

Heuristic Evaluation of EDUConnect

1. Problem/Prototype

EDUConnect is a platform that focuses on ameliorating teacher-student understanding, communication and relationships both inside and outside the classroom.

2. Violations Found

1. H2-4 Consistency & Standards / Severity 3 / Found by: A, C, D

The interface used the string “Save” on the first screen for saving the user’s profile, but used the string “Update” on the second screen. Users may be confused by this different terminology for the same function.

Fix: Use the same string on each screen.

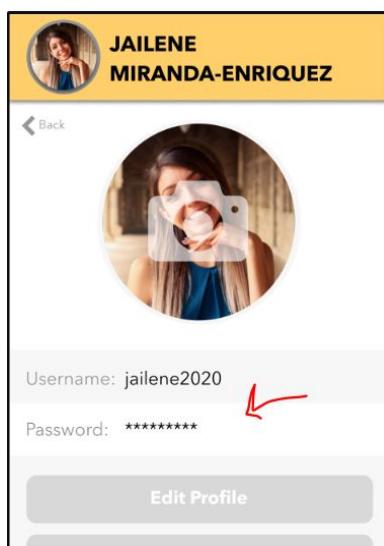
[...list violations here with a blank line between each -- number from 1 to n, where n is total # of violations]

1. H3 User control and freedom / Severity 2 / Found by: A, C

Users are not given the option to logout in most pages of the app. This can be easily fixed by adding a logout option on the top right of each page.

2. H8 Aesthetic and minimalist design / Severity 1 / Found by: A, D

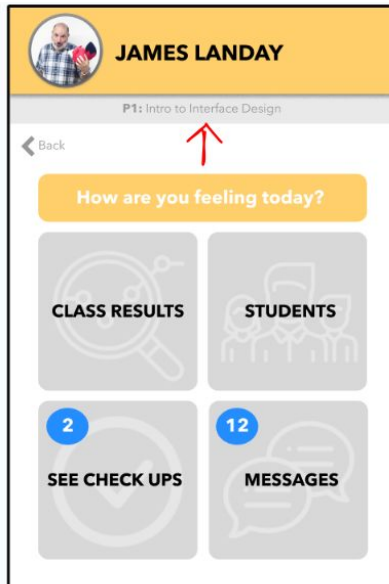
On the profile page you are able to see your username and are also displayed your password which is hidden with asterisks. There really is no reason as to why your password should be shown despite it being hidden with asterisks as you are not updating it. A solution to this would be to simply not show the password until in “Editing profile” mode. [Image below]



3. H8 Aesthetic and minimalist design / Severity 1 / Found by: A, D

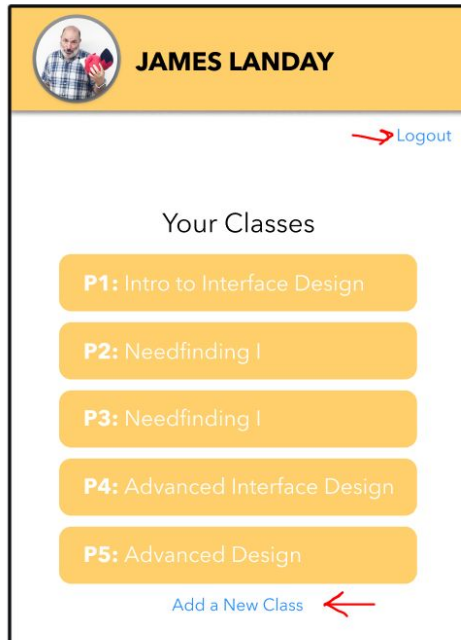
In the “How are you feeling today” page, the class title’s grey background makes it seem like something that you should ignore. This is because all the other options which are greyed out can’t be accessed. As a header/title this needs a bolder color/font size. A recommendation would be to change the background to white and increase the font size.

