CS 147 Autumn 2015: Assignment 9
Instructor: James Landay

Heuristic Evaluation of HelpList

1. Problem

HelpList is an anonymous way for people to ask and answer questions while in-class, vote on them, and to find previously asked questions and their respective answers.

2. Violations Found

1. [H2-4 Consistency & Standards] [Severity 4] [A,B,C,D]

The "ask" button looks like it should complete a search. In many iOS apps, a button next to the search bar implies that clicking that button "completes" or launches a search. This could be confusing to a user who expects that behavior and is instead taken back to the ask page. You could get rid of this button (you already have the back button in the navigation view, which users are used to using) or move the ask button to the bottom.

2. [H2-8 Aesthetic and minimalistic design] [Severity 1] [A]

On the ask page, I feel like "current lecture" is a lot more important than "past lectures" yet the two buttons are the same size. I would consider refactoring the sizes of these buttons to portray their relative importance. Maybe make the past lectures small text at the bottom of the screen. (task 2)

3. [H2-2 Match between system and the real world] [Severity 3] [A,B,C,D]

When I submit a question, I expected to be taken to the page with all of the questions and see my question on there. Right now when you submit a question it just stays on that page and a small label changes to "submitted," so it was hard to tell that you even submitted a question. It would be better if you transitioned to the page with the questions for the current lecture. (task 1)

4. [H2-2 Match between system and the real world] [Severity 3] [A,D]

Why is the search bar on the page where I'm inspecting a question and its answers? I have no intuition as to what I would be searching for on this page.

5. [H2-8 Aesthetic and minimalistic design] [Severity 1] [A, B]

When first opening the app, it requires too much scanning of the screen to confirm that the class selection is correct. This may be because the "Now in" section of the screen may appear too low to users. Ultimately the student first needs to know that they are posting questions to the correct class, so I would suggest moving this to the top of the screen.

6. [H2-8 Aesthetic and minimalistic design] [Severity 4] [A, C,D]

The "write answer" button looks like a heading, not a button. It seems you have been going with the green theme for buttons so that could work. (task 2)

7. [H2-8 Aesthetic and minimalistic design] [Severity 1] [A, C]

On your homepage: I'm thinking about what information is necessary. App title unnecessarily clutters the home screen. The "HelpList" icon is nice but I would like to see some sort of "Ask a question!" label or something that makes it clear what the textfield is for (don't want to have to read the placeholder text).

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8. [H2-8 Aesthetic and minimalistic design] [Severity 1] [A]

On your homepage: "Now in:" is probably unnecessary text…this is super minor detail but you could get rid of it and just display "Physics 41."

9. [H2-6 Recognition rather than recall] [Severity 3] [A, C]

It would be nice if from the page that lists the questions in the current lecture, you could see if a particular question had answers (or how many answers). This could be a subtitle on the cell, right under the text for the question.

10. [H2-2 Match between system and the real world] [Severity 3] [A, B, C, D]

It would be helpful to get notified if a question that I upvoted was answered. That way I don't have to keep checking the app (which could be distracting during class). (task 3)

11. [H2-2 Match between system and the real world] [Severity 1] [D]

The green ask and submit buttons don't look press-able (though the contrast helps there).

12. [H2-3 User Control and Freedom] [Severity 4] [B, C, D]

As of right now, there is no way to "escape" this class – yes users can go to past lectures from this class, but what if I want to check out some other class's questions? Automatically going into class trades off against flexibility… what if I don't want to be in this class, but the one next door? My recommendation would be to confirm/change (if necessary) class selection before accessing the "Ask" screen.

13. [H2- 5 Error Prevention] [Severity 2] [D]

Initially, I thought I was going to "past lectures" as in for all my classes when I pressed that button, but it took me to dates. And only dates for this class. I caught on, but it was an error with slight confusion and potential for irritation.

14. [H2- 5 Error Prevention] [Severity 2] [D]

Different error problem: because the numbers don't look natural to press, people might try the arrows above the numbers – which are very close to other things that I'm not aiming for (e.g. submit, the other questions, etc). Then they get navigated to a different screen and are confused about what just happened.

