

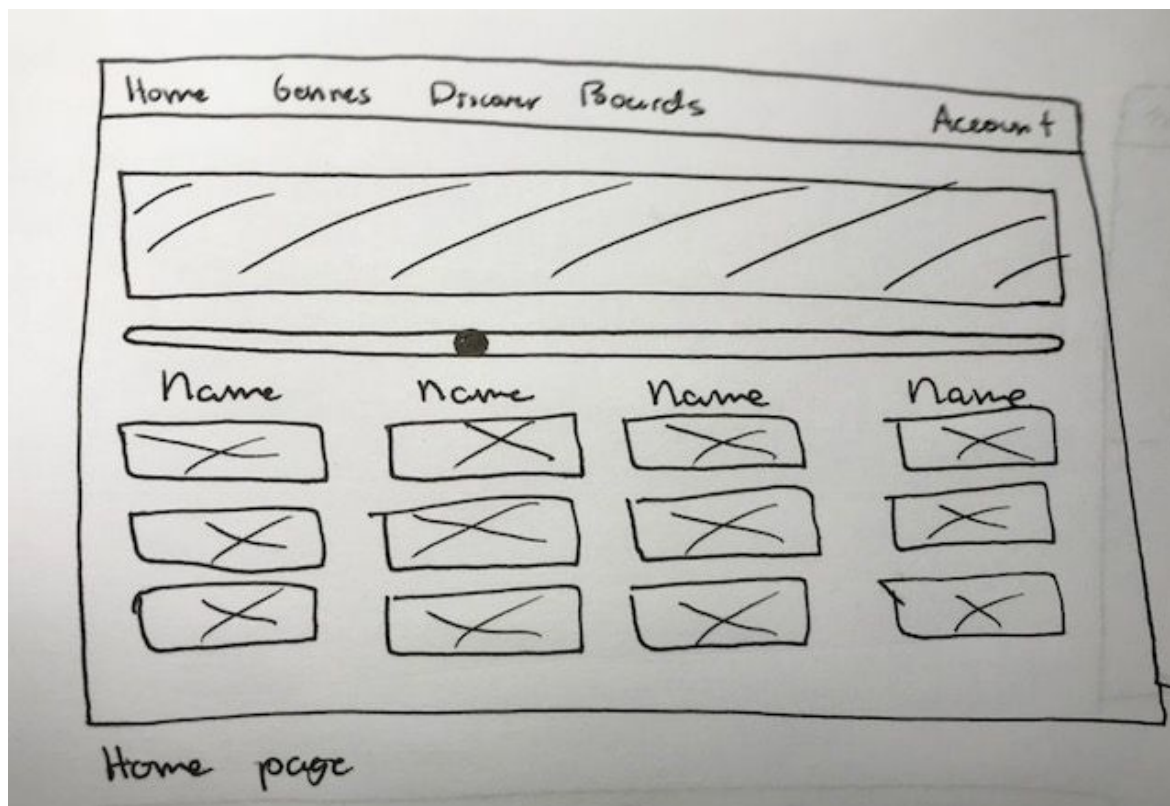
Iterative Design and Evaluation

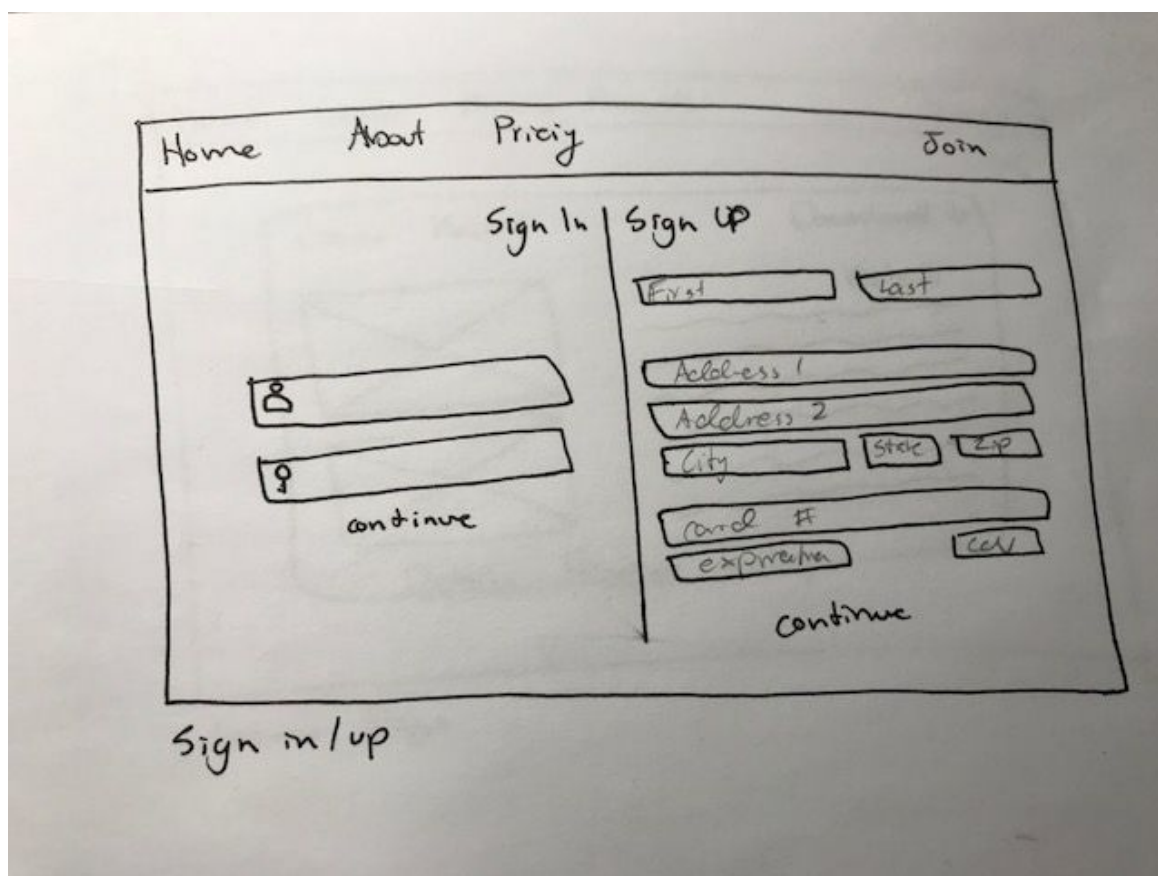
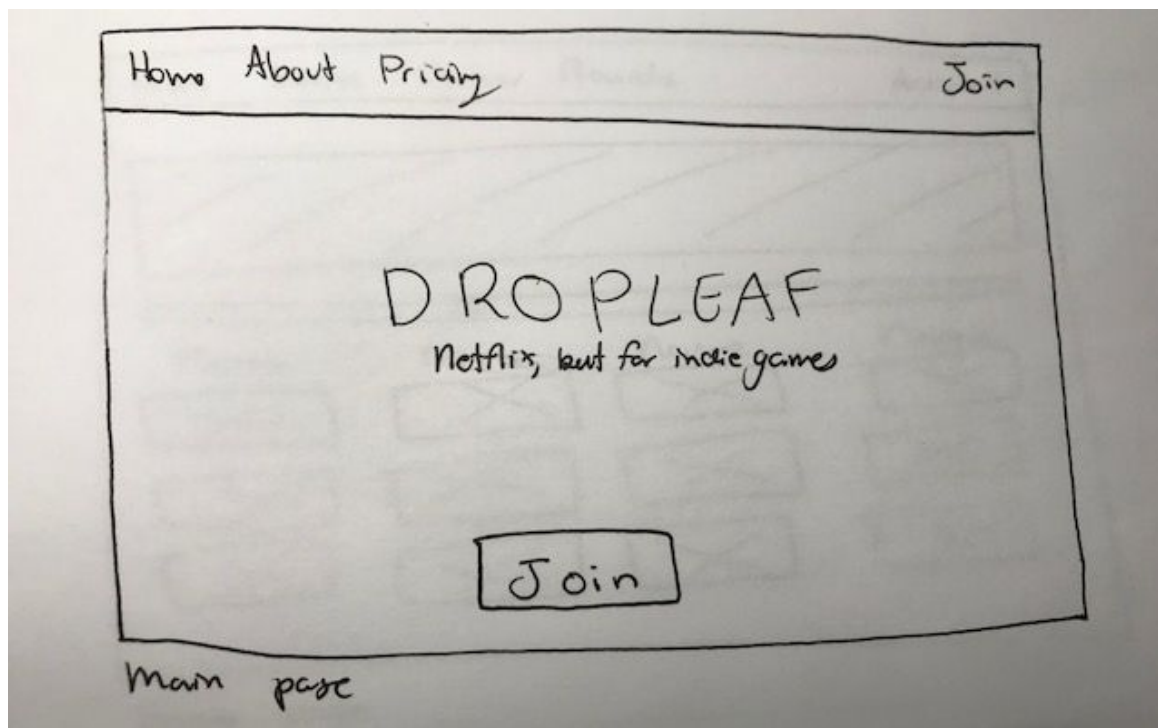
Dropleaf is a startup which emerged as part of the YCombinator 2017 program. It serves as a monthly subscription service for independent video games - self-described as “Netflix for indie video games.” We were all very interested in this startup idea, and we decided to design and prototype an interface for Dropleaf. This iterative design process took place in three steps: sketching, mockup, and user testing.

