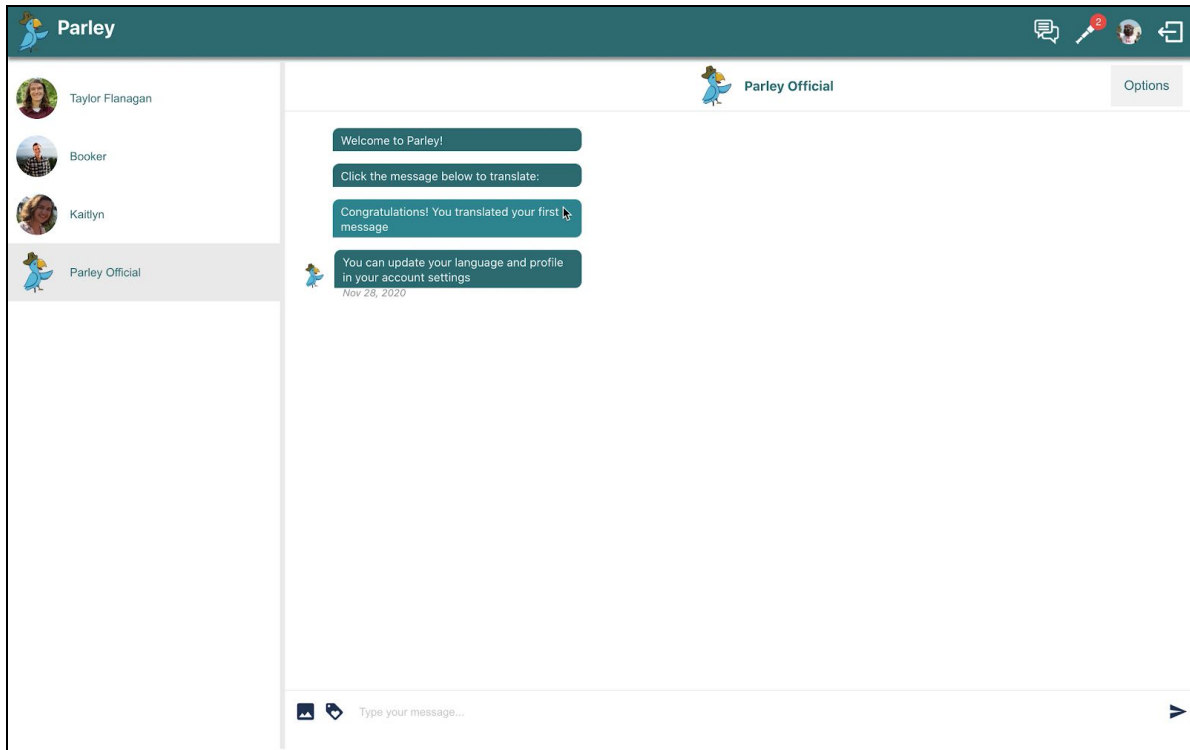


Once logged in, Parley participants are taken to the messaging page in which they are free to interact with any of their contacts (the vertical list on the left of the screen).