[Image below]



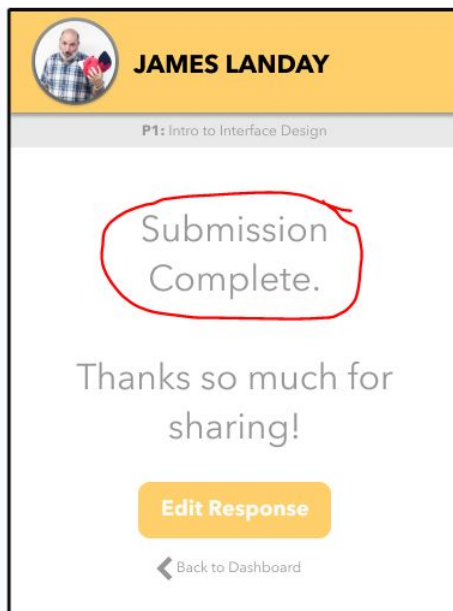
4. H4 Consistency and standards / Severity 1 / Found by: A,

“Logout” and “Add a new class” are both blue making them feel like they fall under the same action category despite them being very different types of actions. A fix would be to make logout a different color or to put “add a new class” within a similar box to the ones used to denote different classes. [Image below]



5. **H1 Visibility of system status / Severity 1 / Found by: A,**

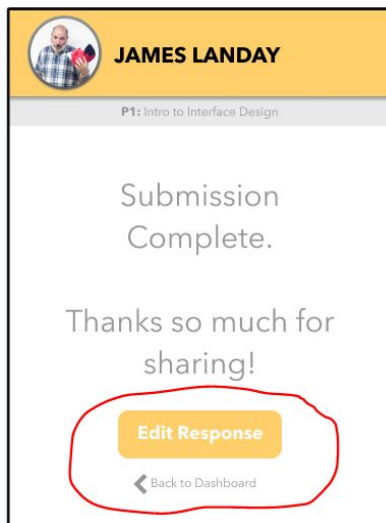
Submission complete should be a different color in order to really signal completion of input. A fix to this would be to make the text a different color such as green or to add a visual aid such as a checkmark next to it. [Image below]



6. **H2 Match between system and the real world / Severity 1 / Found by: A,**

"Edit Response" and "Back to dashboard" should have equal importance and be the same size. The current design makes it seem like the application's flow is for you to edit

your response rather than return to dashboard. A change would be to make both have the same type of box surrounding them. Or to put edit response below back to dashboard. [Image below]

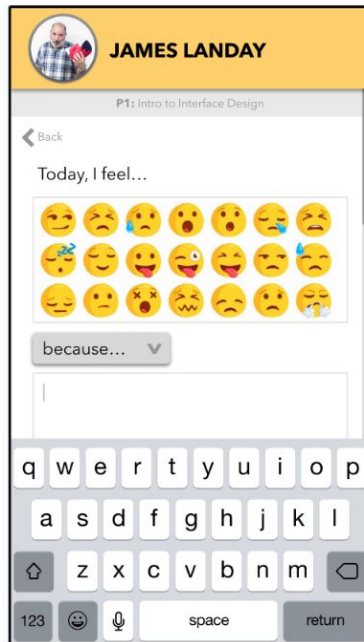


7. H5 Error prevention / Severity 2 / Found by: A,

There is no error prevention that keeps you from accidentally editing your initial response. It would be useful for there to be a “Are you sure you want to edit your response” dialogue to prevent accidents.

8. H2 Match between system and the real world / Severity 4 / Found by: A, D

Edit response redirects you back to the response page which is now empty so you aren't actually able to actually “edit” your response but are rather forced to write a new one. A solution to this would be to use a technology which makes the previous response reloadable. [Image below]