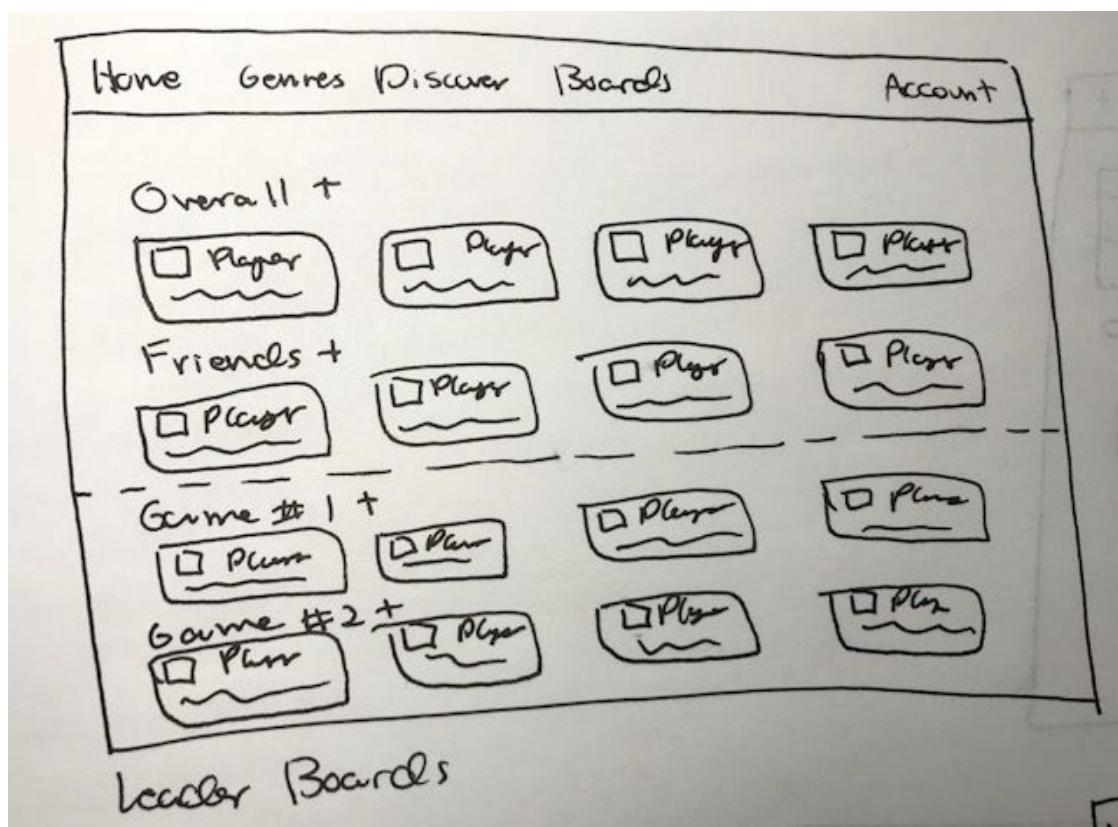
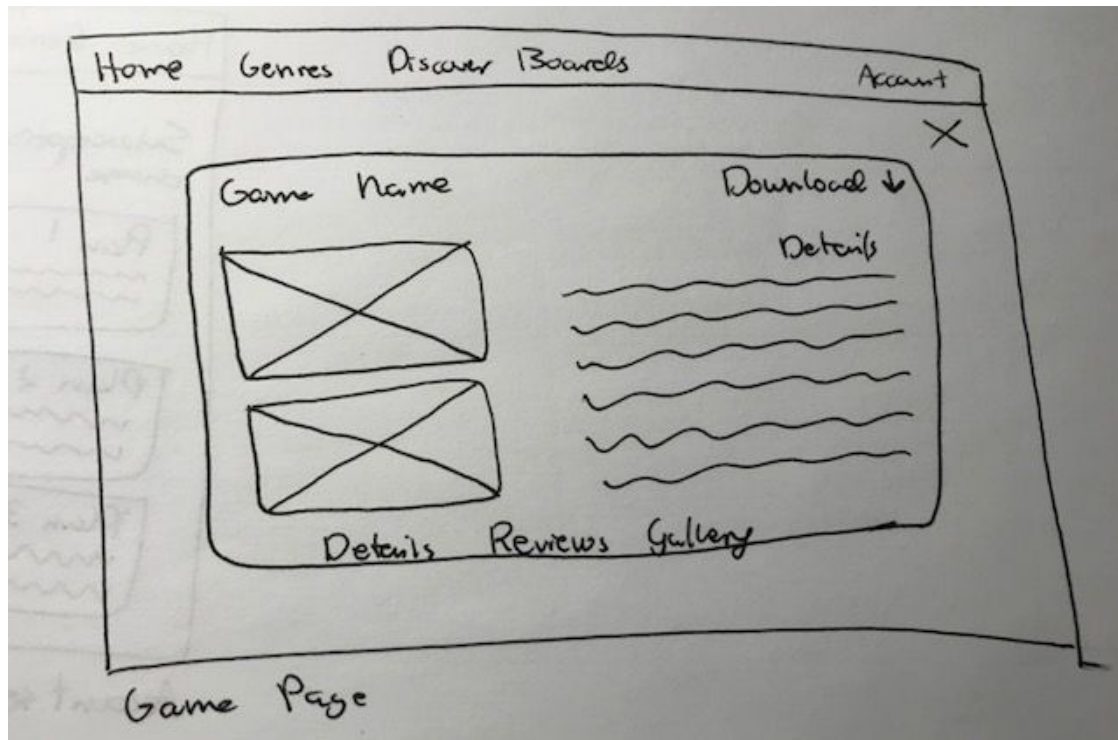
Part 1: Sketching

Below are four sets of sketches of the main pages that we thought might be necessary for Dropleaf’s website.