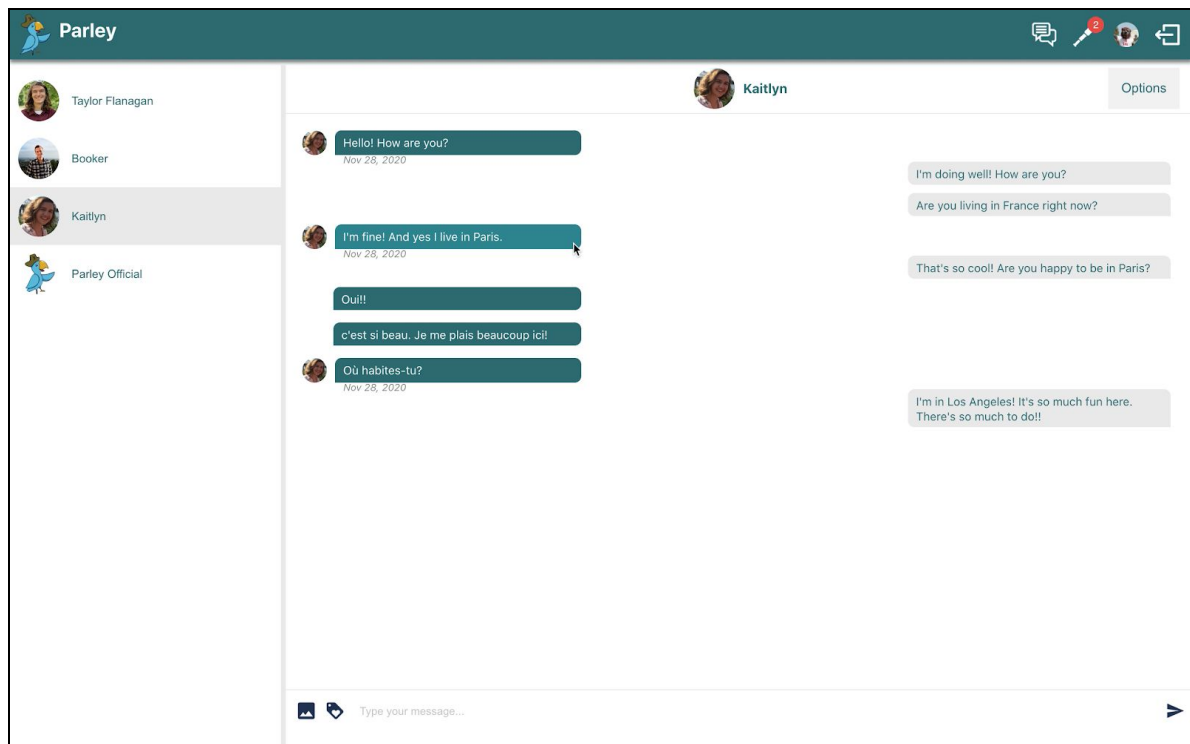


Once a contact is selected, they can view their conversation with this contact. Messages can be translated by clicking on the text bubble. This toggles the message language between the participant's language and their contact's language. Below is an example of this functionality as explained by the Parley tutorial account that appears as everyone's first contact as default. It has been included to help teach first time users how to translate messages.



