

Advancing the UI/UX Design for Video Sharing Platforms

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What makes an experience impactful? What makes it meaningful? And is it fair that some can experience things with more ease than others? These are essential questions User Experience (UX) designers must address when creating meaningful interfaces to accommodate all types of people that interact with their products, i.e., building an inclusive design. The first interaction a user has with any service is through their UI/UX, which gives it an integral significance in any technology that is produced for consumers. To create the best user experiences and interfaces, it all starts with addressing people's needs and their accessibility.

Video is one of the most widely used platforms for instant information, but is video accessible to all types of demographics? YouTube is the world's leading video sharing platform and have made great advancements in viewing videos through their UI/UX. As of May 2021, YouTube added the ability to add closed captions during the upload process to encourage content creators to caption their own videos to improve caption accuracy, which is very beneficial for the deaf community that depend on closed captions. As for the blind community, users are given the option to slow down the speed of the video for easier comprehension when needed. But in terms of accessibility there are many more advancements that can be taken to adhere to people with disabilities as well as aid to the convenience of the general demographic, changing the way we use video completely.

In this research, using the YouTube platform, we build a UI/UX design for video sharing platforms to promote inclusivity. The first step in advancing video user experience is to develop a fully voice controlled mode of operating YouTube, i.e., a fully voice activated YouTube. This would allow users to launch YouTube, search, browse, filter and watch videos completely through voice control. By giving audio commands that Google would recognize, it will make accessing YouTube seamless without lifting a finger. This solution would be greatly useful for the blind and disabled communities and will allow a larger audience to access videos from anywhere around the world. Voice aiding technologies such as Microsoft Cortana and Apple Siri can complement the aid in accessing basic functionalities, but they do not allow users to fully operate an application's complete features. To implement this strategy, it would be executed by optimizing Google assistant capabilities to sync with YouTube to create this completely hands-free experience.

The second solution that takes the video user experience to the next level through the use of touchless gesture controls. This intuitive touchless technology is the next step in allowing consumers to interact with their technology in a much more convenient manner. YouTube has already implemented many smart touch gestures to make using their interface easier and smarter, but by going touchless, we are redefining the way we experience videos. Touchless gesture controls operate by recognizing and understanding hand gestures or actions executed by users and convert them to functions that perform the exact same actions if one were to control it by a

mouse or touchpad. This feature would provide a great aid to the deaf community as touchless gesture controls allow them to use their sign language to give visual commands to operate YouTube and its complete functionalities. It allows them to type words through sign language and control features such as forward, pause and rewind. The deaf community can operate YouTube without hearing, but this inclusive functionality makes it very accommodating towards this demographic, which is essential when creating a meaningful user experience for all types of people.

Additionally, these touchless gesture controls would also greatly aid regular users, especially in the case of instructional videos. For example, if a user is watching an instructional cooking video on making cookies where their hands are occupied making the dough, touchless gesture controls allow them to control videos such as pause, rewind and forward without ever having to touch the computer or phone with their preoccupied hands. The same can apply to countless other instructional and non-instructional videos. It can also serve as an important tool when presenting ideas on a large display to a group or audience. To implement this technology, one would simply turn on their webcam which will detect the user's movements and convert them into actions and commands.

Videos are an integral part of how we spread and learn information. Viewers claim to retain 95% of the message if it were delivered by video than by another mode. Videos are replacing books and writing due to its compact nature of data transfer and we expect it to stay forever. And so, it is vital to enhance the way we access these videos and more importantly how we experience them as well. By designing interfaces from the perspective in which no one is left behind, only then can we truly create an inclusive experience.

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