Heuristic Evaluation of Civility

Evaluator #A: TS
Evaluator #B: JC
Evaluator #C: DZ

1 Problem
Civility is a smartwatch application that uses Natural Language Processing to offer suggestions to the user about issues with their person to person communication.

2 Violations
   i. [H2-4. Consistency and standards] [Severity 2] [Found by: A]
      i. On the page displaying users volume and words per minute (figure 14 in the report), you use an interface that users normally associate with a user input (adjust volume of an application) to display information (how loud the user is). This breaks from the users expectations and may confuse the user as to whether the screen is an input or an information display. A solution would be to add some text to the screen to help the user understand the interface.
   ii. [H2-4. Consistency and standards] [Severity 3] [Found by: A]
      i. On the settings page, it seems like users can edit their email and password. It is unclear how users would do this, as typing is near impossible on a smart watch, and no application on my galaxy gear actually requires me to use my gear to type input. This is typically relegated to a companion mobile application.
   iii. [H2-6. Recognition over recall] [Severity 3] [Found by: A]
      i. On the pages showing the users historical volume and words per minute (figures 10 and 12), the user is given no indication as to whether the numbers are good or bad numbers. The user is forced to figure out for themselves what a good score is, and then remember that score when on the page. A solution would be to potentially add color coding for good/bad scores or show a “target” score for the users.
   iv. [H2-8. Aesthetic and minimalist design] [Severity 1] [Found by: A]
      i. Every screen has “CIVILITY” and several have the date and time at the top (Figures 14, 15, 16). When the user has very little screen real estate, it seems unnecessary to include the logo/name of the app on every page. On the screens where it is required as a way to navigate home, instead a “back” button can be added. On screens where the user could also swipe to get back to home it is unnecessary. Removing the date would allow more information to be displayed, or simply a cleaner look.
   v. [H2-3. User control and freedom] [Severity 3] [Found by: A]
      i. On the “Pause” and “Unpause Now” screen, the user’s only path to exit without completing the pause/unpause now would be to click on the “CIVILITY” logo on top of the screen. The user should be provided with a clearer “Cancel” option.
   vi. [H2-8. Aesthetic and minimalist design] [Severity 3] [Found by: A]
      i. Almost no screens use color. They are instead all grayscale. Color is a great way to convey some information, and highlight important or related elements. Some smart watches have the ability to show color (Samsung galaxy gear), while others don’t (pebble), but given that a few of your screens have color, it seems that you are designing for a watch that supports color.
vii. [H2-8. Aesthetic and minimalist design] [Severity 3] [Found by: A]
i. Buttons on some screens are too small. For example, on Figure 6 and 7, the edit buttons and the drop down arrows are very small. As an owner of a Galaxy gear, I know that buttons of that size can be hard to hit. I would recommend increasing the size of the buttons.

viii. [H2-8. Aesthetic and minimalist design] [Severity 2] [Found by: A]
i. Some screens require less text than is currently on the screens. For example, in figure 6, “Your Email” and “Your Password” can be replaced with simply “Email” and “Password”. On a computer or even a mobile device this change wouldn’t be necessary, but given the limited screen space on a smart watch every pixel counts.

ix. [H2-4 Consistency & Standards] [Severity 2] [Found by: B]
i. “Average words/min” is how you documented the user’s average words per minute in one screen but the term WPM is used in the warning notification; because both refer to the same concept, it would be helpful to use the same term in both screens. One possible solution could be to include “Average Words/Min (WPM)” in the documentation screen.

x. [H2-3 User control and freedom] [Severity 3] [Found by: B]
i. If the user signed in using the wrong email address, there’s no interface to switch accounts. An option could be to include a sign-out button (in the settings screen if you are worried about clutter).

xi. [H2-2. Match between system and the real world] [Severity 2] [Found by: B]
i. Most people associate a turtle to rabbit scale with speed of movement and may be confused the first time they see Figure 14. A solution would be to label the second figure WPM levels.

xii. [H2-3. User control and freedom] [Severity 2] [Found by: B]
i. I’m assuming the user sees Figure 14 as the default screen when the user is in a conversation. There does not seem to be any way to navigate away from that screen to the home screen (even if the user is in a conversation, he or she may want to check up on the number of his/her violations for the day). A possible solution would be to have an icon on Figure 14 to redirects home.

xiii. [H2-1. Visibility of system status] [Severity 3] [Found by: A, B]
i. While how off-topic a conversation is was actively being measured, as indicated by the warning for it, there were no visual cues that this was taking place in the screen of Figure 14. In addition, the user is unable to see his/her past performance in this field as he/she is for the other aspects of conversation. Include some type of indicator that off-topic-ness is another aspect being measured in Figure 14, and add a past metrics on off-topic-ness screen.

xiv. [H2-3 User control and freedom] [Severity 4] [Found by: B]
i. The user has no way of canceling out of the process of pausing Civility. This is particularly frustrating, as it would otherwise take three additional taps unpause it. A solution would be to include a cancel function in the first screen of trying to pause Civility.

xv. [H2-1. Visibility of system status] [Severity 4] [Found by: B]
i. After signing in, there’s no indication of whose account is open (people may have multiple accounts on the same wearable). Add some type of indication of which user is logged in in the top bar.

xvi. [H2-2. Match between system and the real world] [Severity 2] [Found by: B]
i. While it easy to extrapolate what the term “unpause” means, most people associate the play icon with resumption of play, so it may be helpful to adhere to that convention in Figure 9 with “Resume now.”