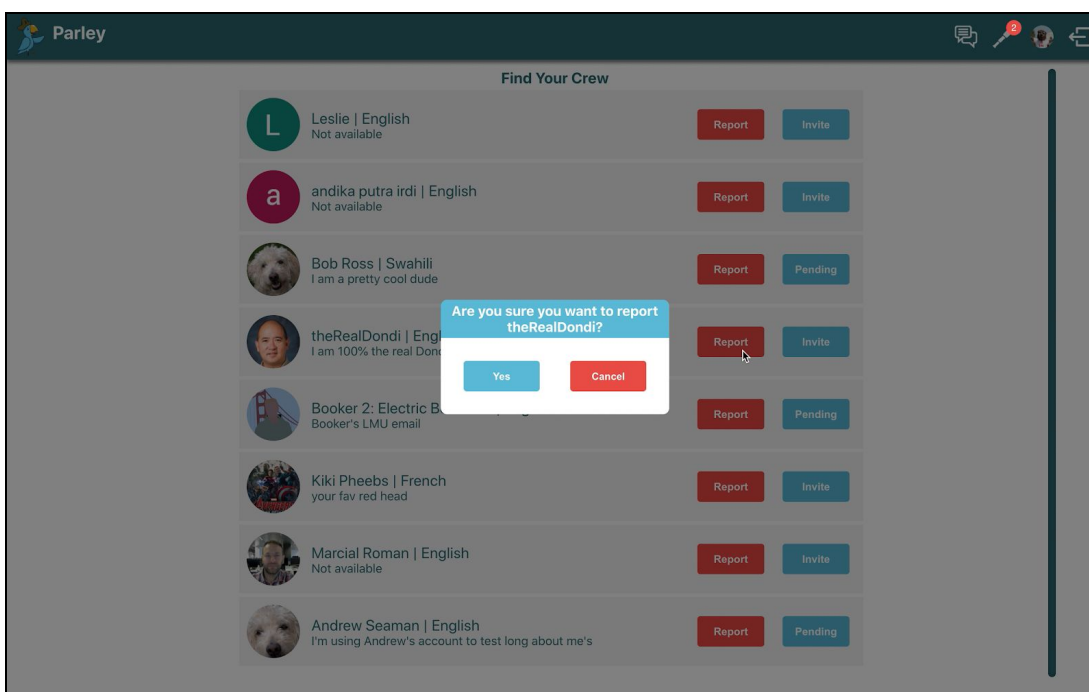
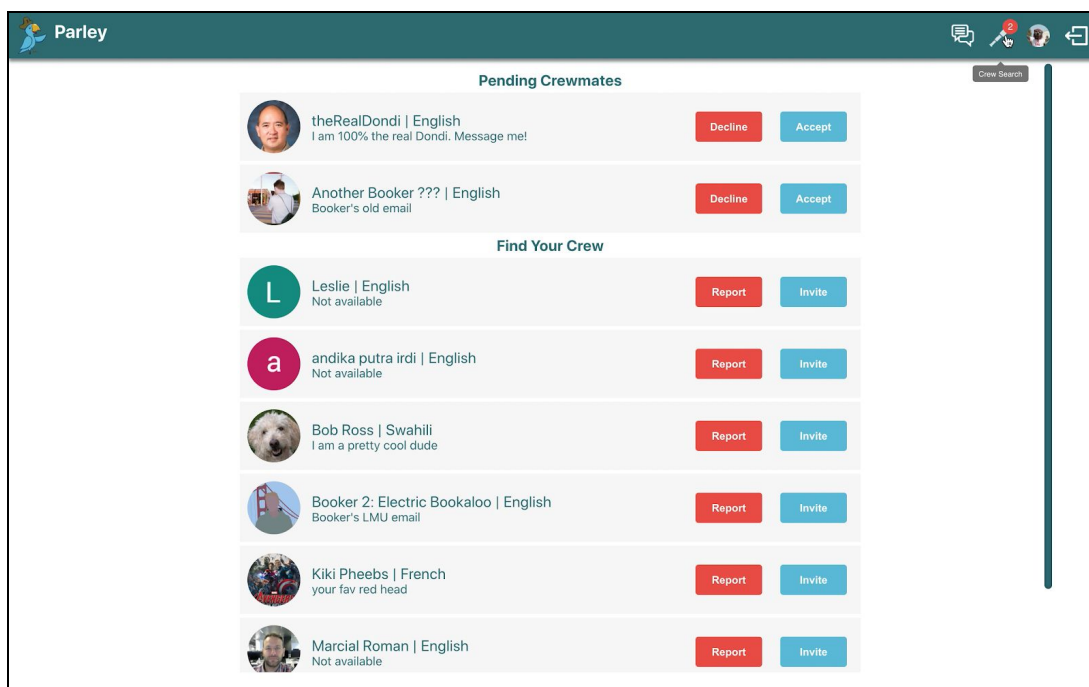


This language toggling functionality was included so that when one is conversing with someone who speaks another language, they have the ability to see both the original language as well as the translation. For people looking to improve their knowledge of a foreign language, it is especially useful to have this option, as they may choose to only read the messages in the foreign language in order to strengthen their skills, or they might not be familiar with a certain phrase but can easily learn what it means by quickly getting the translation.



