# **Heuristic Evaluation of SPQR**

#### 1. Problem

SPQR is an app that lets language learners meet other language learners with similar interests and complementary language needs, either by texting, talking, or meeting up in person.

### 2. Violations Found

- 1) H2-3 User Control and Freedom / Severity: 4 / Found by: A, B, C Very few back buttons where it would be helpful to go to the screen right before. Places where a back button would be needed: after selecting the language you speak/learn, setting up your profile, selecting a potential match (but deciding you'd rather pick someone else)
- 2) H2-3 User Control and freedom / Severity: 3 / Found by: B, C Need ability to navigate between pages (more easily than using back buttons). For example, need a way to go back from potential match page to home page. In general, you should be able to return to the home page from wherever you are in the app.
- 3) H2-3 User Control & Freedom / Severity: 3 / Found by: A, B, C
  There are no controls on the "my profile" page. The only action you can complete on this page is to search a new match. Either a back screen or, even better, making the current selection displays such as the languages and the interests clickable to modify/edit would be useful.
- 4) H2-3 User control and freedom / Severity: 1 / Found by: B When you're viewing the map and you tap on someone, bring up a text box overlaid on the map at the location of the pin, rather than immediately going to their profile this is how most mapping applications work.
- 5) H2-4 Consistency and standards / Severity: 2 / Found by: A, B, C It's unclear what the difference between the red and blue pins on the maps means. Clarify this difference: use a tutorial, use clearer symbols (e.g. use the standard circle with arrow that reflects orientation as shown when using Google maps for the user's current location)
- 6) H2-4 Consistency and standards / Severity: 2 / Found by: A, B, C Unclear what the theater icon on "Select a Location to Meet" page means. Is this related to the theater icon in my interests? Also, what does the pin at Cupertino mean? Clarify these meanings (via some sort of documentation), and maybe make the theater icon more visible; it's hard to see compared to the other pins because of its color and size.
- 7) H2-2 Match between system and the real world / Severity: 1 / Found by: B, C When I clicked "search new match," I wasn't initially sure what the pins on the map were showing me. Maybe show profile pictures within the pins to make it clear that we are looking at other users of the app. Also applies to the meet-up map.

- 8) H2-4 Consistency and standards / Severity: 1 / Found by: A
- Profile page: the text for "speaks/learning" and the respective languages is too similar. This might give the user the feeling that the two phrases are of equal importance. If that's intentional, great. I feel like the "speaks/learning" words should be emphasized over the names of the languages
- 9) H2-4 Consistency & Standards / Severity: 1 / Found by: A
  The color of the SPQR chat bubble is red on the initial sign up page, but then it switched to a
  blue color scheme on the create profile page. Instead, pick a unified color scheme/palate
- 10) H2-10 Help and documentation / Severity: 1 / Found by: B During the setup, I'm not sure what the green avatar that looks like a keyhole means. If that is a special type of avatar, make the symbolism more clear.
- 11) H2-10 Help and documentation / Severity: 1 / Found by: B
  On same two pages, I'm not sure if I can select multiple languages. I assume you will be able to.
  Since you can only select one avatar, but multiple languages, you may want to make the selection overlay look different for an avatar versus a language. For example, when you select an avatar, draw a box around it, but when you select a language, put a check over it. Or you might have a note below the page title that says "Select all that apply" or something like that.
- 12) H2-2 Match between system and the real world / Severity: 1 / Found by: B "Search new match" seems like an awkward phrase to me; I would prefer "find a match."
- 13) H2-2 Match between system and the real world / Severity: 1 / Found by: B This is minor, but to me, "meet | call | text" seems like the wrong order it seems like it should be in order with the least interaction on the left, and the most interaction on the right, so "text | call | meet".
- 14) H2-8 Aesthetic and minimalist design / Severity: 1 / Found by: A There's a ton of whitespace on the language selection pages, but the flags/text themselves are small and somewhat hard to read. Take advantage of the whitespace by increasing the size of the flags and, more importantly, the text. In general, the fonts seem small when you pair them with an icon.
- 15) H2-8 Aesthetic and minimalist design / Severity: 1 / Found by: A Massive home button after selecting location to meet disrupts flow/is jarring. Put as small button in upper toolbar instead (house icon, or something)
- 16) H2-8 Aesthetic & Minimalist Design / Severity: 1 / Found by: C Since the interest icons line up with the action circles it seems that there is some 1:1

correspondence between them somehow (like the meeting would be about gaming and the call would be about music). Since this is probably not true you can break the correspondence by either rearranging the interest icons or resizing them so they do not line up.