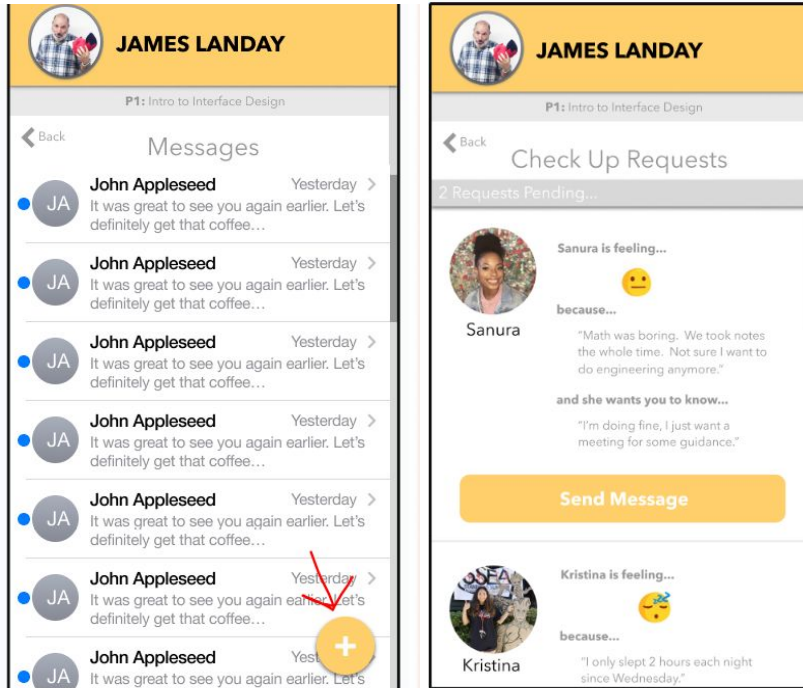


9. H9 Help and documentation / Severity 2 / Found by: A,

There should be documentation describing what each emoji stands for. A solution would be to have an extra page with a description of each emote so that all users have the same understanding of what they mean. Added fix would be to provide a description when hovering over the emoji.

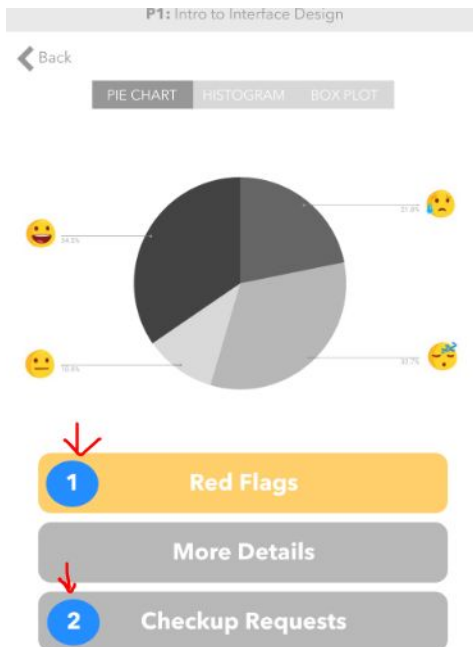
10. H6 Recognition rather than recall / Severity 1 / Found by: A, B

Within the messaging section, there is a plus sign button on the bottom right. I assume that this is meant to create a new message but I feel like there should be more consistency as for how to get to the send a new message page. The user shouldn't have to remember that the plus sign makes a new message. A solution would be to add a "Write a new message" box similar to the one used in Check Up Requests. [Image below]



11. H1 sibility of system status / Severity 3 / Found by: A, D

On the pie chart page, the “Check up requests” tab is grayed out despite having notifications next to it. You are allowed to access this tab despite it being grayed out which sends the user confusing messages. A fix is to make all buttons yellow so that the system provides the same message throughout. [Image below]

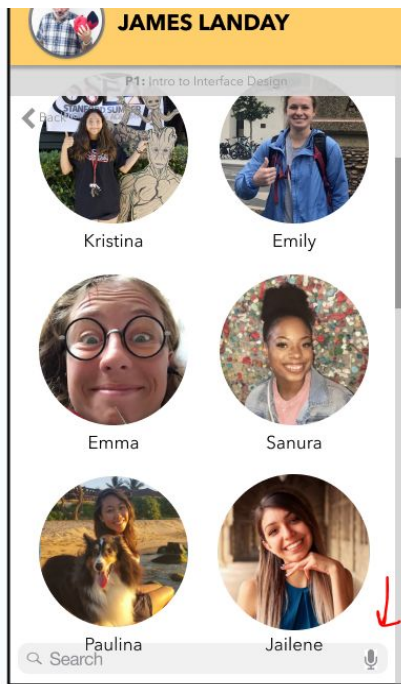


12. H10 Help and documentation / Severity 3 / Found by: A,

It would be useful to have a date connected to the pie chart to help the teacher know what date the pie chart corresponds to. A solution is to add the date the responses are linked to below the chart type. [Image above]

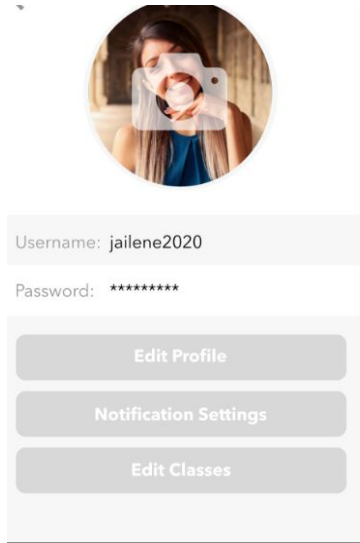
13. H4 Consistency and standards / Severity 1 / Found by: A

