#### **Chidube Ezeozue**

# 6.831 HW2 | Heuristic Evaluation of "Musical Sketches" app

#### 1. Good: **Ease of use** (learnability, simplicity)

The app was simple and easy to use even for a non-musical person like me I also did not need any documentation.

# 2. Good: **Automatic saves and save button** (standards, error prevention, external consistency)

The edit screen saves things automatically but leaves the save button in place for users that are more comfortable with manually using a save button.

#### 3. Catastrophic: Cannot edit piece properties (error recovery)

It is not possible to edit the properties of a piece after it has been created. This may force a user to delete an entire piece in order to change something as simple as a name.

Recommendation: Give users the option to edit properties set during piece creation.

### 4. Catastrophic: **Inaccurate note placement** (match the real world)

When creating music and a note has been selected for addition, the notes do not land on the point on the sheet where the user clicks; it lands above the target.

Recommendation: Ensure notes land on the target position on the music sheet.



Figure 1: Inaccurate note placement

#### 5. Major: Ambiguous close option (error prevention)

The close menu option present in most screens is ambiguous. Users cannot tell if it closes the app or the screen.

Recommendation: Add a little more detail to the close option menu or replace it with "Back" as appropriate.



Figure 2: Ambiguous close option

6. Major: Piece name is not displayed during editing or playback (visibility of system status, error prevention, recognition not recall)

Piece name is not displayed anywhere during editing or playback and this may lead to mode errors where the users edits the wrong piece, for instance.

Recommendation: Display name and a few properties of the piece being edited or played back.

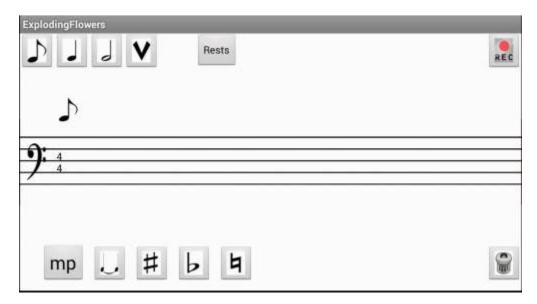


Figure 3: Piece name is not displayed during editing or playback

# 7. Major: **Notes do not stay selected after adding them** (efficiency)

Users have to click a note every time they want to place it on the sheet even if they want to place a particular note multiple times.

Recommendation: Allow users select a note for multiple placements without reselection.

# 8. Major: **No vertical line for marking play position** (standards, efficiency, error prevention)

When playing the song, the slider for marking the point of play does not have a vertical line running down the sheet. Users will therefore need to manually trace down the point on the sheet being played with their fingers or eyes.

Recommendation: Add a vertical line across the sheet to mark the play position

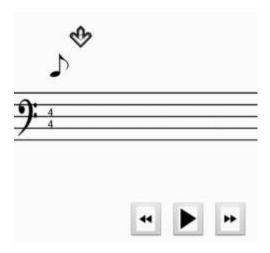


Figure 4: No vertical line for marking play position

# 9. Major: Frequent and unhelpful alerts (minimalist design)

There are alerts accompanying almost every action. Many of the alerts are not useful eg. "as you wish" that the user sees when they leave the edit screen.

Recommendation: Remove the unhelpful alerts and leave the helpful ones with an option for the user to disable them.

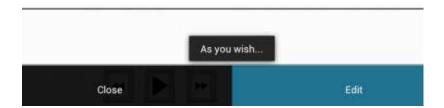


Figure 5: Frequent and unhelpful alerts

### 10. Major: **Using mostly shades of gray** (aesthetic design)

The color choice of mostly shades of gray with no other colors gives the app a drab look.

Recommendation: Add a couple more colors to the palette while keeping within the usability rules of colors.

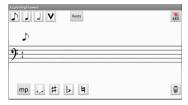


Figure 6: Using mostly shades of gray

#### 11. Major: It is not obvious that the user library is a list (affordances)

The user library lacks obvious affordances indicating that it is a selectable list.

Recommendation: Use alternating row colors or more contrasting separating lines to the give the user the impression that the library is a selectable list.

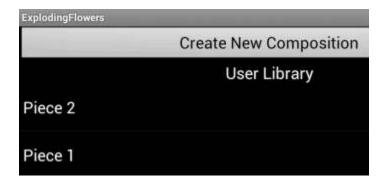


Figure 7: It is not obvious that the user library is a list

### 12. Major: **2-step select to change notes** (efficiency)

While creating music, selecting a note when another is selected deselects the currently selected note without effecting the select on the intended note thus requiring a second select on the intended note.