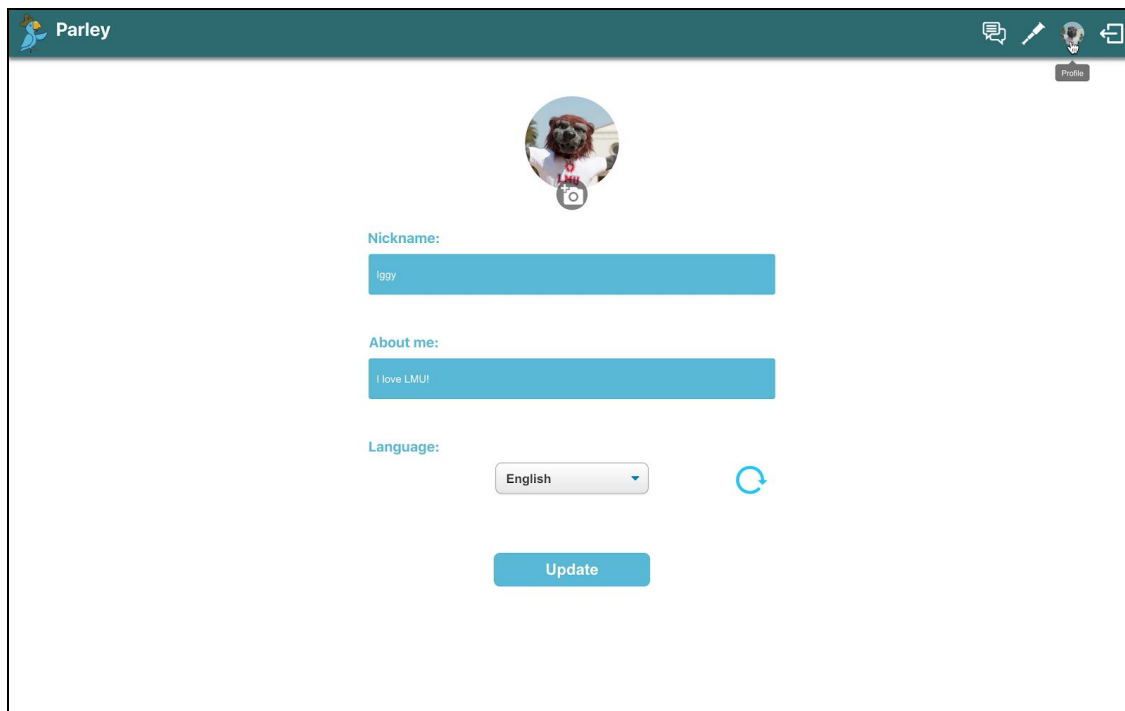
As seen above, a participant's messages will appear on the right, while the other user's will appear on the left. Text messages can be sent by typing into the bar at the bottom of the screen and pressing enter or hitting the send button on the right. Additionally, photos and GIFs can be sent by using the two buttons to the right of the text input box.

The navigation bar is located in the top right corner of the screen. The first option is for the messaging pages, as described above. The second button, a spyglass, navigates to the Crew Search page. On this page, participants can find other Parley users to add to their "Crew" (their list of contacts). This page displays others' usernames, native languages, and short descriptions about themselves. At the top of the page, pending crewmates are shown. These are people who have sent a crewmate request, and the participant has the ability to decline or accept their request.