The search bar is found in an unintuitive location. Furthermore the color of the text makes it get lost within its grey background. A fix would be to bring the search bar to the top of the page and to make the word "search" black. [Image below]



14. H4 Consistency and standards / Severity 4 / Found by: A, B, C, D

All the bars are greyed out, and the color grey is used in other parts of the app to signal unclickable bars. This suggests that these bars can't be clicked on at the moment however they are actually accessible. A fix would be to make them all yellow. [Image below]



15. H4 Consistency and standards / Severity 2 / Found by: A,

When filling out the form you are given the option of over a dozen emotes, however your histogram only shows three of them. All emotes used should be displayed somehow in the charts to accurately represent information. A fix would be to add more emotes.

[Image below]



16. H1 Visibility of System Status / Severity 1 / Found by: B,

The starting screen is aesthetically pleasing, but it is not immediately intuitive the user has to click or tap the screen to reach the login page. This is a violation of system status as it may be unclear to the user what is going on. Fix: add a click or tap button like the “press home to unlock” label on the iPhone when logging in, or set a fixed time for the screen to such that users are aware the app is loading.

17. H8 Aesthetic and Minimalist Design / Severity 1 / Found by: B,

The back label next to the back icon may be redundant and not entirely necessary. In fact, it often adds extra text to some already text-heavy screens.

Fix: simply remove the label as the icon itself seems to be sufficient for users to understand functionality of the button.

18. H3 User Control and Freedom / Severity 2 / Found by: B,

Upon submitting the student's feelings for the day (simple task), users are informed their submission has been completed, however, it isn't possible to immediately edit their submission. Currently, student users instead have to go back to the dashboard and then update their response.

Fix: upon completion, add a button like "Edit your response" beneath "Thanks for submitting!" which would bring users straight back to their response form, similar to the way Google forms allows users to edit their response immediately after submission. It seems this has been supported for teacher users while filling out their feelings, but not for student users.

19. H10 Help and Documentation / Severity 2 / Found by: B,

While student users are sharing how they are feeling, it is unclear who actually will see what they fill out and this may hinder user transparency.

Fix: provide a short description prior to the form on how a student user is feeling today that explains only the teacher for that respective class will see their response. This would be especially useful for first-time users and perhaps could even be included in onboarding.

20. H5 Match between System and the Real World / Severity 2 / Found by: B,

The button "Chat more?" on the screen after submitting the form on how a student is feeling today may be confusing to a student user. Though the language "Chat more?" seems familiar, the term "chat" seems to lack a sense of depth the student user may wish to obtain from further conversation with the teacher. Furthermore, the placement of the button on the screen may suggest talking about the teacher's feelings, given the proximity to the teacher's feelings blurb.

Fix: have a separate screen for the student user to see the teacher's feelings and place the "Chat more?" button on the student dashboard, after they've submitted their feelings for the day. Instead of "Chat more?", use language that is more indicative of a deep conversation, perhaps even something simple like "Want to talk more on how you're feeling?"

21. H3 User Control and Freedom / Severity 2 / Found by: B,

Once students request extra attention from the user, they are able to edit their response but are not able to delete message or undo sending the message. This is especially important if an accidental message/request for attention is sent to the teacher.

Fix: implement an undo message button, which would delete the check-up request for the teacher user and undo the sent message for the student user, giving users better control and freedom.

22. H1 Visibility of System Status / Severity 2 / Found by: B,

Currently, for each screen users see their name. It is unclear where exactly in the app the users currently are and what process is going on/what they are being displayed.

Fix: instead of having the user name at the top of each screen, perhaps you could have “Check Up Requests” or “Messages” so user’s are able to navigate the app with more ease. Further, the profile icon in the left-hand corner may be sufficient, letting the user know that they are currently logged in.

23. H4 Consistency and Standards / Severity 1 / Found by: B, C

It seems as though when check up requests and feelings forms are submitted for both user groups, there is an inconsistency in the app on the completion messages: “Thank you so much for sharing!”, “Thank you so much for submitting!”, “Submission Complete.” It can get confusing for the user especially if all phrases have the same meaning.

