

## Heuristic Evaluation of [StudBud]

### 1. Problem

**StudBud** is an app that allows students to find other students and student groups with similar study times, classes and study spots through a profile-focused vetting system, and connect with them via a messaging interface in order to coordinate study sessions.

### 2. Violations Found

#### 1. [H2-3: User control and freedom] [Severity: 3] [Found by: A]

In the beginning, users must log in through via a Facebook account. Users may not have a Facebook account, limiting your user base to a subset of Facebook's user base, or may want to keep their Facebook identities separate from their StudBud identities. My recommendation would be to include the option of creating an account specifically for StudBud, or by allowing other platforms with which to log in (e.g. google accounts)

#### 2. [H2-10: Help and documentation] [Severity: 1] [Found by: A]

The quote on the front page doesn't have a source, which makes it seem less valid. My recommendation would be to include the name of the person/user who said the quote or left the review.

#### 3. [H2-3: User control and freedom] [Severity: 2] [Found by: A]

The information from the bio page, age information, etc. suggests that the app used information from my Facebook page to create my profile. However, I would have preferred the app asked for permission to use that information (again, I may wish to keep those identities separate), rather than having to remove or change that information after the fact. My recommendation would be to have a screen that asks the user for permission to access this sort of information.

#### 4. [H2-5: Error prevention] [Severity: 2] [Found by: A]

Later summaries of the bio suggest that the bio should only be a couple sentences long. However, there's nothing keeping the user from writing a novel for their bio. My recommendation would be to include a character limit on the bio page to ensure the bios are brief.

#### 5. [H2-5: Error prevention] [Severity: 3] [Found by: B]

Is there an undo button? What if you accidentally swipe No on someone, that in retrospect, might've been a good study partner? I would recommend a "back button" to revert swipes.

#### 6. [H2-4: Consistency and standards] [Severity: 3] [Found by: A]

The description of the sun and moon icon goes from "morning" and "night" person in profile set-up to "morning" and "evening" when viewing another person's profile. For study times, "evening" and "night" have somewhat different ranges of time associated with them. My recommendation would be to choose either "evening" or "night" and stick with it.

#### 7. [H2-3: User control and freedom] [Severity: 2] [Found by: A, B]

The dichotomy of "morning" and "night" may be too limiting. Some users may like working in the afternoons or evenings. Some might consider working at "night" to be working at 9:00pm, while another person considers it to be working at 2:00am. My recommendation would be to have icons that reflect this difference, such as an icon of the sun/moon at different points in the day or a sky that changes color.

**8. [H2-3: User control and freedom] [Severity: 3] [Found by: B]**

How does it work if you want to invite a friend you already know? I.e. you don't want to wait to match up with someone random; you have a friend you know already and want to find a 3rd person through StudBud. You could implement this option in your Profile screen.

**9. [H2-3: User control and freedom] [Severity: 2] [Found by: B]**

Can't send pictures on the chat interface. Add a button to send pictures.

**10. [H2-10: Help and documentation] [Severity: 2] [Found by: A]**

The screen appearing just before the first user profile was somewhat confusing. When I read to "scroll down to see more options," I didn't realize what screen it was referring to and tried scrolling on that current page. My recommendation would be to better clarify that this comment as referring to information on a user's profile page.

**11. [H2-10: Help and documentation] [Severity: 1] [Found by: B]**

The "?" question mark isn't very useful. All it does is direct you to a screen that says to tap on any of the blue links to change your settings. Recommend taking it out, or adding more information to make it more useful.

**12. [H2-10: Help and documentation] [Severity: 0] [Found by: B]**

I was confused as to what the (22) next to Andrew's name was, and had to think for a bit before I realized that it was his age. You should specify that it's his age. Also - is having an age that important?