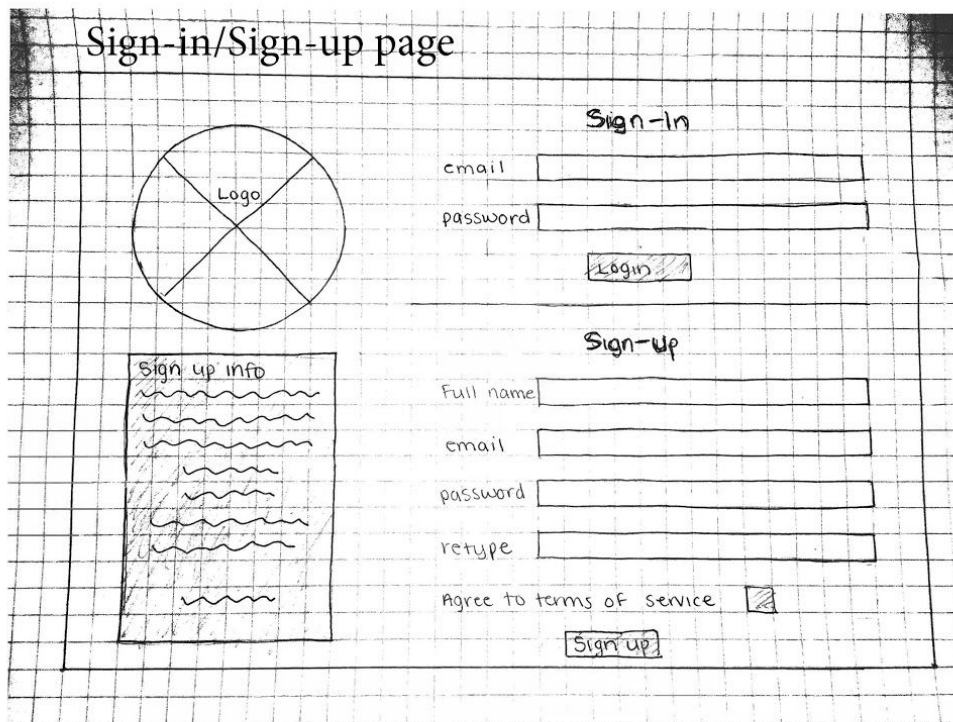
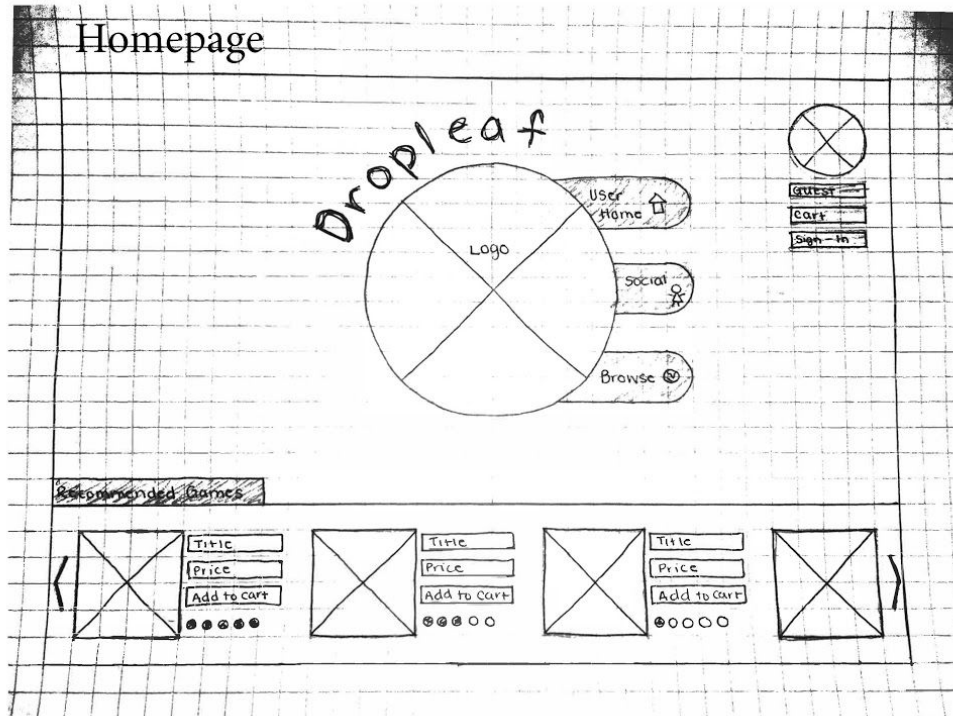
Arthur's Sketches