Fix: it would be nice to have the same completion message to keep consistency for both user groups.

24. H4 Consistency and Standards / Severity 2 / Found by: B,

On the teacher user dashboard, the button labels “Messages”, “Class results” and “Roster” are all consistent, however, the “See check-ups” seems odd and different in contrast with the rest of the buttons.

Fix: simply label the button “Check-ups” to follow the other label buttons.

25. H8 Aesthetic and Minimalist Design / Severity 1 / Found by: B,

Currently the graphs on the Class Results page use grayscale to show the data and collected statistics. This may be hard to differentiate and also brings back to the idea of greyed buttons indicating inactivity.

Fix: coloring the graphs on the Class Results page to the teacher user could be an interesting way to display data as opposed to the currently used grayscale. It might be more aesthetically pleasing.

26. H7 Flexibility and Efficiency of Use / Severity 2 / Found by: B,

For new users, it can be hard to understand the difference between the screen that shows up after you click on the “more details” button on the Class Results page versus the student Roster button. It seems like there is an overlap of information.

Fix: you could try to congregate the information presented to teacher users to avoid the overlap; perhaps the more details section could be combined with the Roster page such that the Roster is sectioned out by student’s current emotions and the teacher can click on each icon to view the personal profile of each student?

- 27. H2 Match between system and the real world / Severity 2 / Found by: B, D,**
“Get Connected!” Buttons on the homescreen make it sound like you are signing up for the first time, especially because you have in parenthesis “teacher” or “student”. It’s unclear to me if these buttons are supposed to log you in or if you are signing up.
Fix: If these buttons are to log you in, you should just have one button “Get Connected!” with no option for teacher or student. However, if you are signing up for the first time, then there should be a third “login” button below the username and password. To clearly differentiate login vs sign up.
- 28. H4 Consistency and Standards / Severity 1 / Found by: D, C**
Blue circle with 1 in it on top of messages is not greyed out, or it’s confusing what its purpose is given that the messages button is greyed out. It was unclear if the blue dot next to messages meant that the messages have not been read or have not been responded
Fix: Either take it away or make it a lighter blue
- 29. H2 Match between system and the real world / Severity 1 / Found by: D,**
Blue circles to indicate notifications should be in the top left corner of each box, which is the usual way apps indicate new notifications
Fix: Move blue circle.
- 30. H4 Consistency and Standards / Severity 1 / Found by: D,**
Black text of “messages” and “your history” should be a lighter color when it’s greyed out, having it be super black is confusing because it looks like a real button still
Fix: Make the font a lighter color
- 31. H3 User Control and Freedom / Severity 3 / Found by: D,**
“Back” button on emoji page for teacher profile not working.
Fix: Add a link to another screen for back button.
- 32. H4 Consistency and Standards / Severity 2 / Found by: B, C, D**
“Update how you’re feeling” button is grey which makes it seem not clickable
Fix: Change the color so it’s clearly clickable.
- 33. H2 Match between system and the real world / Severity 3 / Found by: B, D,**
Messages page on student page looks like you can message more than one person, but from what I understand you can only message the teacher
Fix: Go straight to an individual text message page with just the teacher, instead of a “messages” page, get rid of yellow “plus” at the bottom.
- 34. H8 Aesthetic and Minimalist Design / Severity 1 / Found by: D,**
On profile page, you have the picture twice.

Fix: Add the camera icon to indicate changing the picture on the top instead of having a separate picture

35. H3 User Control and Freedom / Severity 2 / Found by: C,

Users have the option to add new classes, but they should also have the option to delete classes from the “Your Classes” list. Fix: Add “Delete classes” button to the class screen.

36. H2 Match between System and Real World / Severity 2 / Found by: C,

The button “Back to Dashboard” might seem confusing to users. It was unclear if dashboard means the class selection screen or the class screen (the screen that has “update feeling”, “your history”, “messages” functions) until users actually clicks to find out the dashboard means the class screen. Fix: Add the title of “Dashboard” on the class screen to help users understand which screen is the dashboard.

37. H3 User Control and Freedom / Severity 2 / Found by: C,

“Back to Dashboard” is only on one screen. Users cannot easily navigate back to the dashboard screen.