**13. [H2-2: Match between system and the real world] [Severity: 2] [Found by: A]**

When I was on Andrew's profile, I thought that I would be able to speak with Andrew through the messenger icon. It was a bit jarring to be taken somewhere unrelated to the profile page I was just on, and I still didn't have a way to talk to Andrew. My recommendation would be to include the functionality that, if you tap on the communications icon from another user's profile, you can speak to that user.

**14. [H2-8: Aesthetic and minimalist design] [Severity: 2] [Found by: A]**

The process for not making a group with someone seems a bit harsh. If I don't want to join a group with a user, I have to tap on a huge red button with an X on it. The program repeatedly informing me that the user won't be notified actually made me feel worse about it (Should I be worried about Andrew finding out? Is not forming a study group with him a bigger insult than I realized?) My recommendation would be to try and make rejecting someone less of a big deal- for example, maybe give someone the option to simply leave that profile rather than formally rejecting the person.

**15. [H2-4: Consistency and standards] [Severity: 1] [Found by: A]**

Clicking on Brianna's class list gave a different list than what was listed on her profile. This is likely just due to recycled assets for the med-fi prototype, but it's worth noting for future iterations of the project. My recommendation would be to make sure the pop-ups for information match up with the information in the profile

**16. [H2-4: Consistency and standards] [Severity: 2] [Found by: A]**

When the user taps on a day of the week, the time goes from 1am to 12pm to 11pm. Most programs I use for time go in increasing order from left to right, so that seemed a bit confusing. My recommendation would be to change it such that time goes from left to right in increasing order.

**17. [H2-1: Visibility of Status] [Severity: 2] [Found by: A]**

When I chose to join or reject the Johanna and Caroline study group, I received a splash screen confirming my choice. However, I didn't receive any such notification when choosing to join or reject my other partners. My recommendation would be to apply the splash screens to any time a user selects/rejects a study buddy.

**18. [H2-1: Visibility of Status] [Severity: 2] [Found by: B]**

During registration, there is no "back" arrow to go back and edit your response. This can be confusing, because users may want to go back and update the information they just put in. Include a back arrow for responses

**19. [H2-1: Visibility of Status] [Severity: 1] [Found by: C]**

There is no progress bar when you register that indicated the number of screens needed to register. Include a progress bar or something similar to show progress through profile creation

**20. [H2-7: Flexibility and efficiency of use] [Severity: 1] [Found by: A]**

When looking at the Johanna and Caroline study group, their profile states "Bonus if taking CS103." It seems odd that they would have to specify that, because it suggests that they want to prioritize CS103 over the other classes listed. If that's the case, it seems like there should functionality within the program to account for that, rather than the users having to work around it through communicating preferences via their bio. My recommendation would be to implement a things like priority systems, particularly if you believe that users will try to implement a version of that on their own.

**21. [H2-7: Flexibility and efficiency of use] [Severity: 1] [Found by: B]**

Class viewing process should be more streamlined - instead of a new screen with every class popping up, consider just being able to scroll through all the classes from left to right.

**22. [H2-7: Flexibility and efficiency of use] [Severity: 3] [Found by: B]**

How does it work if you're in a group and looking for other people, but also looking for other people solo? For example: You're in a group for math, trying to look for more members. But, you're also by yourself, trying to find members to study with for Bio. How can you look for different StudBuds at a time? You should consider adding the option to specify which "study group" you're currently looking for.

**23. [H2-1: Visibility of Status] [Severity: 3] [Found by: A]**

There are no time stamps for when messages are sent and received. Studying can be time-sensitive: if I receive a message asking if I want to meet for homework, it would help if I knew whether that message was from a couple hours ago or a couple days ago. My recommendation would be to include time stamps underneath when the message was sent.

**24. [H2-4: Consistency and standards] [Severity: 2] [Found by: A]**

Usually tapping on a person's name or profile sends me to their profile page. However, when I tapped on Jenna Lee's profile while messaging her, it sent me back to my list of matches (I wasn't able to view our group until a clicked on the add-person button, which seemed counterintuitive). My recommendation would be to either consistently link profile pics back to profiles or make the back button more distinguished as a back button when messaging.