- 17) H2-6 Recognition rather than recall / Severity: 2 / Found by: A Could go away with time, but I couldn't remember what the double mask icon represented as an interest. To fix, have some way of remind yourself what your interests are *after* you've already selected them.
- 18) H2-7 Flexibility and efficiency of use / Severity: 1 / Found by: A Translation page for chat has "touch to return to call." Remove.
- 19) H2-3 User control and freedom / Severity: 1 / Found by: B In the initial setup screen, if I already have an account, how do I log in? Add a login button above or below "sign up." Subsequent screens should then have a "cancel" button in case you accidentally click to create a profile when you already have one, and want to go back and log in instead.
- 20) H2-3 User control and freedom / Severity: 2 / Found by: B When I decide to meet someone, I think I should be able to choose a specific place to meet rather than only having a few options. I should also be able to preview the place I have selected and make sure it is a good place to meet before sending the invitation (rather than just clicking on an unlabeled pin and hoping it's a nice place). Alternatively, get rid of the "meet" functionality anyways--generally, people who want to meet up can do so easily and more flexibly through chat.
- 21) H2-3 User control and freedom / Severity: 3 / Found by: B From my profile, I should be able to view people I have previously matched with.
- 22) H2-3 User control and freedom / Severity: 2 / Found by: B After meeting, texting, or calling a match, I should go back to the page for that match (profile), not the home page.
- 23) H2-3 User control and freedom / Severity: 1 / Found by: B On both the "I want to learn" and "I speak" pages, I want to be able to select more than just 8 languages. Include a search feature. Or if those are the only languages available, include a note indicating this so I don't get confused. Also applies to selecting interests.
- 24) H2-3 User control and freedom / Severity: 2 / Found by: B, C In the suggested phrases, the scroll button is hard to notice, and once I scroll down, I don't see any way to scroll back up. Instead of using buttons, drag to scroll up and down.
- 25) H2-5 Error prevention / Severity: 1 / Found by: B

On the "pick an avatar" screen, it looks like I can click "next" right away (bright blue button), but I'm actually required to pick an avatar. It's unclear what would happen if I clicked "next" right away in the actual app. You may want to gray out that button until I've chosen an avatar. The same applies to the other setup screens; gray out "next" until it can actually be clicked.

- 26) H2-7 Flexibility and efficiency of use / Severity: 1 / Found by: B In the translation interface, it would be more efficient to translate in real time rather than having to click "translate" once you have typed a phrase.
- 27) H2-7 Flexibility and efficiency of use / Severity: 3 / Found by: B, C In the translation interface, I will want to be able to translate from my target language to my native language in order to understand my language partner (i.e. translate in both directions). Also, I would imagine that one common task flow would in a conversation would be to translate the phrase the other person is saying without having to retype it. Adding that functionality would probably be useful. Also the translate button seems like it would be for this task. Maybe phrase "lookup" would be a better name for this button.
- 28) H2-7 Flexibility and efficiency of use / Severity: 2 / Found by: B In the suggested phrases for a phone conversation, include a (textual) pronunciation guide so that the user can immediately and confidently employ a given phrase.
- 29) H2-7 Flexibility and efficiency of use / Severity: 1 / Found by: B Instead of inserting a phrase directly into a conversation as a text message, insert into your text input bubble, so you can edit the phrase or add to it before you actually send it. This makes the suggested phrase feature more flexible.
- 30) H2-5 Error prevention / Severity: 1 / Found by: B When using translate while texting, "insert in talk" should be next to the bottom textbox, i.e. the text that will actually be inserted, rather than in the middle. Having it in the middle makes it unclear what text will be inserted.
- 31) H2-1 Visibility of system status / Severity: 1 / Found by: B When I select a suggested phrase while texting, it is not highlighted in the list of phrases, so it is not clear what phrase I have selected to insert. Highlight the phrase that I have selected.
- 32) H2-4 Consistency and standards / Severity: 1 / Found by: B It looks like the suggested phrases are buttons, since they're outlined in blue. This is the case while texting, but apparently not while having a phone conversation. Make the suggested phrases for phone conversations look different so they don't seem like they can be clicked.
- 33) H2-4 Consistency & Standards / Severity: 1 / Found by: C
  At first glance it is not clear that the languages on the "I want to learn" and "I speak" pages are clickable. It might be useful to include a visual cue such as shading or a grid structure.

