

MyePlay

first prototype design

Our original design includes a combination of a vertical spiral and the flat button design. The reason for our vertical spiral comes from the need to make the interaction with the menu intuitive for Bob. We chose a vertical design based on the Bobs limitation of only vertical movement. We also chose the spiral because a spiral implies continuity in the menu, making it intuitive to think of the menu of a continuous cycle, where the user can also look up and down to move the menu. We also needed to making only one option available at a time, since it would increase the accuracy of the user being able to choose the right option and prevent the number of errors the user can make. Studies have also shown that many errors are usually made with using attention as input, since eye movements are often involuntary and easily distracted.

The spiral design hints to the user about what the next incoming top and bottom options are in the spiral menu. We also used the spiral design for the possibility of more options than only games and the media player. Our first two options are the game, media player, and exit options. After the game option is entered, and a game is chosen (also in the vertical spiral design), and the menu switches to a flat button design to choose the number of players. We chose to switch to the flat design because there will only be two options in total for the number of players, and it will decrease amount of time and amount of interaction needed versus the amount of time and interaction with the vertical spiral design to get into the game. At the top of the users current screen, all the options the user had chosen would be displayed, to make the system status visible so the user will always know what they have chosen before and know where in the system they are exactly. If the media player option is chosen instead, the user will stare for two seconds at the top quadrant to pause the video, and a menu will drop down with a resume and exit option. To choose either option, the user will stare at the option for two seconds.

At the vertical spiral menus, the user will select the option by closing their eyes for two seconds, and a sound notification will occur to notify the user that he or she has been successful.

An auditory cue is needed to at every successful action to notify the user that an action and change has been made, especially since the user will be closing their eyes. At the flat option designs, the user will look at the desired option and blink twice, and their desired option will be highlighted with a light teal green. To continue with the option, the user will close their eyes for two seconds and a sound notification will occur to indicate success.

A highlight is needed to notify the user about what where the eyetracker and system thinks the user has selected, to prevent errors on the systems part, or to even notify the user about the systems error. To reverse or to go back, the user can look at the top part the screen and double blink at the system status. A double blink will highlight the display, to notify the user that he or she has chosen to go back. The user will close their eyes for two seconds and a sound notification will occur to indicate success. This is needed to give the user more freedom and control of the system, since users will often make mistakes.