15. [H2-8 Aesthetic and minimalist design] [Severity 1] [D]

The grays are a little too washed out. Some of the text is near impossible to read when I take my glasses off as a result. (Also, past lectures might not even look like a button if it was bright out or otherwise non-optimal viewing conditions)

16. [H2-9 Help users recognize, diagnose, and recover from errors] [Severity 4] [D]

The hierarchy of the app - I'm not sure where I am in the app. When I went to past lectures, it isn't really obvious how I get back. I can press ask, I suppose, but what if I just want to use questions? I know there is a back button, but that doesn't really feel natural in this hierarchy – it feels like the are a "broader" category than this specific lecture, so I think a back button feels more natural from the specific lecture to the past lectures, not the other way around.

17. [H2-10 Help and documentation] [Severity 1] [D]

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Although it's pretty self explanatory, it is really nice to have some sort of tutorial so I'm not just thrown into the app and expected to know what it does. It's unclear how I get between places I might want to be (like classes)

18. [H2-7 Flexibility & Efficiency of Use] [Severity 1] [B]

The app remains on the start splash screen until the user taps on the screen. This isn't efficient, because the user has to click on the splash screen before doing any "work" in the application. It would be more efficient to take the user directly to the first page (perhaps after a splash screen) to speed up use of the app and allow for fewer clicks.

19. [H2-4 Consistency and Standards] [Severity 3] [B, C, D]

While the "Ask" button on a lecture screen takes the student to the initial ask question screen, this isn't consistent with the button on that page – which reads "Submit". So, if paired with the search bar, it is unclear from a visual standpoint what purpose that "Ask" button serves. While the back button on this screen serves the same purpose, it doesn't for subsequent screens (ie. the answering questions screen). Therefore, I would recommend having a gesture based action (ie. a double tab) from which the user can go to the "Ask" screen from any state in the application.

20. [H2-7 Flexibility & Efficiency of Use] [Severity 3] [B, C]

When submitting an answer to a question, once the user types something it isn't immediately apparent how to exit from that state and either submit/delete their reply entirely. It currently takes users two steps – click on the question title and then click submit. It would be good to make the submit button visible even when the keyboard is open (that way the answer can be submitted in only one click). Also there actually doesn't seem to be any way to cancel after clicking "write answer" at all. Perhaps add a "cancel" button, or cancel when they tap outside of the text box.

21. [H2-3 User Control and Freedom] [Severity 2] [B]

If a user accidentally exits out of a reply, their answer is currently not saved and the user will have to rewrite it completely if they wish to submit an answer. Instead, the system should save their reply as a draft if they want to return to it and submit it.

22. [H2-4 Consistency and Standards] [Severity 3] [B, C]

When asking questions in a Past Lecture, the Ask button is the same as in other places, so it is not clear that the user is asking a question in that previous class. I would recommend changing the look and/or text of "Ask" button to be clear that you're asking a question in the previous lecture. Perhaps something like "Ask in 10/5 Lecture", where the 10/5 is autofilled from what lecture screen you're in.

23. [H2-6 Recognition Rather Than Recall] [Severity 2] [B]

For the past lectures screen, the user currently has to choose from lectures based on the date and day of week. This does not provide much information to users, especially if they want to choose a lecture based off what was learnt then. I would recommend adding a couple words to each tile with the lecture topic ie. "String Theory."

24. [H2-4 Consistency and Standards] [Severity 2] [B, C]

When clicking on "Ask" in a previous lecture the user is taken to a different Ask Question screen than the one commonly used throughout the app. There's also a different style back button on that screen which isn't otherwise found. For consistency purposes, it would be nice if the UI for this looked identical to that

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of the original Ask Question screen just with the name of the lecture changed (as it currently is). And I would perhaps change the UI of the original screen to include a menu bar at the top.

25. [H2-8 Aesthetic and Minimalist Design] [Severity 1] [B]
The previous/current lecture buttons on the home screen are quite large horizontally and take up a lot of screen real estate. The horizontal slots for each question are so not easily clickable. In order to make them more easily clickable, it may be easier if they were more like cards in shape or just vertically longer.