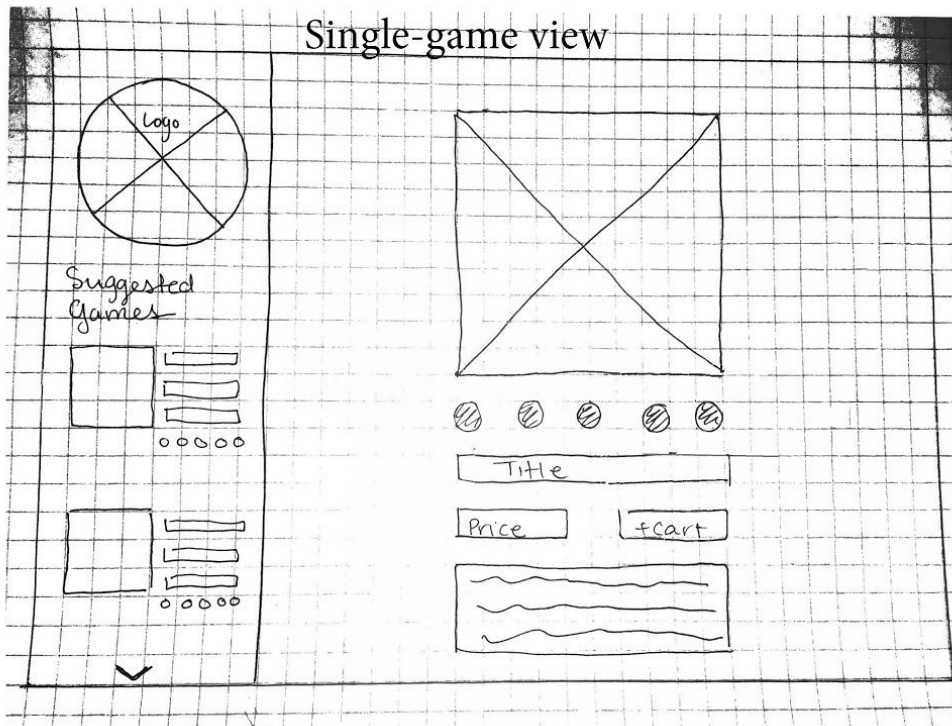




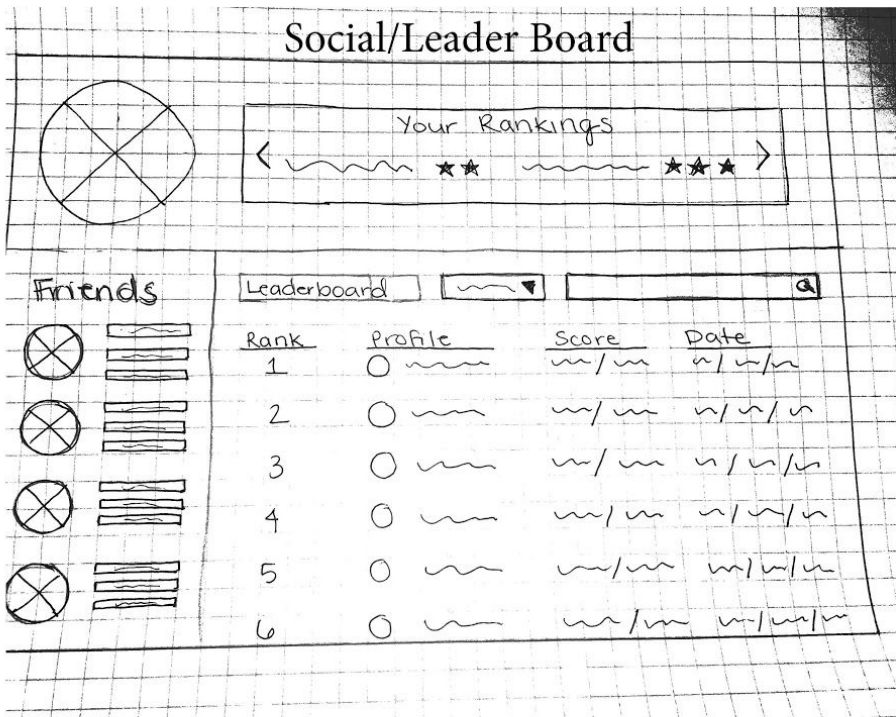
Jennifer's Sketches



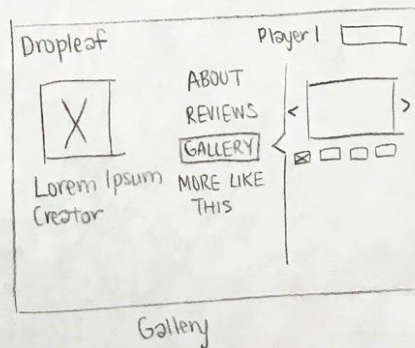
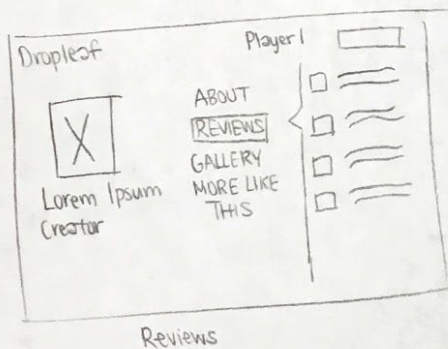
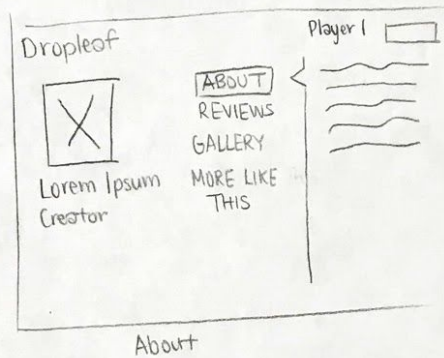
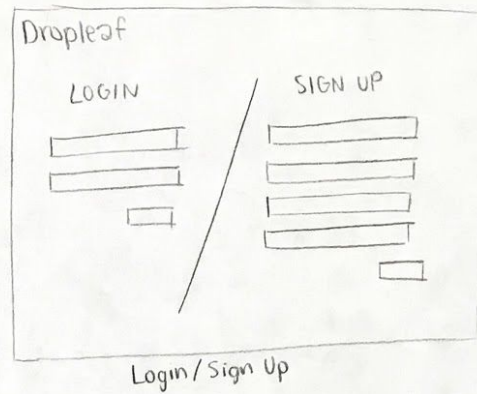
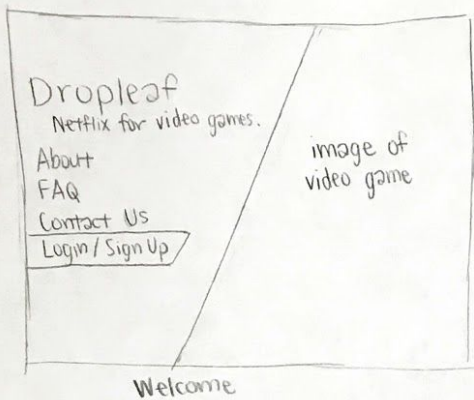
Single-game view