Recommendation: Clicking on a note should select that note regardless of whether another note is currently selected. The action of deselecting the currently selected note should be merged into the action of selecting a new one.

# **13.** Major: **There is no obvious way to undo** (standards, external consistency, error recovery)

A user should be able to undo actions like adding a note or removing one.

Recommendation: Implement undo functionality

#### 14. Major: **Ambiguity in delete command** (error prevention)

The non-obvious difference in function between the recycle bin icon that is visible while creating music may lead users to delete a file when they intend to delete a note and vice versa.

Recommendation: Use clearer button labels; textual if necessary



Figure 8: Ambiguity in delete command

#### 15. Major: **App title conflict** (consistency)

In the Android title bar, the app is titled "ExplodingFlowers" while in the splash screen it is "Musical Sketches"

Recommendation: Make the app title consistent throughout the app.



Figure 9: App title conflict

# 16. Major: "Create New Composition" button could be mistaken for a section header (standards, external consistency, error prevention)

The "Create New Composition" button is so wide that it could be mistaken for a section header.

Recommendation: Reduce the width of the button



Figure 10: "Create New Composition" button could be mistaken for section header

#### 17. Major: **Need to hit play twice** (efficiency)

After clicking play in the options menu from the edit screen and being sent to the play screen, a user still has to hit the play button instead of having playback start immediately.

Recommendation: Allow playback start once the user clicks play in the edit screen's option menu.

#### 18. Major: **No context menu in user library** (standards, efficiency)

Long-clicking any of the items in the user library does not result in a context menu for performing actions on the piece like deleting, playing etc. This adds a few more steps for a user intending to perform this action; they will have to edit first before playing or deleting, for instance.

Recommendation: Add a context menu to the items on the user library

### 19. Major: **No indication of an empty library** (standards, external consistency)

There is no label or similar affordance indicating that the library is empty. This makes the app's main screen a little confusing to first time users.

Recommendation: Add a "No items yet" or similarly-worded label to the user library when empty.



Figure 11: No indication of an empty library

# 20. Minor: No obvious use of "Continue to Music Library" button at app start (efficiency, simplicity)

The app starts off with a screen that has a single button: "Continue to Music Library". This adds one seemingly unnecessary step to the usage of the application. The button also blocks off some portion of the app's name on its splash screen.

Recommendation: Remove this screen



Figure 12: No obvious use of "Continue to Music Library" button at app start

#### 21. Minor: Difference in menu option presentation (internal consistency)

Menu options on the home screen are slightly different in presentation to similar menu options throughout the app. Some of the options are upper casing while others are not. "HELP!!!" is used in at least one place and "Help?" in other places



Figure 13: Difference in menu option presentation

### 22. Minor: Adding notes: drag vs. click (flexibility, direct manipulation)

When adding notes to the music sheet, it is not obvious if notes should be selected then music sheet clicked (as it is currently implemented) or if the notes should be dragged to the sheet instead.

Recommendation: Both modes of interaction should be permitted.

# 23. Minor: **Different component widths** (internal consistency)

On the screen for creating a new piece, the "Set Your Clef!" dropdown has a different width from "Set Your Key!" and "Set Your Meter!" dropdowns.

Recommendation: Make all similar components have similar widths



Figure 14: Different component widths

# 24. Minor: **No options icons** (standards)

Android users expect to see certain icons on each option in the options menu. These icons are not present here.

Recommendation: Add standard icons to each menu option.



Figure 15: No options icons

# 25. Minor: Misaligned buttons in new composition form (aesthetic design)

In the new composition form, the buttons, "Set" and "Cancel" are not aligned in any obvious way. They are not aligned to any of the other components or placed at the center, for instance.

Recommendation: Properly align the buttons in the new composition form.

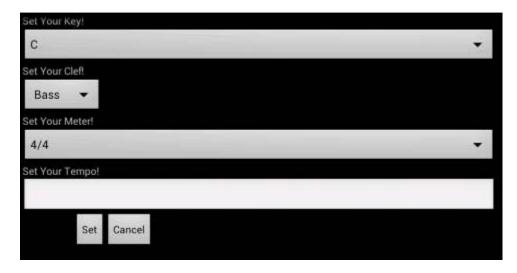


Figure 16: Misaligned buttons in new composition form