xvii. [H2-3. User control and freedom] [Severity 2] [Found by: B]
i. There are no affordances for an individual who sees that he/she still has time left for “paused” Civility and decides that he/she does not want to unpause it. Add a cancel or “continue pausing” function to accommodate for this case.

xviii. [H2-1. Visibility of system status] [Severity 3] [Found by: B]
   i. Even though loudness is one of the metrics being measured in Figure 14, the user does not receive any notifications/warnings for being too loud. Include a warning screen for loudness in the same style as the other two notifications you have.

xix. [H2-3. User control and freedom] [Severity 3] [Found by: B]
   i. There is no obvious way for a user to navigate away from the Settings page, other than tapping the top bar, which a new user may not think to do. Possible solutions include having a button or icon that allows the user to return to the home screen.

xx. [H2-5. Error prevention] [Severity 3] [Found by: B]
   i. If the user were to change something like Notification Type on Figure 6, there is no function for saving that change. Prompt the user to save changes if he/she changes information in the settings page.

xxi. [H2-4 Consistency & Standards] [Severity 2][Found by: B]
   i. The average volume and average words/min information were both provided in terms of Today, Yesterday, Last Week, and Overall, while the number of reminders is listed for each day, and there does not appear to be any reason for the difference. Use the same temporal distinctions for all screens.

xxii. [H2-6. Recognition rather than recall] [Severity 4] [Found by: B, C]
   i. It is unclear that there were other views reachable from the “you lost your cool” page, because there were no arrows on the left and right. I only realized they were there when I accidentally clicked off of a button and all of the hotspots showed up. I suggest you follow platform standards and include arrows on the left and right to indicate that there are more choices.

xxiii.[H2-10. Help & Documentation] [Severity 1] [Found by: C]
   i. A feature I love to see in my apps is a way to connect with a support in case I have questions or comments about the software. It’d be great if you had some sort of feedback button that opened an email to support.

xxiv. [H2-7. Flexibility & Efficiency of use] [Severity 4] [Found by: B, C]
   i. I’m generally not a huge fan of having to click through views in order to find the one I want. It’s confusing to the user, because there’s no visible reminder of what the different options are. I suggest doing as much as possible to make those options visible as much as possible and implementing the UI so that users only have to click once to get to a given screen. Having some way for more advanced users to be able to jump to the screen with specific metrics they wish to see (average volume, wpm, etc) without having to swipe through content irrelevant to them at the moment. A possible way could be to have little dots/circles on the home screen that are unobtrusive to the new user but correspond to the different metric screens for the more experienced users to use.

xxv. [H2-5. Error prevention] [Severity 2] [Found by: C]
   i. It’s a bit too easy to accidentally pause Civility, especially for a mobile device such as a wearable, which is likely to rub against lots of different things throughout the day and potential press buttons on the screen. This is important, because it is the key functionality of your app and it would be really unfortunate if the user was unable to receive the data they expected it to collect. I suggest you make the “pause” buttons a bit smaller to decrease the probability that they are pressed by accident, and you could potentially add an alert message asking “Are you sure you want to do this?” before the pause takes effect.
xxvi. [H2-4. Consistency and standards] [Severity 2] [Found by: C]
   1. I was confused by your usage of the term “average volume” on the second
      screen. After analyzing it a bit more, I realized it must be the aggregate counts
      of the “times you lost your cool today” for each individual day, but it wasn’t
      clear from the get-go. Consider rephrasing the title to clarify that connection.

3 Summary of Issues

<table>
<thead>
<tr>
<th>Category</th>
<th># Viol. (sev 0)</th>
<th># Viol. (sev 1)</th>
<th># Viol. (sev 2)</th>
<th># Viol. (sev 3)</th>
<th># Viol. (sev 4)</th>
<th># Viol. (total)</th>
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<tbody>
<tr>
<td>[H2-1: Visibility of Status]</td>
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<td>3</td>
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<tr>
<td>[H2-2: Match Sys &amp; World]</td>
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<td>[H2-3: User Control]</td>
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<td>[H2-5: Error Prevention]</td>
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<td>1</td>
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<td>[H2-6: Recognition not Recall]</td>
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<td>[H2-7: Efficiency of Use]</td>
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<td><strong>Total Violations by Severity</strong></td>
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<td><strong>26</strong></td>
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### 4 Evaluation Statistics

<table>
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<tr>
<th>severity \ evaluator</th>
<th>evaluator A</th>
<th>evaluator B</th>
<th>evaluator C</th>
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<tbody>
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<td>level 0</td>
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<tr>
<td>level 1</td>
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<td>level 2</td>
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<td>60%</td>
<td>20%</td>
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<tr>
<td>level 4</td>
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<tr>
<td><strong>total (levels 3 &amp; 4)</strong></td>
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<td>53%</td>
<td>12%</td>
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<tr>
<td><strong>total (all levels)</strong></td>
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<td>52%</td>
<td>17%</td>
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<table>
<thead>
<tr>
<th>evaluator # Ex. C</th>
<th># problems found Ex. 7</th>
<th># unique problems remaining &amp; problem IDs Ex: 5 (1, 7, 11, 13, 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>8 (1-8)</td>
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<tr>
<td>B</td>
<td>15</td>
<td>15 (most found)</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>3 (23, 25, 26)</td>
</tr>
</tbody>
</table>

**Number of Violations Found**

![Graph of Number of Violations Found](image-url)