26. [H2-6 Recognition Rather Than Recall] [Severity 3] [B, C]
At any given question, the user can't tell which lecture they are currently in. It would be nice for users to be able to tell which lecture the questions they are currently looking at are from, instead of having to remember it based on that path of items they clicked on.

27. [H2-3 User Control and Freedom][Severity 4] [B, C]
After submitting a question the user has no way to see it, edit it, delete it, or get a notification if the question is answered. I would recommend making a control flow that allows you to see questions that you have submitted to make sure that it is what you were after. Additionally, questions or answers that you create should have edit functionality, because you may want or need to change something that you wrote, especially if you accidentally incorrectly answered something. And finally have a notification system if a question you upvote or ask is answered.

28. [H2-7: Flexibility & Efficiency of Use] [Severity 2] [C]
- Description: For writing a response, there's a tiny up arrow above the text box – why is it there?
- Reasoning: The up arrow appears to let the user retract the "answer question" text box.
However, it is far too small for a user to tap, and it doesn't appear to do anything.
- Fix: Remove the up arrow that appears when you click "answer question"

29. [H2-5: Error Prevention] [Severity 2] [C]
- Description: When an answer is very long, it will either be cut off, or will take up a huge amount of space in the "answers" table
- Reasoning: Since the "answers" table already scrolls, you can't have a long answer scroll. So a long answer will expand answer cell larger and larger, likely hurting a users experience. Alternatively, if you limit the length of answers, then you will get surface-level "twitter" responses to questions, when a longer answer is necessary for understanding.
- Fix: Let answers be clickable, taking you to another screen where you can view the answer in its entirety.

30. [H2-7: Flexibility & Efficiency of Use] [Severity 2] [C]
- Description: No ability to rank questions by "newest"
- Reasoning: Since questions are always ranked by vote, the new (and perhaps important) questions will be buried beneath a sea of all of the questions that were asked before.
- Fix: Allow users to sort the questions by "newest"

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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	0	0	0	0	**0**
[H2-2: Match Sys & World]	0	1	0	3	0	**4**
[H2-3: User Control]	0	0	1	0	2	**3**
[H2-4: Consistency]	0	0	1	2	1	**4**
[H2-5: Error Prevention]	0	0	3	0	0	**3**
[H2-6: Recognition not Recall]	0	0	1	2	0	**3**
[H2-7: Efficiency of Use]	0	1	2	1	0	**4**
[H2-8: Minimalist Design]	0	6	0	0	1	**7**
[H2-9: Help Users with Errors]	0	0	0	0	1	**1**
[H2-10: Documentation]	0	1	0	0	0	**1**
Total Violations by Severity	**0**	**9**	**8**	**8**	**5**	**30**
Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)						

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4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
sev. 0	0	0	0	0
sev. 1	4	3	1	3
sev. 2	0	3	4	2
sev. 3	4	6	7	5
sev. 4	2	3	4	4
total (sev. 3 & 4)	6	9	11	9
total (all severity levels)	10	15	16	14

5. Summary Recommendations

Our main concern is navigating your app. It's hierarchy is currently rather confusing/inconsistent. And some functions/buttons take you to different places than what you're expecting, or it isn't clear what their purpose is. The main points we are looking at here are the "Ask" button, the "Search" bar, and understanding which class/lecture the user is currently in. It is not clear which objects on the screen were actionable. If you wanted users to be able to "Ask" a question from any screen in the app - you may want to rethink this using gesture actions instead of a button (ie. double tapping the screen). Sometimes buttons were obvious, as hoped (e.g. main screen past/current lectures), but many other places (e.g. gray "write answer" button or especially clickable numbers with small triangle) it was not clear what we needed to press to take an action, or was not clear what an object would do once we clicked it. By making action items more consistent (similar colors maybe) some of this confusion could be alleviated, as could the better hierarchy mentioned previously.

Aside from that, our second main concern can't be addressed without rethinking the anonymity aspect of your app. Users would need a consistent profile in order to get notified when their questions get answered, or in order to allow them to edit questions/answers down the road. This consistent profile could be invisible to the public, and could simply exist on the backend for the app to keep track of your activity.