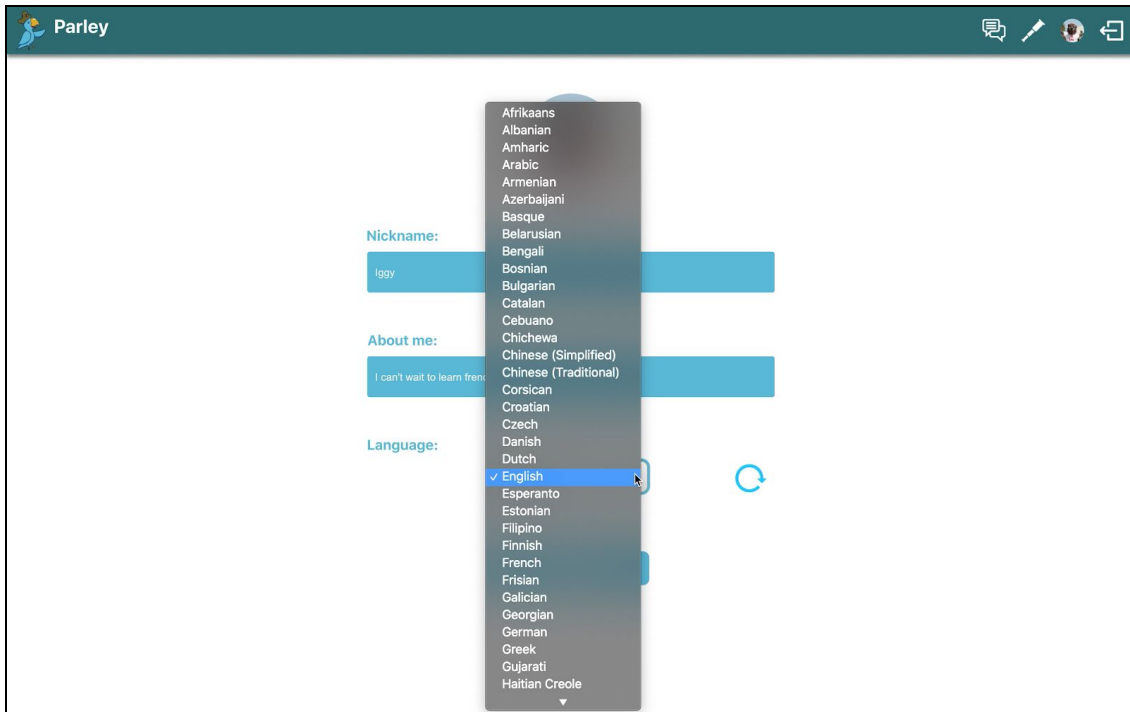


Below the pending crewmates is a list of all other Parley users. For each, the participant has the option to invite them to their crew or report them (as shown above). After inviting another person to their crew, the participant will only be able to message them after they accept the request. This prevents unsolicited spam messages from unknown users. Safety is taken extremely seriously on Parley, so any users that seem dangerous, suspicious, or aren't who they say they are can be reported to the developers, who can then remove them. Reporting is also available on the messaging page within a conversation by clicking the "Options" button on the right.

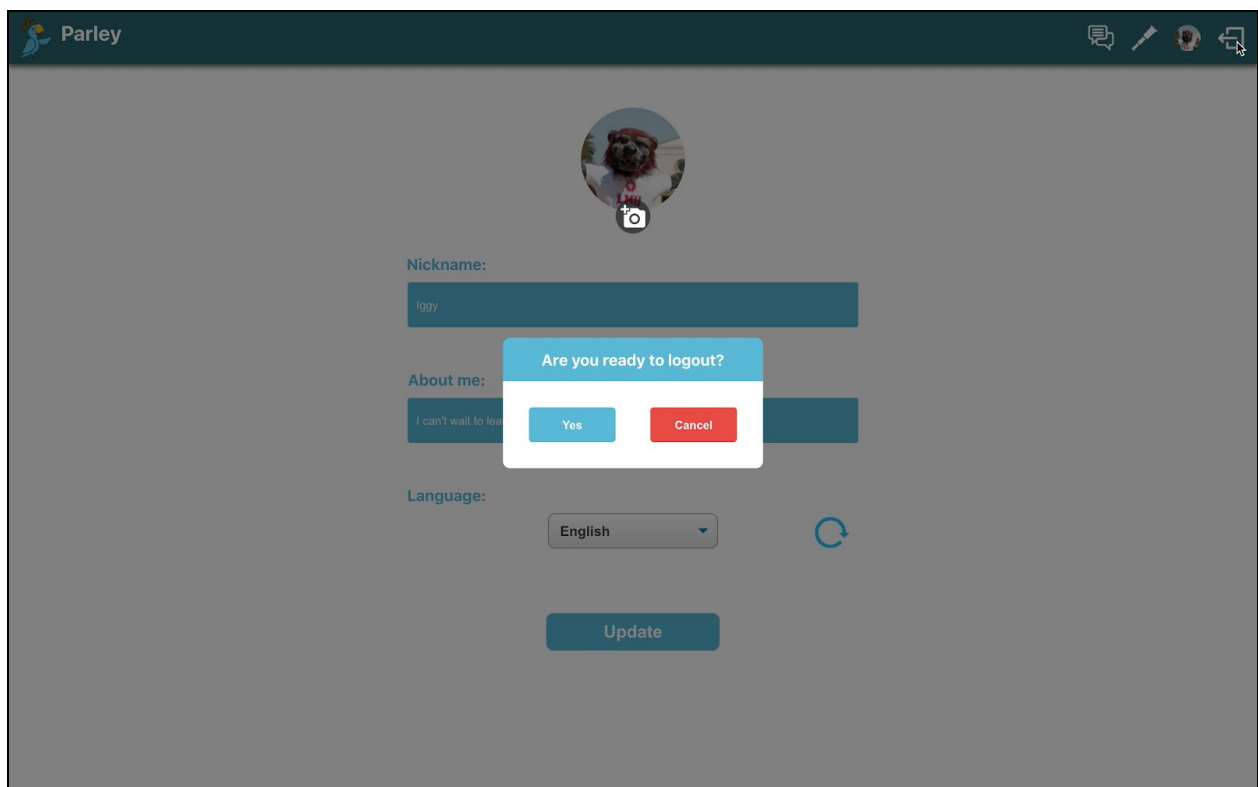
Lastly, clicking the profile picture in the navigation bar navigates to the Profile page. Here, participants can update their info and personalize their account. They can change their profile picture, their screen name, their "About Me", and even their preferred language from the dropdown box. By default the language is set to the language that the user's device operates on. If the language is accidentally changed it can always be reset to the default by hitting the reset arrow to the right of the language dropdown.



