

## Implementation of a Web-Based Wireless ECG Measuring and Recording System

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**Abstract :** Measuring the Electrocardiogram (ECG) signal is an essential process for the diagnosis of the heart diseases. The ECG signal has the information of the degree of how much the heart performs its functions. In medical diagnosis and treatment systems, Decision Support Systems processing the ECG signal are being developed for the use of clinicians while medical examination. In this study, a modular wireless ECG (WECG) measuring and recording system using a single board computer and e-Health sensor platform is developed. In this designed modular system, after the ECG signal is taken from the body surface by the electrodes first, it is filtered and converted to digital form. Then, it is recorded to the health database using Wi-Fi communication technology. The real time access of the ECG data is provided through the internet utilizing the developed web interface.

**Keywords :** ECG, e-health sensor shield, Raspberry Pi, wiFi technology

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