**ENSE 271 - HiFi Design Analysis with People Centered Design Topics**

The high fidelity prototype is designed to facilitate a better music distribution method for the Regina Mandolin Orchestra. We used concepts from "People Centered Design" to model and analyze the hi-fi design. The prototype presents a website that has a low threshold (easily understandable) and high ceiling (many opportunities).

a) **Discoverability** - Firstly, our designs try to be highly discoverable by using appropriate page titles displayed in the navigation bar and side panel. The panel is easily discoverable from any page by clicking the hamburger menu situated in the top left corner. This makes it convenient for members to determine where they can and need to go. We included links to their social media in the footer and notification icon in the header. Since the footer and header displays on each page, members can easily discover the links and be redirected to the appropriate pages.

b) **Understandability and affordances** - Understandability outlines the users' knowledge of the meaning of various controls and actions. Affordances determine what actions are possible   For example, when RMO members see a highlighted upload button underneath the upload area, they understand the file will be posted. Members can see that selecting checkboxes and date ranges in the "search filter"  helps sort information. The calendar index/pop-pop shows members they can annotate and respond to calendar events. We attached descriptive icons to buttons, links, slides, and the navigation bar to display the meaning of actions associated with these interactive areas. A number shows up beside the bell icon to signify a notification, a calendar icon is attached to calendar links to show page type, a plus button is used to show administrators can add new music sheets or exercises. Additionally, the "sort by…" button has an arrow to indicate that it drops down and will display all of its options.

c) **Signifiers and metaphors** - signifiers communicate actions that take place and convey affordance. We used metaphors to signify action such as a magnifying glass to signify search function, exit icon to signify return to public page, a bell to signify notification, user silhouette to signify account, music note to signify music section, etc.

d) **Gestalt Constraints**

**Proximity / similarity** - newsletters, music sheets, and recent updates are presented in proximity with other similar styles. For example, in the home page, previews of music sheets and calendar events are displayed using tiles made from similar shapes, fonts, spacing, and labels.

**Continuance** - Tiles are placed in patterns, instead of a random layout, to help users' eyes move smoothly from one object to another. We used curves, lines, and shapes to guide users from one action to the next like the upload and sign up processes. The "recently opened" music sheets and "upcoming events" in the calendar are presented as tiles and designed into a carousel. RMO members can use the carousel to navigate and view the preferred information.

**Figure & ground** - foreground and background will be separated by shape and color. We used colors such as blue for foreground and gray for background.

e) **Mappings** - Website is designed for the Regina Mandolin Orchestra members, so we used North American natural mapping conventions. The navigation panel displays on the left side of the website, Icons show to the left of written details, notification displays on the top right of the website, titles and headers are left aligned, and more negative space occupies the right side of web design.

f)  **Heuristic Evaluation - "Help Users Recover from Error"** - If they navigate to the wrong page, they have the navigation bar / hamburger menu at their disposal.  They can easily click on a tab and return to the intended page. If they exit a tab before saving a process such as uploading music sheets, they get a warning message. If they accidentally scroll to the bottom of the page, there's a button with an upwards arrow to redirect members to the top of the website.

g)  **Mistakes vs Slips:** We predicted human errors that might occur, and took preventative measures. For example, we included a "forgot my password" option in case RMO members forget their log-in information. To reduce the amount of information memorization required, we enabled members to use their email address as their username. To reduce chances of incorrectly responding to calendar events, we color coded the response types.