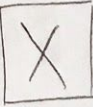
Social/Leader Board



Shawna's Sketches



Dropleaf Player 1 ☐



Lorem Ipsum
Creator

ABOUT
REVIEWS
GALLERY
MORE LIKE THIS

X

X

X


More Like This

Dropleaf Player 1 ☐

Leaderboard	
Username	Last Played
1	
2	
3	
4	
5	
6	

Leaderboard/ Social

Dropleaf Player 1 ☐



Username
Level X

My Account

Subscription
Email Preferences

My Account

Dao's Sketches

DROPLEAF

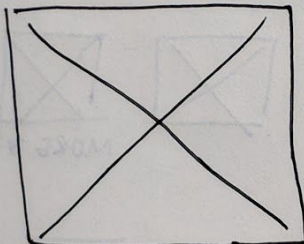
LOG IN

☐ ☐

SIGN UP NOW

☐

WHAT IS DROPLEAF?



FEATURE #1

EXPLORE

DROPLEAF EXPLORE John


Q SEARCH BY KEYWORD

FILTER FILTER FILTER


<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SEL X SEL X SELECT X

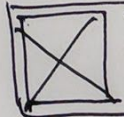
RESULTS?



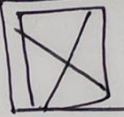
TITLE



TITLE




TITLE






TITLE

USER HOME PAGE

WELCOME BACK, JOHN! John 

RECENTLY PLAYED



TITLE ★★★★★


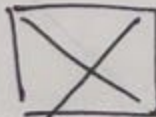



PLAY NOW

FORUM

MORE LIKE THIS

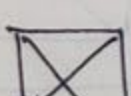
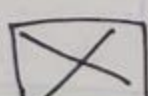


REVIEWS / PAGE

RECOMMENDED / FEATURED



MORE ▾

THIS WEEK'S FEATURES



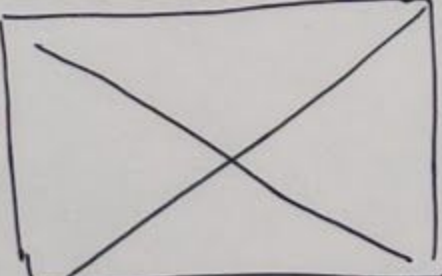
GAME DETAILS

DROPLEAF breadcrumbs

TITLE

PLAY


INGAME PHOTOS



INFO

INFO

INFO

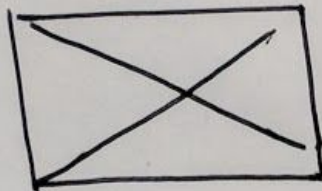
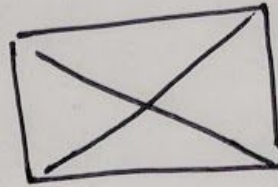
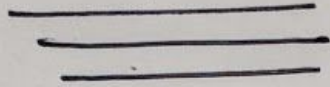


WELCOME to DROPLEAF

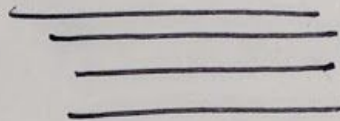


WHAT IS DROPLEAF?

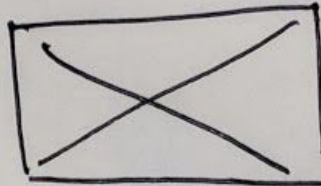
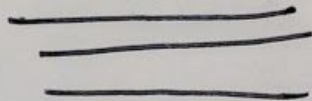
FEATURE #1



FEATURE #2



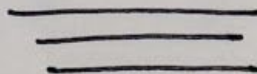
FEATURE #3



HOW MUCH DOES IT COST?

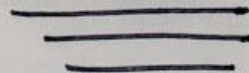
\$XX

PLAN #1



\$YY

PLAN #2



SIGN UP NOW

Part 2: Mockup

[Our Figma Interface](#)

Individual sketch critiques.

Features we really like from Arthur's sketches were his clear layout, which allowed us to keep an intuitive design. His idea of a local and static menu allows the user to easily learn to use the website. This added to ease of learning and allowed faster memorability. In Jennifer's design, we really appreciated the welcome page because it was clean and visually appealing; however, this is subjective satisfaction. We also like the search features and filters on her design of the search page because it was a very intuitive design and followed our mental model. In Shawna's design, we really liked her layout of the the Leaderboard, since it seemed very intuitive and and easy to learn. In Dao's design, we really liked how he laid out the games, also implementing a grid-like feature. His design also followed our mental model, and overall his organization of the genre pages and homepage followed an intuitive design, allowing efficient usage and enhanced memorability.