The screenshot shows the Parley Profile page. At the top is a dark teal header with the Parley logo on the left and icons for chat, a pencil, a profile picture, and a share icon on the right. Below the header is a circular profile picture of a dog. Underneath the picture are three form fields: "Nickname:" with the text "lggy", "About me:" with the text "I love LMU!", and "Language:" with a dropdown menu showing "English". To the right of the language dropdown is a circular reset icon. At the bottom of the form is a blue "Update" button.



When a participant is finished using Parley, they can simply click the logout button in the upper right corner. Before being logged out, they are prompted to confirm that they are ready to logout in order to avoid any accidental logouts. After being logged out, the participant is returned to the original login page.



# List of Features

- **Account Customization:**  
Add a profile picture, nickname, and bio to make your account stand out to other users.
- **Crewmate Search:**  
Search through a list of current users to find people who speak a language you want to learn or who sound interesting from their bio. Click to add these Parley pirates to your crew!
- **Messaging:**  
Send your crewmates messages containing text, images, and gifs!
- **Translation:**  
Chat with friends who speak different languages! Simply click on a message in another language to translate it into your language as selected in your settings. Click again to see the original message.
- **Reporting:**  
Safety is always our priority. If you do not feel safe when chatting with someone, click to report them and remove them from your crew.

# Usability Specification

A few of the main usability specifications we will be testing with participants are learnability, efficiency, and long-term use. In terms of learnability, our goal is to make sure Parley is easy enough to understand and use without any prior knowledge of the interface. We will only be providing participants with a few short messages from a tutorial account in order to learn how to use Parley, and the expectation is that they will be able to complete a set of benchmark tasks (see below) simply by clicking around the interface.

While our testing for learnability will mostly consist of ensuring participants can complete a list of tasks without any extra help, when testing efficiency we will be keeping track of time during interviews in which we will employ direct observation. Our expectation is that completing the set of benchmark tasks should not take more than about five minutes. If participants are unable to navigate through Parley this quickly, that will be an indication that we need to find ways to make it more efficient.

Lastly, another goal of ours is to make sure participants will want to use Parley long-term and will continue coming back to it. While it will be difficult to quantify this specification in early rounds of usability testing, as part of our evaluation we will have a questionnaire that asks participants about the likelihood of their future usage. Long-term usage will be tested by seeing what they have to say about whether or not they would use Parley in their day-to-day life.

# Initial Evaluation Plan

## Benchmark Tasks

When testing our program, we will have test participants perform a variety of Parley's main functions in order to see how easy and effective they are. The tests will be used in combination with a questionnaire and interview in order to maximize the feedback to help evaluate our system. The following six tasks comprise the majority of Parley's current functionality. It will be important to see how easily each participant is able to navigate our app with little to no instruction. Because of time constraints and the small size of students we are likely to have evaluate Parley, we will be using within-subjects evaluation, where each participant tests out all features of the app. Because these benchmark tasks build off of one another and are fairly different, we do not need to worry about participants learning as they go. In fact, we hope that is the case.

