

## Comparative Evaluation Results:

### Prototype A:

Name	Occupation	Qualitative	Quantitative
Nathan Au Yeung	Student	<p>Surprised that there were pre-existing friends already and checked each of them out.</p> <p>When clicking on the friends, he was confused as to why clicking on their name took him to their bio and had to use the backspace button to exit out.</p> <p>When playing around with the profiles, he noticed that the more button when clicking on the profile photo of a friend and clicking on their name did the exact same thing and he felt it was redundant.</p> <p>Nathan then proceeded to click schedule but was leery as to why it was just called schedule. He commented that if I'm scheduling a workout, wouldn't it be better to make it sound more specific?</p>	Add Friend:1 Remove Friend:2 Total Clicks: 18
Karina Ulloa	Student	Karina was able navigate faster than when she did Prototype B. The only slowdown she had was	Add Friend:0 Remove Friend:0 Total Clicks:5

		<p>when looking at the schedule and asked if it was the exact same as Prototype B but with the workout just lopped off.</p> <p>She then proceeded and clicked on schedule and was surprised that it took her to the schedule again.</p> <p>Feedback: The blue borders around the profile photos and how close the profiles were in proximity to each other was not a good look. Also to make the buttons more clear like it was in prototype B (her first experience).</p>	
Bonnie Yu	Student	<p>User checked out the two suggested and current friends because she was interested in what they said for their bios.</p> <p>Was confused as to why there was no back button to use on the app and when she clicked on the upper left profile photo button, it would redirect her to her profile. Felt that there should be a back button placed somewhere so she won't have to use the contacts button or back button on the laptop.</p> <p>When on the popup page for a friend, she felt that the schedule button was confusing because she</p>	<p>Add Friend:2 Remove Friend:0 Total Clicks:21</p>

		<p>didn't know if it was to schedule a workout or for just an overall schedule like the times she works out.</p>	
William Randall	Student	<p>Before navigating the friends page William asked for clarification between his existing friends and his suggested friends. This suggests that perhaps the vocabulary that is used for friends, "fam", is not very impressionable or meaningful to the user, but this may change if the user were to get acquainted with the app from the beginning (sign up), because the user does not see the app's name on every page.</p> <p>Will expected to be taken to a page with options to message his friend or plan a work out with them after clicking on their profile picture when instead he was taken to the modal with the three buttons. He assumed that since he was given the task to work out with the individual, he would have to contact them directly.</p>	<p>Add Friend: 1 Remove Friend: 0 Total Clicks: 4</p>

		<p>After clicking on the “schedule” button and going to the calendar page, Will understood that it was his own calendar page and not his friend’s, which was not expected after our results in A7.</p>	
Ahnaf Ahmed	Student	<p>Overall, Ahnaf had a much smoother time navigating the friends page than Yiham and William, but this can be attributed to the fact that he interacted with prototype b before prototype a and he already knew which buttons would be present where. However, in the final evaluation, Ahnaf said that he enjoyed prototype b much more than prototype a because the design was much simpler.</p> <p>When testing prototype a, Ahnaf clicked the name of the person expecting to be taken to the modal as in prototype b. However, he was taken to the profile page first.</p> <p>From there, Ahnaf navigated to his schedule through the “Workout” link on the upper right of the profile page, but in the</p>	<p>Add Friend: 0 Remove Friend: 0 Total Clicks: 5</p>