Design Explanations of Hi-Fidelity prototype:

The major website-pages consisted of a welcome page, sign-in page, sign-up page, browsing page, genre expansion page, search page, individual game page, and user profile page.

In our **welcome page**, we decided to centralize the logo, to bring user attention to it. Since the user's attention is directed to the logo, we decided to have our main menu buttons right by it. Here, we establish our button color scheme. That is, to make our page easier to follow and more visually appealing, we decided to keep our buttons to a consistent color (#EB6767).

The next major page is the **sign-up** page, which is where a new user can learn about the service and become a subscriber. The page contains an About section with Dropleaf's description, as well as sign up section. To make it easier for the user to read, we break the content into bullets and use white text with a dark green background. The page also contains details about the subscriptions available. We decided to merge the service details and the plan selection on the same page is to minimize clicking. We use visual cues such as a key for the password and a person icon for the username to reduce the cognitive load on the user.

On the **sign in** page, we have large input-text-boxes because we wanted to keep user accessibility in mind. Also included in each textbox is placeholder text to tell the user what to input and icons, to make it easy for the user to quickly identify where to put what text. The sign in button is located in the bottom center, near additional links, which are underlined to let the user know they are clickable links. Keeping in mind our mental models (i.e. Netflix), we assigned the location of the different sign in components accordingly.

On the **home** page, we decided to use a grid-like layout and tried to include as many Netflix-like qualities as possible. We used small boxes with images and text for each game. We used a horizontal scroll for each page (each is a row) and by clicking the “plus” button we expand into a new **genre** page. This page was designed with a grid as well with monosized game boxes to emulate the previous boxes from the previous screen. We also have a Suggested section which we separated using blank space and different colors. The “plus” then becomes a “minus” which, if clicked, collapses the expanded screen.

On the **Individual game page**, we again had a grid-like layout. We continued to carry the same red button color to highlight important, clickable features. We organized the page in a four square layout, where the upper left consisted of the game, description and download button. Adjacent to this were preview images and below were the more text-heavy components. We decided to feature images rather than text because this captivates the user’s attention much more than a text-heavy section.

The big **search** bar was on the top of our search page, with the ‘sort-by’ feature on the right draws the user’s attention and is the first thing they see. Below the bar are filter features, which are checkable boxes. Again, we reused the grid layout.

The **leaderboard** has very similar elements to previous pages, the same grid layout but this time we included as little images as possible as to not overload the user with the already very busy page. In this plethora of page elements we decided to include the accent color so that the user could differentiate what was a clickable element and what was not.

The **profile** had a grid layout like all the other pages, but we incorporated a left-side menu to have features specific to the user readily available and clearly displayed. The user’s image, username and rank is the central piece of the page and occupies a large space. This is deliberate as we believe it will convey a sense of the user’s importance.

Throughout our site, we maintain a consistent color palette, as well as a static logo which is kept on the upper left corner throughout the pages to have a consistent place where a user can click and be sent back to the homepage.

Thoughtful justification of changes from the original sketches and analysis of your critique session feedback/changes made based off the feedback:

1. Homepage

Original:

Our first few designs placed a strong emphasis on grouping games by genre. This allowed users to easily explore popular games from different genres, something we felt was core to the website. However, we realized that only categorizing by genre would also mean that a user's homepage is not personalized.

Iterated Design:

We decided to have a personalized approach. To achieve this, we decided to include a "recommended for you" and "recently played" category on the homepage. This would contain the same information as the recommended games on a user's profile page. However, the idea was that user's would most often look to play the same set of games. Creating this category on the homepage allowed users to most quickly access the information they were looking for.

2. Leaderboards vs Community

Original:

We originally had a leaderboards tab to appeal to the competitive gamer spirit that we saw in potential users. Users would be able to see their ranking relative to their friends, and relatively to the global user base.

However, we realized that it "Leaderboards" did not imply other social elements that might have come along with it.

Iterated Design:

Our iterated design featured a community tab that was more inline with user expectations. This new community tab would feature a friends list, as well as the previous leaderboards information.

3. Search Page

Original:

Our original design placed our filter/sort buttons at the side of the page. This was to maximize the display window, and allow the search bar to remain in place without compacting the display space

Iterated Design:

We decided to move our filter/sort buttons to the top of the page (right below the nav bar). This was to improve the learnability of the page, and match it with most sort/filter pages.

In doing so, we hoped to meet users expectations of the page layout. To reduce the compaction of the results area, we also minimized the search bar to take up minimal space. Future iterations for more filters could include drop down menus and a short "tags" section to display currently selected filters.

Part 3: User Testing

Users' Task: The user's task is to login to their account, find the World of Goo game, and view the images in the gallery for that game. Then, they should view their ranking among their friends, and lastly log out of their account.

Hypothesis: Users will be able to complete this task with relative ease. They may struggle with understanding the menu options on the front page; however, logging in and viewing the games should be relatively intuitive. We expect some users to search for the game World of Goo, while others will expand game genres to find it. Viewing the images in the game's gallery should also be quite intuitive, as users have likely encountered a similar format before. Finding friends and rankings may be somewhat challenging, since it may not be obvious to some users that the Leaderboards page contains those things. The last step, finding the dropdown menu to sign out, may be somewhat more difficult.

