

## User Testing

We performed user tests with five non-CS majors and two of our customers from Team Cronus. Although all the users found our app fun and generally easy to use, there were a few points of confusion that several of the users encountered.

For our first user test, we asked an Accounting student named Marvin\* to install and explore our app. Marvin experienced some difficulty changing his Android device settings to allow for GeoPost installation, but he was able to install the app after about one minute. After successfully installing and opening the app, Marvin immediately recognized that GeoPost only allows logging in via Facebook, and he logged in without difficulty. Marvin then selected the “Post” button, and he opted to post a text-only message. After posting his first message, Marvin looked for other pins on the map. None of the pins on the map were within the unlockable radius (the red circle), so a “locked” toast appeared every time Marvin tapped on a pin. Marvin expressed some confusion about how pins become “locked” – he thought that the pin poster had to do something special to lock the pin for other users. At this point, Marvin was not sure how to continue using the app. We prompted Marvin to open the drop-down menu. From the menu, Marvin navigated to the “help” and “profile” pages. Marvin commented that the help page cleared up his confusion about locked posts.

For our next test, we observed a Biology student name Russ\* try out our app. At the login screen, Russ commented that he wasn’t sure if our app would make posts to his Facebook page. After logging in, Russ tapped on the “Post” button and posted a message. Russ then began exploring the map. He was initially confused about why posts outside of the red circle were locked. Russ was not sure how to continue, so we directed him to the help screen. This cleared Russ’ confusion about locked posts. We prompted Russ to walk around to unlock more posts, but Russ did not want to go outside.

We conducted our third user test on another Biology student, Mindy\*. Mindy logged in to the app quickly and smoothly. After logging in, she tapped on some pins outside of the red circle, resulting in several “locked” toasts. Mindy then tapped on the “Post” button and posted a picture with text. After posting her message, Mindy

\* Users’ names have been changed to protect their identities

expressed confusion about whether she had to unlock her own post. Mindy then tapped on the drop-down menu, and opened the profile and help pages. Reading the help page cleared Mindy's confusion about locked posts.

For our fourth user test, we asked Joey\*, a Drama student, to use our app. After logging in, Joey tapped on the "Post" button and posted a picture with text. Joey then tapped on some pins within the red circle and viewed their associated messages. He then tapped on some pins outside of the circle and noted that they were locked. Joey commented that he would have liked the red circle to be bigger so he could view more posts. Joey then opened the drop-down menu, and he opened the profile page. Joey was unsure if he could edit the profile page.

For our fifth user test, we asked a Spanish major named Alice\* to test our app. Alice logged in to the app smoothly, and panned around on the map screen. Alice noticed that it sometimes takes a few seconds for pins to load on the map. She said that she would have liked to see an indication that the pins were loading. Alice then began tapping on some pins inside and outside of the red circle, and she posted a text-only pin. She then opened the drop-down menu, and viewed the profile and help pages. Alice asked whether she could edit the profile page.

After performing user tests with five non-CS majors, we performed user tests on some of our customers from Team Cronus. These students were already very familiar with our app, so they had no trouble navigating and using the app. They did suggest that we widen our unlockable radius.

Although our customers had no trouble using our app, there were a few points of confusion common among some of the non-CS users. In particular, many users were confused about how a pin becomes "locked." This confusion was always cleared after reading the help page. To prevent future confusion, we programmed the help page to pop up immediately after a user logs in for the first time. Another common point of confusion was whether the profile page was editable. We fixed this by changing the "profile" page to a "stats" page, to imply that the page contents reflect user history and are not editable. Additionally, many users expressed that they would like the red circle

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to be larger so that they can unlock more posts without walking as far. We addressed this request by slightly increasing the unlockable radius. Finally, we agreed with Alice that displaying a loading icon while fetching pins was a good idea, so we added this feature in our release candidate.