COMP 3020 A01 – GROUP B

Milestone 3

Evan Murray – murraye2@myumanitoba.ca

Mansimar Singh Bhasin- bhasinm@myumanitoba.ca

Nolan Plett – plettn1@myumanitoba.ca

Victoria Kogan - koganv@myumanitoba.ca

Zooey Schock – umschock@myumanitoba.ca

Department of Computer Science, University of Manitoba

COMP 3020 – A01: Human Computer Interaction

Dr. Celine Latulipe

December 23, 2021

Technology Overview:

Our approach to this vertical prototype was to provide a mockup for a majority of our site's pages, with select functions implemented more deeply. Most of the pages have been put together with html/css to give a sense of what navigating the full interface would be like. The pages that have been more fully developed are **My Games**, **My Goals**, and the **Advanced Search** function. Javascript was used to add utility to these more developed pages as well as to add some functionality to the home page and other less developed pages.

The **My Games** and **My Goals** pages use chart.js for data representation. **My Games** uses the library for a pie chart showing the breakdown of the games in the user's library by genre, and for a timeline of the number of new games added to the account. **My Goals** makes extensive use of chart.js, using functions from the library to display and update progress of user-set goals, as well as hourly and game-based data.

The **Advanced Search** page relies on vanilla js to provide a mock-search (of a small, curated set of games) to illustrate the functionality to users. The games list includes "It Takes Two", "Portal 2", "Team Fortress 2", "Half-Life 2", "Counter-Strike: Global Offensive", and "Among Us". Searching for these games or any part of their titles (or their console or genre tags) will bring these games up. Searching for any of these titles will let the user add a title to their **My Games** page, showing the interactions accompanying newly added games (giving star ratings, or adding as favorites). The **Top Results** box shows all the games that match what the user input (all inputs have to match) while **Related Results** box shows any game that doesn't match all the inputs but matches at least 1 input (at least one console or tag has to match).

Design Deviations and Evolutions:

One of the largest deviations from the paper prototype is the lack of **recommendations** on the main page. As recommendation engines are a massive topic in AI, we decided that this was beyond the scope of a mock-up, and this feature was not implemented. Additionally, the example goals displayed on the main page have also been simplified. This was done due to difficulty of implementation. What is displayed in this portion of the main page is a small hard-coded set of examples, with more functional examples being available on the **My Goals** page.

On the **My Goals** page, one change that was made was the updating of goals. This is now done by clicking a button labelled “update goal”. This was done partially for ease of implementation, but also for clarity (hovering on a usually invisible element to accomplish a function may have been confusing—what was implemented is much clearer).

The paper prototype included a chat functionality (the example used was sharing progress with another user). Having a live chat for multiple users was obviously deemed far outside of the scope of this milestone. What remains in this section is a static representation of what this section would look like in a full implementation.

Several of the more minute functions of our application have not been implemented. These functions are indicated by a reduced opacity (for example the search button and input in the **friends**/**chat** section). The following is a list of the functions that are not implemented in our prototype, and merely exist to display the application’s potential functionality:

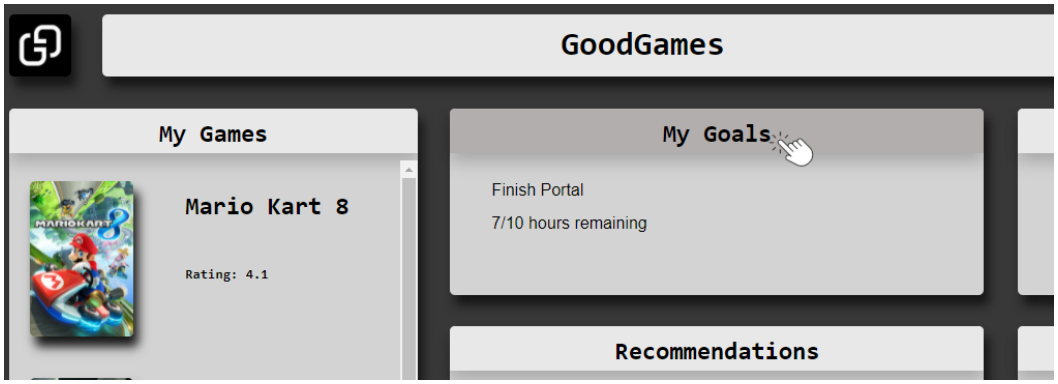
- Clicking through to dedicated **Recommendations** and **Notifications** pages from the home page, as well as those two pages in general.
- The **Chat** function, including the ability to search the chat.
- The ability to alter profile settings on the **Profile** page.
- Many of the add data functions in the **My Goals**.