We anticipate that logging in will be relatively quick, finding the specific game will take somewhat longer, viewing the gallery will be very quick, and finding friends and logging out will take the longest.

User Testing Experiment

Demographics: any and all users

Introduction: Imagine that you are an avid gamer looking for some new indie games to try. You've heard about this great new site, Dropleaf, that allows you to explore indie games on a monthly subscription service.

Tasks:

1. Without leaving the homepage, describe what you would select first. Do not select anything yet. If you would leave without clicking anywhere, please explain why.
2. Log in to your (already made) account. Find this game you've heard good things about - World of Goo - and look around at the image gallery.
3. Try to find your friends on Dropleaf, as well as your global ranking. Then, sign out of your account.
4. What, if anything, is missing on this website?

Questions:

1. What frustrated you most about this site?
2. If you had a magic wand, how would you improve this site?
3. What did you like about the site?
4. How likely are you to recommend this site to a friend or colleague (0=Not at all likely, and 10=Very Likely)?

Results:

We found much of our hypothesis to be true in our user testing results. As we expected, users liked the look of the menu options on the welcome page but found

them somewhat confusing. All were able to login and reach the home page with relative ease, and all were able to find the game we asked for (World of Goo). Some users searched for the game using the search feature, while others found the game through expanding genres on the home page, which is exactly what we expected. Viewing the image gallery was painless, but all users struggled to find their friends and ranking. They struggled to connect the idea of a leaderboard with their friends/community - several of them didn't even realize the leaderboard showed their friends and rankings until they came back the second time. Most went to their personal account when trying to find their friends, which seemed to be their mental model, and we didn't accommodate this in our design. Lastly, most users found signing out quite simple, as we expected them to - only one struggled a little with finding it under their account page.

Several users suggested altering the general structure of a few pages. They generally liked the visual design of the site and its retro gamer vibe, but they suggested making the community aspect more clear, either by changing the Leaderboards feature to reflect community/friends or by placing friends under each user's personal account page. They also suggested having Recommended and Trending games shown on the user's home page rather than under their account, since most users would probably want to see these immediately. There were also some smaller usability suggestions, including rearranging buttons on the welcome page and changing the search tab to just a magnifying glass icon.

Possible interface changes inspired by results and user feedback:

The critique session provided us with valuable insight primarily on the side of usability and readability of our interface. Aesthetic complaints included too dark of a color palette and a cleaner and rounder font. Critiques on the actual content included comments on the search page (users were confused by sidebar) and criticisms on the overwhelming amount of information on the Signup page. To fix the first issue we decided to have a search page more similar to what users are used to, in other words, all the controls (such as genre options and sorting options) are placed around the search bar instead of in a sidebar away from this.

Some of the critiques that we took into account but chose to not include were primarily not included due to the visual crowding of the page. One recommendation was to add borders to our boxes in the Home and Search pages, which we decided to implement and test. We immediately found that the page became overwhelming and such a small addition as a white border made navigation much more taxing. In addition to the border it was recommended we use cards (with a photo, title and brief description) for each game in the Home and Search page but this drastically increased the cognitive load on the user and we decided to not include this feature as well.

What we did change to the game boxes was make the background images lighter. This increased the contrast between the boxes and surrounding elements, made it more visually appealing and made the elements look more “clickable.”

User testing also provided us with insightful suggestions to improve the usability of our interface. The user suggested moving the Login button on the Welcome screen to the top right corner, which is pretty standard among other websites. This allows us to change the options in the main menu, creating a Community option, which is more intuitive for finding friends and others on the site. We were able to implement this change; however, there were some larger changes suggested that we would like to implement in the future. One of these was moving Recommended and Trending games, which currently are under your account, into the user’s home page, so that the user can see these as soon as they log in. Another was to move the friends/leaderboard feature into your personal account, since this is more specialized to each user. The Leaderboards would then turn into more of a Community function, allowing communication/chats with other users, as well as more interaction with the global community.

Reflection

It was interesting to work with the user testing website and gain some insight into how external users might respond to our design. Even though the in-class critiques gave us some useful feedback based on usability and design principles that we’ve learned in class, the user testing really allowed us to better analyze how users interacted with our product and what their mental models were. User testing allowed us to see that the Leaderboards feature was confusing to users; since we’ve been working on this design for so long, we never would have realized this without having users interact with our site.

It was also really interesting to see how differently users respond to visual design elements. Among our three users, one rated us a 4 out of 10, another 8, and the last user 10. One user really liked the home page’s retro game aesthetic, while another really disliked it and said she probably wouldn’t continue into the site. User testing provided an eye-opening experience in this regard - we really can’t please every possible user to the fullest extent with our design choices, so it is our goal to create something that will be usable and visually appealing to the audience we intend to reach.

Unexpected challenges included wanting implementing extensive of functionality, but choosing not to due to the need of an intuitive design and improved memorability. Successful methods included implementing a grid layout throughout the pages. The profile, leaderboard and welcome pages were different from the others in layout and aesthetic. An improved iteration of our interface could be including more cohesive elements in these pages specifically.