		<p>final evaluation, one of the reasons why he enjoyed prototype b more was because it didn't take him through the profile and he could just access his schedule directly through the modal (if Ahnaf were to keep using the app in its initial form, he may keep accessing the schedule through the profile and not the modal that pops up when clicking the picture of the person because he never discovered that feature). This is also why Ahnaf did not perform the add friend or remove friend action because he expected that the friend was added once he accessed their profile. It is also possible that he said this because he did not notice that there was any add friend option in the first place.</p> <p>Ahnaf expected to be taken to his own schedule by clicking the workout button, which is correct, but this may have resulted from the fact that he tested prototype b before he tested prototype a.</p>	
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Yihan Hu	Student	<p>When looking at the friends page, Yihan initially did not know who were already his friends and who were not. It took him about 10 seconds to figure it out but even then he was not very sure about the fact.</p> <p>Yihan tested the adding and removing functionality multiple times in the process of exploring the buttons on the modal which he accessed through clicking the profile picture. However, when he was taken to the profile page after clicking the “more” button, he became extremely confused and he almost clicked on the workout button on the nav bar to try to bring him back to the friends page. This is probably due to the fact that he was unaware of where he was relative to the nav bar when he was on the friends page. In the end, he determined that he could not go back to the friends page unless he used the back button.</p> <p>Before and after clicking</p>	<p>Add Friend: 3 Remove Friend: 2 Total Clicks: 13</p>
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		<p>the schedule button, Yihan assumed that he was looking at Frank Ocean's schedule and not his own. After being informed that he was looking at his own schedule, Yihan asked where he could see Frank's schedule if he could not see it through the schedule button.</p>	
Elizabeth Khith	Student	<p>Did not side scroll on friends so did not find that there were 2 more friends that she had besides 'Philip' and 'Edwin'</p> <p>Clicked on profile expecting to go to their profile, but was met with the modal. This is fine, we wanted this to happen.</p> <p>Clicking on 'more' she thought the modal would expand, but ended up taking her to his profile page</p> <p>Clicking 'Remove Friend' did as she expected it would</p> <p>Clicking 'schedule' brought her to the calendar page as expected</p> <p>Clicking 'Add Friend' removed the friend from suggested, but she</p>	<p>Add Friend: 5 Remove Friend: 1 Total Clicks: 19</p>

		<p>couldn't figure out where her added friend went. This is again an issue with the side scrolling feature of friends</p> <p>After seeing the modal, when she clicked on a different person she landed on their profile instead of the modal. This is because we had two different links, the photo would open the modal, and the name/mutual interests would link to their profile.</p> <p>User flow was not as fluid as we wanted it to be. She accidentally went onto profile page which she did not want, but then saw workout in the top right corner so she clicked that to direct her to the scheduling page. Even then, she didn't really understand what 'workout' meant. She thought it would direct her to the person's workout. I did feel that this was still ok because it allowed for more freedom of control, but should keep in mind to change the 'workout' button to something more intuitive to scheduling. When she added a friend she kept refreshing to see if it would update, but since she didn't realize that it</p>	
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		<p>was a side scroll she thought the app was just buggy. She also accidentally clicked on the top left profile icon as a means of going back. It was too hard for her to see that it was a profile icon, but this may have also been because since we tested just the friends page she did not upload a photo herself so if she uploaded an original photo that she recognized, this problem may have disappeared.</p>	
Allen Ng	Student	<p>Found side scrolling by accident because he was just playing around on the page and incidentally managed to scroll and see.</p> <p>Expected to enter profile when clicking on them, but modal popped up. He immediately exited, but just because he wanted to explore more. As he clicked on various people he realized that the name brought him to profile while the picture brought him to the modal.</p> <p>Although this matched what we wanted to happen at this iteration, we are now realizing this is not ideal.</p> <p>Clicking 'add friend' and 'remove friend' did what</p>	<p>Add Friend: 3 Remove Friend: 3 Total Clicks: 12</p>