**25. [H2-8: Aesthetic and minimalist design] [Severity: 1] [Found by: A]**

This is related to my earlier point about rejecting users. In the case of Alec requesting to join the group, the buttons are the same as requesting a study group. However, the 'reject' button initially stressed that no one

would be notified: in this case, there's no way Alec's not going to know that we rejected him. Once again, my recommendation would be to remove the stigma of rejecting someone from a study group (maybe consider how Facebook handles friend requests?)

**26. [H2-6: Recognition rather than recall [Severity: 2] [Found by: A]**

This is also 'visibility of status,' in a matter of speaking- how do I know whether I'm the one who's managing a group? You mentioned in your slides that the creator of a group is the one who mainly makes the decisions for it. Right now it seems like a person has to remember which groups they're in charge of. My recommendation would be to have some sort of notification on the side of group you've created showing that you are the one managing it.

**27. [H2-8: Aesthetic and minimalist design] [Severity: 1] [Found by: A]**

When looking at the "match details" portion of the app, the information at the bottom (especially under "looking for another person to join") is very small and difficult to read. My recommendation would be to increase the size or color contrast of the text, or else move the information to other pages or pop-ups.

**28. [H2-8: Aesthetic and minimalist design] [Severity: 0] [Found by: B]**

Do we really care that much about the user's age? Consider taking out the age or deemphasizing it on the profile page.

**29. [H2-8: Aesthetic and minimalist design] [Severity: 0] [Found by: B]**

After registration, why is there a "find a studbud" button? There's no need for the user to tap again - it's an unnecessary action from the user. Consider showing a timed splash screen.

**30. [H2-8: Aesthetic and minimalist design] [Severity: 1] [Found by: B]**

"Or type in your own." It doesn't feel like this is needed; the textbox with the placeholder text seems like more than enough information for a user to press it and update what they want their bio to be. There should not be 2 options for this 1 specific feature.

**31. [H2-2: Match between system and the real world] [Severity: 3] [Found by: A]**

Under my profile, it's a bit unclear where exactly my classes came from. I don't have my classes listed in my Facebook account (arguably I may not even have my school listed on my Facebook page), and I didn't enter in that information when creating my profile. For a piece of information so important to your app, it should be clear where it gets added. My recommendation would be to have users create a list of classes during the initial profile creation.

**32. [H2-5: Error prevention] [Severity: 2] [Found by: A]**

In the profile page, There's a bit of redundancy in setting the morning/night preference and the times available as separate values. I'm specifically putting it under H2-5, because there's nothing to stop a person from putting that they're a morning person and listing all of their available times in the evening. My recommendation would be to have an algorithm that looks at the times they have listed as available and calculate the sun/moon icon for the user.

**33. H2-1. Visibility of system status [Severity: 2] [Found by: B]**

Changing study spots is counter-intuitive - what if the study spot that the student likes hasn't been pre-populated by Google Maps? Consider allowing the pin to be dropped anywhere on the map.

**34. [H2-1: Visibility of Status] [Severity: 0] [Found by: B]**

Also, maybe allowing a radius for the study spots is useful. A person who lives in a large city like San Francisco may only be able to meet people within walking distance, whereas a person in a suburb like Palo Alto may have a car and be able to drive to different locations.

**35. [H2-9. Help users recognize, diagnose, and recover from errors] [Severity: 1] [Found by: B]**

Why can't you go back after you reject / accept a buddy? What if you change your mind if you run out of people to match with, and you decide you want to go back and try to rematch with someone you previously swiped left on? I would recommend adding a list of people you've rejected, so you can go back and un-reject them if necessary.

