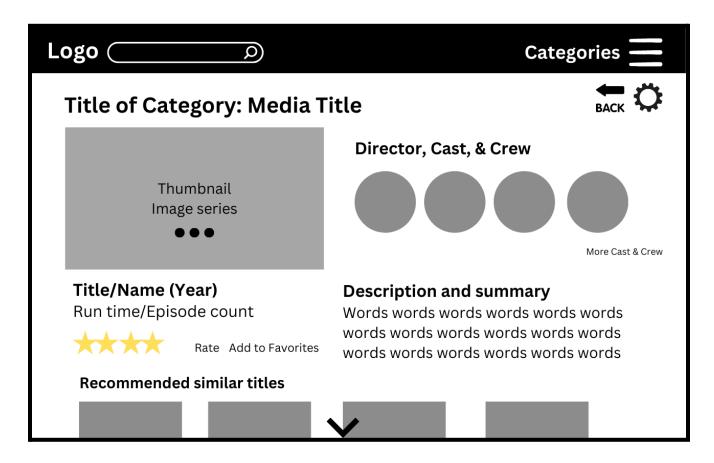


When the user first opens the app, the Home grid viewport will appear and will be identical to the Category grid viewport when they select a category. In the Home view, the titles will be recommended or popular titles and in the Category view, it will be the most popular/highly rated titles within that category. Users can choose different categories using the categories menu or return home by hitting the logo or the Home icon on the remote.

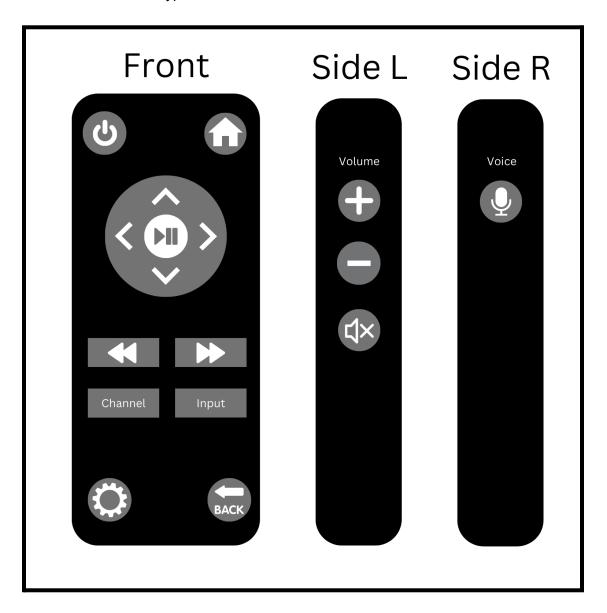
The grid view displays eight titles at a time, four in a row for simplicity, each of which has a thumbnail from the film or show, the title or name of the media, the year it was released, the run time or episode count, and a rating system out of five stars based on other users' ratings. As the user scrolls down row by row, more options appear but the header remains in the same position. When a user hovers over a thumbnail for more than 3 seconds with the directional arrows on the remote, a lightbox of the thumbnail appears with an expanded screenshot, number of seasons or episodes, or even a brief clip from the film or show. The user can use the down directional arrow on the remote to continue scrolling through titles row by row.

The user can also navigate to the gear icon using the directional arrows or press the gear icon on the remote to bring up a Settings menu that allows them to use voice commands, change brightness and contrast, or employ the gesture control option (users hands can do the scrolling or selection). There is a search bar in the top left corner that users can search for another title or genre from any page.



Once a title is selected, the user is taken to the single column view. The header, categories menu, search bar, and settings icon all remain the same for visual consistency. At the top, the title of the category and the media title is listed, so users remember what category they were selecting within. For example, "Horror: Hereditary," "Romantic Comedy: Love, Actually," etc. On the left side is the thumbnail, which will automatically scroll through several images in a series or the user can scroll through them manually using the directional arrows on the controller. The user can again hover over the thumbnail for 3 seconds, and a short clip or trailer will play in a pop out lightbox feature. Below it is the same information from the grid view and the rating system. Here users can also choose their own rating using the "Rate" option or add it to a list of their personal favorites using the "Add to Favorites" option.

The user can read a brief summary and description, and above it, they can see the director as well as top billed cast and crew. Users can select the director, cast, or crew bubbles to see other titles that feature that specific director or actor. At the bottom, the user can scroll down using the directional arrows (or voice command or gesture, if those features have been employed) to see similar and recommended titles based on this title. The user can hit the "Back" button on the remote or the Back option in the right corner to return to the previous screen or press the "Play" button on the remote to play the title.



In all my designs, I err on the side of simplicity because I as a user appreciate simplicity. This remote prototype is meant to be super simple and intuitive. I chose a small, rounded design that is ergonomical. The top two buttons are the Power button, which turns the device on and off, and the home button, which returns the user to the main Home view. This button placement feels very common and consistent with other remotes for devices. In the center of the remote are the directional arrow keys which navigate the user around the screen. The center button operates as both the play/pause button and the "Enter" button. When the user is scrolling around the grid view and wants to select a title, they would hit the play button where it acts as the enter button. When they're on the single column title view, they would hit play again to actually play the film or show. While watching, the user would hit play or pause to play or pause viewing. I don't think it's necessary to have a separate play button and enter button because their functions are so similar and many users are already used to this design.

Below the directional arrow keys are the fast forward buttons. While viewing a film or show, users can use these buttons to rewind or fast forward through the content. Below these buttons are the "Channel" and "Input" buttons for other TV functions. The user would press "Channel" and then navigate using the arrow keys. The user would press "Input" to switch inputs in case they were using an HDMI connection, USB connection, or a wired connection.

At the bottom of the remote is the gear "Settings" button, which corresponds to the Settings option on the main and title views. In lieu of having multiple buttons for voice commands, closed captioning, playback speed, screen brightness settings, gesture control, or other functions, the user can press settings and then navigate through a menu using the directional arrow keys with all of these options, again keeping the design simple. This could also include a menu function that includes other applications or steaming channels. In the bottom right corner is the "Back" button. When the user is on the title screen, they can press the back button to take them to the previous screen without losing their place in the category they were searching. On the home view, the Back button will act as the "Exit" button and will give a prompt asking the user if they're sure they want to leave the application as a failsafe. The volume controls are located on the left side of the remote, with an increase button, a decrease button, and a mute button. A microphone button is located on the right side of the remote and users can press it at any time to activate voice commands.

The buttons on the remote would be constantly backlit by an LED light for viewers watching their TV in a dark room, or users can opt to only have the backlight on when they press a button of the remote, which can be changed in the settings menu.

Prototype/Testing Plan

To test the software and remote, a lo-fi and inexpensive model of the remote control would be created and a blank screen on a wall, roughly the size of a TV, would be covered with sheet paper. On the sheet paper would be the designs of the software, to scale, with a few different options the user can "select" or navigate through. Users would test the design by standing in front of the screen and selecting the functions on the remote while the moderator changes the sheets of paper to represent what they have selected. This could also be modeled with voice commands and gesture control, and the moderator would change the paper on the screen to show what the screen would look like in real time.

Demonstration: https://video.kent.edu/media/10ft+Prototype+Demonstration/1 g1dbwo3c