1. Access Parley and create an account.
2. Set up account settings, including a profile and default language.
3. Navigate to the Crew Search page and send a crew invite to someone you know.
4. Send someone in your crew a message.
5. Translate a message you have received into your native language.
6. Log out of your account.

## Questionnaire

After someone has done the above tasks, they will fill out a short questionnaire to let us know what their experience was with the app. The following questions are some that we may choose to include in our followup questionnaire. Note that participants will be able to rate their answers on a scale from 1 to 5.

- How easy to learn was the Parley interface?
- How clear were your tasks in Parley?
- How did the visual interface of Parley make you feel?
- If Parley were an app on your phone or computer, how likely would you be to use it to talk with people who speak different languages?

## Interviews

In addition to using a simple questionnaire to gather quantitative data, we can also employ interviews with participants to learn about the specifics of their experience with Parley. Likely these interviews would entail an initial round of questions prior to using the app as well as follow-up questions afterwards.

The initial questions would be very similar to some of the questions included in our data-gathering stage in Milestone 1. They would be broad questions about the participant's



experience with translation apps and language learning in the past. This will give us a chance to understand where this specific participant is coming from when they first use Parley. We can use our user evaluation from Milestone 1 to categorize each participant based on their experiences. It is very important that these questions do not lead our participant to feel a certain way about Parley or other, similar apps. Instead, we want to remain objective and ask them for their own experience. Some sample questions might include:

- Have you studied a foreign language? If so, which? What is your level of proficiency in that language(s)?
- What kinds of things have you done to improve your proficiency in that language (e.g. watching television in that language, taking online classes, etc.)?
- Have you ever used any apps that allowed you to speak with people in another language (e.g. Google Translate, Slatch, HiNative, etc.)? If so, what was your experience like?
- What kinds of features, if any, would you want to see in a message translation app?

After the participant has answered these questions, they would then go on to try out Parley for themselves. It will be very beneficial to watch them try out the app for the first time, so we will likely go with a direct observation approach. Because of the limits of the current remote learning situation, this will likely need to be done over Zoom with a shared screen. While the participant is testing out the app, we will be sure to let them explore the space themselves, rather than leading them through our own idea of what the app should do and how to use it. If they really get stuck, we will of course note this down before helping them continue with the tasks.

Following the trial of the app, we will then resume the interview to ask the participant about their experience throughout the test. This portion of the interview will likely be more open-ended, depending on what the participant experienced during their trial. However, we will start with some baseline questions to get a feel for their initial reactions. These might include:

- Overall, how was your experience with Parley? Did you enjoy it? Why or why not?
- Were there any points at which you were confused about how to accomplish a task? How could the task have been made less confusing?
- Does Parley look and feel like a modern app/website you would use today?
- Is there anything you tried to do in Parley or wish would be added as a feature?
- How did using this app make you feel?

## Other Evaluation Techniques:

Of course, there are other evaluation techniques besides questionnaires and interviews that we might consider using to evaluate our app. For example, we could conduct focus groups to interview a larger number of people at once. Focus groups, however, take the participants out of the individual experience that they would otherwise have using the app and can easily be dominated by a single voice. One-on-one interviews will be much easier to coordinate remotely and will still provide an in-depth evaluation of our app.

Another evaluation technique is indirect observation, in which we would indirectly observe app users through things like keystroke monitoring and tracking eye-movement. However, we have neither the technical ability to accomplish this nor the number of participants to make it worthwhile. We will instead stick with direct observation during our interviews.

Finally, we may consider employing a heuristic evaluation/expert review using other students from our class. These experts will have a much easier time picking out potential problems with our design due to their training this semester in the class. We will likely use the 10 design heuristics modified from Nielsen as discussed in class and allow experts to give feedback on each heuristic using a simple form. While expert reviewers may miss some larger usability issues, performing a heuristic evaluation in addition to our usability review will help to augment our tests with informed critique from these experts.

This evaluation plan is only preliminary. Likely, we will need to modify and expand it after our in-class studio session day and feedback from this milestone. Additionally, we may need to update the plan while we are already evaluating the app if our initial findings require further questions/methods to be used.