HOSPITAL MANAGING MULTIPLE PATIENT SYSTEM WITH ABNORMALITY ALERT

A PROJECT REPORT

Submitted By

SEENI HABEBU MOHAMED.A - 110119106025

ARUN KUMAR.B - 110119106004

SYED ALI NOVFAL - 110119106029

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AVADI I.A.F

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ABSTRACT

India witnessed an outbreak of the pandemic coronavirus, otherwise known as COVID-19, or SARS-CoV-2 in late January 2020 when three Indian students travelled to the southern state of Kerala from Wuhan in China - the epicenter of the outbreak. All three tested positive for COVID-19, confirming a local contagion. India's healthcare workers and public officials were vigilant in their fight against the virus. Despite that, the country's healthcare infrastructure may not be enough in the face of an epidemic. Data from 2017 showed India had less than 0.5 hospital beds per 1,000 people. Moreover, the country's population density was one of the highest in the world, making it harder to contain local transmissions if strict precaution measures are not followed. A lacking healthcare infrastructure also remains a major cause for concern. In this project we use an oxidation sensor and a temperature sensor to record the readings of the blood oxidation levels and body temperature of the patient. The readings are then pushed to the cloud using a Wi-Fi module, the values are then fetched on the front-end web application. A web application using javascript is developed to give a live analysis to monitor and check the condition of multiple patients with a graphical representation of their oxidation and body temperature levels. The bio data of each patient specifically can be viewed by the doctor. When the condition of a patient is at an abnormal level the doctor is immediately alerted through a pop up in the web application. Thus, this project prevents the doctor from coming in direct contact with multiple patients preventing further spread of the virus.

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