		<p>he expected since he knew about side scrolling and just checked to see that it was getting updated.</p> <p>Clicking 'more' he expected to stay on the same page just with more information, but was brought to the profile instead. When asked why he said it was because he already got to the profile before so this was kind of a repetitive button.</p> <p>Clicking 'schedule' he expected that there would be some other pop up to quickly plan a workout, but was brought to the calendar page instead</p> <p>Ran into same issue as Liz where he thought profile was a back button</p> <p>This was perhaps the best run for this version, although it may have been by chance. Most of the features we implemented he understood and quickly navigated through the pages with minimal backtracking. Most of his mental model matched our's, but the biggest thing he noticed was that the 'schedule' did not have any preset information, not even the friend.</p>	
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Grace Oh	Student	<p>Also did not realize that there was side scrolling</p> <p>She initially clicked on the name instead of clicking on the photo so it brought her to the profile. This matches what she thought was supposed to happen, but not what our ideal mental model would be.</p> <p>From here she clicked on 'workout' and scheduled the work out so task was completed, however, I reran the test for her to see the modal. This took 3 tries total because the second time she again went straight to profile.</p> <p>Clicked on picture and was presented with modal, this was on the last run so she was surprised that it did not bring her to the profile as expected.</p> <p>Clicked 'more' to go to profile which was correct</p> <p>Clicked 'schedule' and ended up on calendar page as planned</p> <p>Clicked 'remove friend' and found the person in her suggested as expected</p> <p>Clicked 'add friend' but then he 'disappeared' because she didn't realize side scrolling was a</p>	<p>Add Friend: 2 Remove Friend: 1 Total Clicks: 15</p>
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		<p>feature on our friends container</p> <p>This was better than Liz's run. Although she was confused about why adding a friend only removed the person from suggested, she didn't refresh as much. This is not good because she basically just gave up and didn't care where that person went. Still important to note that she expected to see this friend added in. User flow was better, not as much backtracking, but when she finally opened the modal she was confused and immediately exited out of it and clicked again to reach their profile to schedule a work out. Finally started using the modal when I gave her a helping nudge in that direction. Modal usage was a bit better than Liz. Most of her mental model matched up with our's except when she tried to 'add a friend' because he seemingly 'disappeared'</p>	
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#### Prototype B:

Name	Occupation	Qualitative	Quantitative
Nathan Au Yeung	Student	For prototype B, Nathan was more successful in	Add Friend:1 Remove Friend:0

		<p>navigating the app to schedule a workout with a friend.</p> <p>He noticed that when clicking on the profile photos, there was a change in the color of the buttons compared to prototype A.</p> <p>He also liked that if he clicked on their name/interests, it wouldn't redirect him to a new page with their bio but popup that gave him the option to see profile or schedule workout.</p> <p>The more specific wording it was, the better he said.</p>	Total Clicks:9
Karina Ulloa	Student	<p>Karina was able to find a friend to schedule a workout with easily and had no problem bypassing the am/pm option when scheduling. (Nathan had trouble figuring out that he should just type it in)</p> <p>Feedback After Karina tried Prototype A last: This one had a better layout and better contrast because only 2 colors were used and the blue borders were removed because it did not look nice. Also the profiles were enlarged so more space was used instead of having it all compact and hard to see</p>	Add Friend:2 Remove Friend:0 Total Clicks:7

		their profile pictures was nice.	
Bonnie Yu	Student	<p>Bonnie this time didn't add any friends and went straight to clicking on their profile photo and scheduling a workout this time.</p> <p>When directed to the calendar page, she was clearly able to tell that this was her own and was faster in putting in a workout with her friend of choice.</p> <p>Bonnie did notice that the friends were bigger sized and farther apart and that there weren't the blue borders around the friends.</p>	Add Friend:0 Remove Friend:0 Total Clicks:2
William Randall	Student	<p>For prototype b, William repeated the same exact actions as he did for prototype a, by going to the modal, clicking on the schedule button and going to the calendar page. Because he identified the calendar page as being his own in the initial test for prototype a, he did not find a significant difference between his expectations for the pages.</p> <p>In fact, Will did not notice many changes at all, and</p>	Add Friend:1 Remove Friend:0 Total Clicks:5