34) H2-4 Consistency & Standards / Severity: 1 / Found by: C

It is not clear to me what the buttons on the left and the right of the mute button on the call screen should do.

35) H2-10 Help & Documentation / Severity: 1 / Found by: C

It is not clear to me why I am choosing a few interests and what they will be used for the the future. A pop up screen explaining this could help the user understand the purpose

### 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]

# 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	1	0	0	0	1
H2-2: Match Sys & World	0	3	0	0	0	3
H2-3: User Control	0	3	3	3	1	10
H2-4: Consistency	0	5	2	0	0	7
H2-5: Error Prevention	0	2	0	0	0	2
H2-6: Recognition not Recall	0	0	1	0	0	1
H2-7: Efficiency of Use	0	3	1	1	0	5
H2-8: Minimalist Design	0	3	0	0	0	3
H2-9: Help Users with Errors	0	0	0	0	0	0
H2-10: Documentation	0	3	0	0	0	3
Total Violations by Severity	0	23	7	4	1	35
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
sev. 0	n/a	n/a	n/a
sev. 1	22%	61%	17%
sev. 2	43%	86%	43%
sev. 3	25%	100%	75%
sev. 4	100%	100%	100%
total (sev. 3 & 4)	40%	100%	75%
total (all severity levels)	34%	71%	43%

## 5. Summary Recommendations

One of the main issues with the user interface is the lack of ability to smoothly navigate through the app as it is lacking any navigation bar and missing many back buttons. You should be able to easily go back to the home screen, go back and forth between screens, find friends you've already talked to, preview selections on the map before you actually click on them, etc.

I also wonder whether you might combine the text/meet flows--I can imagine users would want to text about where/what time they're meeting, which would requiring a chat interface anyway. I would also minimize the text on the buttons. "Go to profile" could just be "finish"; "Search new match" could just be "new match." It would also be good to incorporate consistency into text--all button text is lowercase, but title bars of pages are all capitalized. I would also consider changing your buttons from circles to rounded rectangles--it's hard to use all the space in circles effectively, meaning that buttons seem much larger than they need to be.

Additionally it would be helpful to have some tutorial functionality for first time users – though I expect this will come in the hi-fidelity implementation. On a more general note, the map component of this app seems to be only relevant to task 2 – meet people nearby with similar interests and complementary language needs. The first and third task can probably be completed irrespective of location of the language partner. Hence using the map as a mandatory filter may prevent matches based on other criteria from happening for no good reason.

It felt like the core features were there, but a lot of side features and intermediate screens were missing (for example, what happens when you've requested to meet a match, but they haven't confirmed yet?). I think this is largely because this is a prototype, and some of these issues will go away when you implement the real app. There were also some minor issues with the

suggested phrases interface, to make using and inserting suggested phrases more intuitive, as well as improvements that could be made to the translation interface. Finally, the setup sequence could be made more intuitive and more flexible (picking many languages, choosing your avatar, etc.). Other than that, the app was fairly intuitive to use and achieved the tasks well without too many confusing points.