REAL TIME BLOOD SUGAR MONITORING

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Abstract: This research aims to design an interface that connects the blood sugar measuring instrument with the mobile phone as well as designing database systems and visual display for monitoring blood sugar levels in a patient's body. Monitoring system that integrates glucometer, arduino, Bluetooth, and mobile phones, are used to transmit data from the blood sugar measurement. Beside the position of patient there is glucometer along with android based mobile phone that will be used to transmit the measured data to a web server that can be accessed by doctors to monitor the progress of patients' health. Based on observations, we obtained error value of 23.33% for observation within 60 seconds, an error of 32% for observation within 90 seconds, and the error of 31.11% for observation within 120 seconds.

Keywords: Glucometer, Diabetes, Bluetooth, Handphone.