

The IoT Based Exercise Cycle

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Abstract: *The "IOT Based Exercise Cycle" project combines a variety of technologies, including computer hardware and software, to provide bikers with a new modern home exercise solution that immerses them in their surroundings. As a result, a cyclist can monitor some of the most significant training data online via a web page, including speed, distance covered by the rider, heart rate, and oxygen level during exercise. Additionally, depending on the amount of peddling, a cyclist can view flashing pictures on a web page. This cycle is linked to the cyclist's heart rate and temperature, allowing him or her to keep track of their BPM (Heart Beats Per Minute) and body temperature. The system consists of both hardware and software components. Hardware is in charge of gathering, measuring, processing, and transmitting data from sensors. A server contains a Front-End Web page that displays and controls data for cyclists on the software side. Finally, there is a web page that displays all of the parameters that the rider can use to track his or her route.*

Keywords: IoT, Virtual Reality, Exercise

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