		only after being shown the two prototypes side-by-side did he say that there was a noticeable distance with the color of the buttons and the blue borders around the pictures.	
Yihan Hu	Student	<p>Yihan did not mention anything about having an issue differentiating between his existing friends and his suggested friends when he tested prototype b.</p> <p>He also did not test different modal buttons as he did in prototype a and went directly to the schedule, this time understanding that he was going to be seeing his own schedule, but this may also be due to testing effects after interacting with prototype a first. He was still disappointed, however, at the fact that the app did not allow him to see his friend's schedule.</p>	Add Friend: 1 Remove Friend: 0 Total Clicks: 4
Ahnaf Ahmed	Student	<p>Ahnaf tested prototype b before testing prototype a. He was very impressed with the simple style of the page and understood</p>	Add Friend: 2 Remove Friend: 0 Total Clicks: 6

		<p>the system of adding and removing friends immediately (because the results were visible without scrolling).</p> <p>To go to the schedule, he clicked on the button through the modal, and he predicted correctly that he would be taken to his own schedule.</p> <p>Note: he decided to try and schedule his own event, but he forgot which day it was and checked on his phone to proceed with the scheduling. It may be helpful if there was a response system signifying today's date. Furthermore, he did not attempt to put in the AM/PM option manually; instead, he wrote the time in military time and was surprised when the calendar didn't automatically convert the time into standard time.</p>	
Elizabeth Khith	Student	<p>Grid allowed her to see all friends at once, which was helpful in comparison to issues seen in version A</p> <p>Since names/mutual interests were no longer</p>	<p>Add Friend: 2 Remove Friend: 2 Total Clicks: 8</p>



		<p>blue she only clicked on the photos and was presented the modal</p> <p>The modal buttons extend past the modal itself. Need to fix this</p> <p>All buttons matched expectations because labels were much more precise and informative</p> <p>She commented on how it overall just looks better now (besides the button extending past the modal)</p> <p>Felt the colors were nice touch for buttons, but when asked about version A she said it didn't really matter since ALL the buttons were red and had different labels so the color didn't really afford much to her</p> <p>Add/Remove friends were evident because friends were displayed in the grid</p> <p>Overall she thought this version was better because of the changes that we made. We also increased the size of the top left icon so she could see clearly that it was a person in there. However, she didn't really use the back button all that much.</p>	
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Allen Ng	Student	<p>He was the only one who knew about side scrolling in the first version and the change from side scroll to grid was a good move in his opinion</p> <p>He didn't struggle that much in version A, so he flew through version B pretty smoothly</p> <p>He also commented on the buttons and how 'Suggested' is kind of blocking other text, but these are aesthetic changes we can make later</p> <p>Was still disappointed that there was no autofill in the scheduling button (was not what he expected) but in terms of user flow he felt that it was very smooth.</p> <p>Since the names didn't change color and the cursor changed to the text icon he didn't think clicking on the names would do anything, but then was presented the modal.</p> <p>When suggested friends had more than one row, the lower profile blocks part of the upper profile so he wasn't able to see how many mutual interests he had with Beyonce and Edwin (in his run).</p>	<p>Add Friend: 2 Remove Friend: 1 Total Clicks: 6</p>
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		<p>Still better than version A in his opinion, but did want for the auto fill scheduling implementation to be included</p>	
Grace Oh	Student	<p>Noticed the grid format, was able to see all friends. Made the connection after removing/adding friend that maybe she just missed something in version A. I explained that it was just the side scrolling. She felt that it was her fault for not knowing, but clearly it was our own implementation</p> <p>Pointed out the button bug in modals, but didn't detract from her user flow</p> <p>All buttons matched expectations.</p> <p>She felt that the spacing/format was kind of distracting because words were overlapping at times and/or blocked by the nav bar.</p> <p>She definitely felt that this version was an improvement from the first, but felt that there were still some issues (mostly styling from how I interpreted as), but felt that it was easier to do our tasks.</p>	<p>Add Friend: 1 Remove Friend: 1 Total Clicks: 6</p>