Fix: Add the button “Back to Dashboard” to all screens. Or add a navigation bar to allow users go directly to the dashboard with one click.

38. H5 Error Prevention / Severity 1 / Found by: C,

The “Chat More” and “Back to Dashboard” buttons are so close together that users may accidentally click one when they mean to click another one.

Fix: Increase the space between two buttons to make them more distinctive.

39. H3: User Control and Freedom / Severity 4 / Found by: C,

If users skip the “Chat More” option after submitting feelings but later on want to chat with their teachers, they do not have the option to do so.

Fix: Add “Chat More” on the main dashboard.

40. H4: Consistency and Standards / Severity 1 / Found by: C,

The style is inconsistent between the “How are you feeling today” and “Update How You Are Feeling Today” button. Only the first letter of the sentence is capitalized in the feeling button, but first letters in all words are all capitalized in the update button.

Fix: use one style across different buttons.

41. H2: Match between System and Real World / Severity 1 / Found by: C,

The meaning of “Red Flags” was unclear, especially for first time users.

Fix: use more intuitive phrase like “Student Needs Special Attention”, or even add an icon to indicate the emergency of connecting with the students.

42. H8: Aesthetic and Minimalist Design / Severity 1 / Found by: C,

The white color of font made texts less readable against the bright yellow background.
Fix: change the color palette with consideration of contrast for readability.

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		2	1	1		4
H2: Match Sys & World		3	3	1	1	8
H3: User Control			5	1	1	7
H4: Consistency		6	3		1	10
H5: Error Prevention		1	1			2
H6: Recognition not Recall		1				1
H7: Efficiency of Use			1			1
H8: Minimalist Design		6				6
H9: Help Users with Errors			1			1
H10: Documentation			1	1		2
Total Violations by Severity		19	16	3	3	42
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)						

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
sev. 0	0	0	0	0	
sev. 1	8	5	6	6	
sev. 2	4	9	5	2	
sev. 3	2	1	1	3	
sev. 4	2	1	2	2	
total (sev. 3 & 4)	4	2	3		
total (all severity levels)	16	16	14		

*Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

[merge the general recommendations you made here]

In general, the medium-fi prototype needs a bit of “cleaning up” with regards to consistency of style, buttons, and some features etc. But at this stage, this level of inconsistency is not unexpected. I think an onboarding step would be very useful to understand what your application actually does, because it may not be immediately clear to first time users (like who gets to see what they write, the purpose of sharing their feelings, or even the data they can get for teachers). Furthermore, it could also perhaps motivate users to be more transparent when it comes to sharing their feelings (both teachers and students). I would also be cautious while working on in-app messaging. Right now, in the task flow, it is pretty confusing who you’re sending a message to and the many different entry points of reaching out to the teacher (for students) needs to be cleaned up. It also seems right now that students can message other students which should be worked out. Finally, the first log-in page could simply have the “Get Connected!” and then for first time users (perhaps in onboarding), the user could choose to be a teacher versus students. There are a lot of applications that follow this structure and this could make your login screen more aesthetically pleasing. I believe in class the team had mentioned that there would be an algorithm they would use to figure out whether they’re a teacher versus student perhaps based on email, but this separate screen to choose teacher versus student could simplify this process. Maybe after the first log-in or creation of account there could be a “Teacher at ...” or “Student at ...” label somewhere in the profile information.

That being said, I think the task flow is generally intuitive and the user interface design is pleasing and minimalist. The style of the application is progressively becoming more sophisticated and the added graphics displayed to teacher users proves the value of this app as a great analytical tool for teachers to better understand their students. As a team, you’re on the right track to building a solid app! Keep up the good work, and I’m excited to see your next steps!

Severity Ratings

- 0 - don’t agree that this is a usability problem
- 1 - cosmetic problem
- 2 - minor usability problem

3 - major usability problem; important to fix

4 - usability catastrophe; imperative to fix

Heuristics

H1: Visibility of System Status

- Keep users informed about what is going on

H2: Match Between System & Real World

- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom

- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards

H5: Error Prevention

H6: Recognition Rather Than Recall

- Make objects, actions, options, & directions visible or easily retrievable

H7: Flexibility & Efficiency of Use

- Accelerators for experts (e.g., gestures, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

- No irrelevant information in dialogues

H9: Help Users Recognize, Diagnose, & Recover from Errors

- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large