Kamal Feracho

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Project Deliverable 1

User Research and User Needs

Yoga is a widely practiced exercise with a very large population of the world partaking in such. Daily, yoga itself acquires thousands and thousands of new “Yogis” who are looking for a physical and mental stimulation that strengthens their mind and body for a healthier lifestyle. Most of these new yogis come in and are learning remotely from their homes with the guidance of pre-recorded videos. Due to the lack of live professional monitoring and guidance, we see many yogis suffer from multiple injuries in varying areas of their body, to which they assume the yoga itself is causing it, when it is really through bad form and posture. With that being said, how many new yogis actually continue doing yoga?

The purpose of this study is to seek to improve this issue by providing remote yogis practicing virtual learning to receive auditorial feedback based off their performance in efforts to let them know if they are performing the range of motion, position, or stance correctly. Yoga has been proven to help build muscle strength, enhance flexibility, and overall improves one's well-being and quality of life [4]. Most people who do not have guidance or someone to watch and critique their yoga will resort to using an external camera to record their positions [5]. This is not effective as cameras do not capture all the angles necessary to help the person fully grasp their faults. Another fault with this is that the timing of when the error took place will be off, as the goal of the auditory supplement is to give live feedback as the mistake is happening. Self-criticism is also often biased, as yogis may overestimate or underestimate their performance, in which this can lead to continuous improper form [2].

The data needed to provide the best is some type of live critique that can let the yogi know of their performance and whether they make a mistake or are using bad technique. In general, it is more efficient for a yogi to be in a live class to get direct criticism from a profession [1]. Sadly, there exist people who do not have the time or money to do these things and need an alternative. The use of auditory feedback would tackle both barriers as it will be cost efficient and allow for yoga to be performed from home. The Sonification handbook defines auditory display as any display that uses sound to communicate information [3]. Sonification, a subset of auditory displays, is the process of translating data into audio for the purposes of data communication and exploration [3]. The data we receive will be motions detected by the user, and the feedback will either let the user know they are doing great or let them now of their faults. Sonification has the potential to communicate a variety of data types to listeners, including emotion, while also providing an aesthetically pleasing and meaningful user experience [3].

References:

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