### Quantitative Analysis:

For our quantitative data we were not testing for any % occurrences, but rather the focus was on how many total clicks it would take our users to accomplish such a task. By tallying up total clicks in version A and version B we are able to make some sort of interpretation about the fluidity and intuitiveness of our app. By looking at the raw data we see that in version A from all 9 users, there 112 clicks total averaging to about 12.44 clicks per user ( $112/9$ ). In comparison, version B had a total of 53 clicks which averages out to about 5.89 clicks per user ( $53/9$ ). This gave us a good start with how our revisions were doing in terms of user flow since the tasks remained the same in both runs. We can conclude that there exists an improvement from A to B due to the disparity in clicks where users more than halved the number of clicks needed to accomplish our tasks. Our qualitative data would then be able to help us pinpoint exactly what the improvement was that mattered most.

### Qualitative Analysis:

Many of our changed features showed positive results after the modification. Our largest measurement, which was the page that users expected to be taken to when clicking the 'schedule' button vs. the 'schedule workout' button, proved to be very different between our prototypes. While testing prototype a, many users expected to be guided to the selected friend's profile and not their own whereas this issue did not arise when testing prototype b. Some users were able to predict the correct page (their own schedule) but many of these users had tested prototype b beforehand, so we believe that their results were affected by the testing effect. Some other users guessed that the 'schedule' button would take them to a form where they could specify their schedule time which did not align with our mental model either.

We didn't specifically test for the other features that we changed but we received feedback regardless, to see if our changes were significant. One of the other features that we changed was the format of the existing friends. On our original version, the friends are organized in a horizontal scroll, which a good portion of our users did not detect. Instead they thought that the number of friends that were on the screen (which was around 3 because our screen accommodates 3) was the number of friends they had. Therefore, they were quite confused when they added a friend and it wasn't reflected immediately, because they would have had to scroll horizontally to see it. However for our prototype b, none of the users had an issue of not being able to see all of their existing friends and many of them appreciated the change. This could be further improved by adding a counter to display the number of friends and suggested friends the user has. Furthermore, many of the users could not tell which of the sections was for

existing friends and which was for suggested friends. Initially we thought this issue was caused by the unfamiliar wording of friends (we refer to friends as “fam” because it is part of our app concept/brand), and that our users did not find any significance in the word, but when we presented users with prototype b, we did not receive any comments about the two sections being hard to identify. In the end, we concluded that it was probably due to the format itself or the readability of the content. Although the format was fixed in the redesign last week, the text was still formatted in a way that it overlapped with other elements, and we decided to include that into our final redesign. Our users were also greatly confused by the disparity between the full profile and the modal the names and the profile pictures linked to respectively. Many users felt that the process was very redundant and unexpected. Although some users demonstrated that they would be able to learn the difference between the links, it would still not have been user friendly. We originally separated the names and the profile pictures because we wanted people to be able to access the profile more, but this should be done through another method, rather than having two separate links for the name and the profile picture.

We did not include the calendar page for our redesign, but since our task included going to that page, we had the opportunity to see the breakdowns that occurred on that page too. One of them was that our users expected there to be autofill and a section for the friend’s name when they were directed to the scheduling modal. We decided to include this in our redesign as well, but since it was a large functionality, we determined that it was not possible for this assignment.

Overall, we got positive feedback about the redesign from prototype a to prototype b, especially concerning the overall simplicity of the page. There were some minor features such as the modal buttons extending beyond the modal that was due to the larger button labels, but this was easily fixed in our redesign.

#### List of Revisions:

- Implement autofill for scheduling
- Format style to have no overlaps
- Make buttons fit inside modal
- Have some sort of counter for friends to show how many total friends/suggested friends a person currently has
- Reformat sizing so icons are smaller as well as the name/interests label
- Allow users to access a person’s profile through other means (not just the ‘view profile’ button)