**3. Summary of Violations**

| Category                            | # Viol. (sev 0) | # Viol. (sev 1) | # Viol. (sev 2) | # Viol. (sev 3) | # Viol. (sev 4) | # Viol. (total) |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| [H2-1: Visibility of Status]        | 0               | 2               | 3               | 1               | 0               | 6               |
| [H2-2: Match Sys & World]           | 0               | 2               | 0               | 0               | 0               | 2               |
| [H2-3: User Control]                | 0               | 0               | 3               | 2               | 0               | 5               |
| [H2-4: Consistency]                 | 0               | 1               | 2               | 1               | 0               | 4               |
| [H2-5: Error Prevention]            | 0               | 0               | 2               | 1               | 0               | 3               |
| [H2-6: Recognition not Recall]      | 0               | 0               | 1               | 0               | 0               | 1               |
| [H2-7: Efficiency of Use]           | 0               | 2               | 0               | 1               | 0               | 3               |
| [H2-8: Minimalist Design]           | 2               | 3               | 1               | 0               | 0               | 6               |
| [H2-9: Help Users with Errors]      | 0               | 1               | 0               | 0               | 0               | 1               |
| [H2-10: Documentation]              | 1               | 2               | 1               | 0               | 0               | 4               |
| <b>Total Violations by Severity</b> | <b>3</b>        | <b>13</b>       | <b>13</b>       | <b>6</b>        | <b>0</b>        | <b>35</b>       |

**4. Evaluation Statistics**

| Severity / Evaluator               | Evaluator A | Evaluator B | Evaluator C | Evaluator D | Evaluator E |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| sev. 0                             | 0%          | 11%         | 0%          |             |             |
| sev. 1                             | 14%         | 11%         | 3%          |             |             |
| sev. 2                             | 31%         | 11%         | 0%          |             |             |
| sev. 3                             | 11%         | 8%          | 0%          |             |             |
| sev. 4                             | 0%          | 0%          | 0%          |             |             |
| <b>total (sev. 3 &amp; 4)</b>      | 11%         | 8%          | 0%          |             |             |
| <b>total (all severity levels)</b> | 56%         | 42%         | 2%          |             |             |

**5. Summary Recommendations**

Overall this was a really polished, well-put together project; we think the only reason we were able to find as many violations as we did was because there was so much functionality already built into the app. The

## CS 147 Autumn 2016: Assignment 9 (Heuristic Evaluation Group Template)

Instructor: James Landay

main areas where we did see problems were in consistency & standards, user freedom, and the aesthetics & design. Firstly, there were elements of the app that would change arbitrarily, contained inconsistent information, or that simply mismatched with standard representations of information. We suspect many of these violations were due largely to shortcuts/limitations within Adobe XD, or were simply small mistakes lost in the size of the project. Still, we would recommend combing through the app for inconsistencies, and perhaps comparing some of the features within the app to popular existing programs such as Messenger or whenToMeet to understand what the standard is for those apps. In addition to consistency, there were some issues with user freedom, particularly in signing up and profile creation. As some users may want to keep their Facebook and StudBud personas separate, we would recommend allowing the user the option to create an account unique to StudBud, or at least ask permission to access information on their Facebook page rather than automatically filling it in. Finally, some of the aesthetics surrounding rejecting a person could be toned down. This is an area we would recommend differentiating your app from apps like Tinder; not wanting to form a study group with someone doesn't have to have the same weight as being uninterested in them. You could perhaps give the user the option to simply leave the profile, or change the color and tone of the reject button to reduce the severity of it. Those are the three main areas; however, the good in this app far outweighed the bad, and we're looking forward to seeing the final product!

One additional comment about your feature set - one of your selling points is that you can set up a study group with individuals, or with groups. But, we couldn't figure out how to differentiate whether we were looking for a study group for an individual. We also couldn't figure out how to show whether we wanted to show people who were looking at us as a group, or as individuals, or even both. We think it would be useful to filter via classes as well, given that in college, there is such a wide variety of classes for which one could be searching for study buddies for.