    - Specifically, the only goal data can be added to is “play less than 20 hours per week”.
- Left and right arrows in the graph section of the **My Goals** page.
    - Specifically, the only place the arrows work is in the archived goal “play more than 5 hours per week”.
- Games added in the **My Games** page will not retain star ratings, and games added this way will not populate the **My Games** box on the **Home Page**.

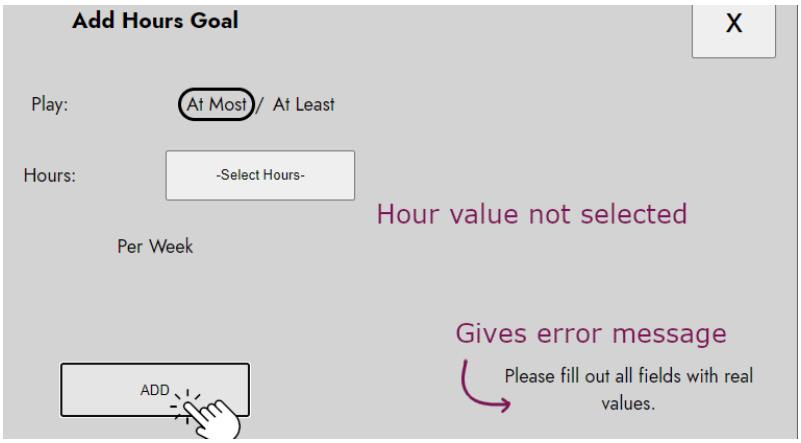
Usability “Sales Pitch”:

Our primary goal in the design of this application was a synthesis of aesthetics and usability. Our main aim was to make every part of GoodGames cohesive looking while also being self-explanatory. We used the feedback gathered in Milestone 2 and corrected the interface elements that some users found unclear, or in need of improvement.

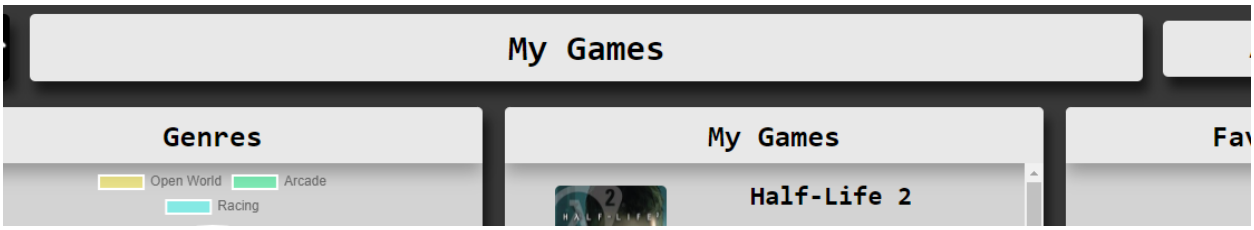
Many of the design/usability principles explained in this course have proved invaluable in our design process. First and foremost, the principle of **Visibility** informed much of our design. We ensure that most of our major functions were readily apparent, with no digging through menus. From the home page, headers of each subsection can be clicked to navigate to a more specific page.



Input **Constraints** were used in the **My Goals** page to ensure all required information was input before a new goal was created.



This constraint on user input prevents unintended consequences when creating new goals. Additionally, we applied the principle of **Feedback** on every individual page of our application. By placing a title bar at the top of each section, users will never forget what mode they are in.



One principle that was very important in our design was the principle of **Consistency**. We wanted the user's experience to be comfortable and free of unpleasant surprises and confusion. To this end we designed each page to have a consistent layout and color scheme. The background and box colors on each page are the same, giving the user the sense that every individual page belongs to the application as a whole.

The principle of **Simplicity** influenced our decision to keep each page of the application (save the home page, which acts as a hub pointing to the others) dedicated to one function. This

focus serves to eliminate distractions, clutter, and relieve memory burden. As many controls as possible are visible on each page to make all available functions as obvious as possible.

The principle of **Matching** echoed some of our user feedback in milestone 2; several users stated they could not figure out how to return to the home page from each sub page. To rectify this issue, the GG logo in the corner of each page is surrounded by a house icon on the sub pages to indicate a click here will send the user to the home page. This design is in line with many other common website designs and is therefore easily recognizable. Additionally, the cursor will change to a hand pointer over clickable elements.

Finally, the principle of **Diagnosing/Recovering from Errors** led us to include a safeguard to prevent accidental archiving of current user goals. When a user attempts to archive a goal they have set for themselves, they are prompted to confirm they want to follow through with this action.