

Fishiotherapy: Providing Affordable Physiotherapy Using Mixed Reality

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Fishiotherapy is a "Virtual Reality Interfacing" unit that harnesses and extends XR technologies to provide low cost, personalised and supplemental physiotherapy services to patients suffering from cervical spine problems. It essentially guides the user through the set of prescribed gamified exercises eliminating the need for the patient to remember the exercises or refer to the prescription during the workout. Our innovative use of external sensors enables us to correct the starting position or orientation and form during the exercise. This makes our system as effective as getting the therapy under the supervision of a trained physiotherapist. All this at a fraction of the cost. It tracks the pain levels on the VAS Scale. These values reported by the patient helps the physiotherapist plan the next course of treatment. The reports generated by the associated application gives an insight into the quality of the sessions, missed sessions and effectiveness of the treatment. Step counting and calorie counting apps have proven that of all the schemes, having an app that confronts you with cold statistical facts is by far the most effective in achieving compliance with an exercise schedule. Above all, Fishiotherapy games take the boredom out of the physiotherapy sessions, making them fun and engaging.