**FIELD OF THE INVENTION**

This invention relates to the detection of hearts electrical activity with the help of heart rate monitor and outputs the data wirelessly under possible scenarios. In today’s health care monitoring systems most of the people are using Internet of Things to develop different kinds of applications and devices for better care of patients. According to the estimation of World Health Organization many people in the world are suffering from heart diseases and it is rapidly increasing year by year. The people are usually required to sleep down in the bed or sit in a place with the electrocardiogram machine to perform cardiology tests. But it is somewhat difficult when a person not there around the patient in the hospital, and at home to monitor continuously. For this type of situation to help the patient for their comfort we developed a new wireless mobile electro cardiogram system for the biomedical application designed to check the problems with the activity of the heart and gives immediate emergency and safety alerts to nearby nurses, doctors, and relatives.

**SCOPE OF THE INVENTION**

Scope of this invention is to develop the electro cardiogram system wirelessly to obtain better quality and accurate ECG recordings in the mobile phone and to get immediate instructions and alerts. This ECG system is developed for hospital, home, and ambulance purposes only. This system consists of both hardware and software designs. The electro cardiogram was designed to diagnose heart diseases and it is applicable in different scenarios such as

* Bradycardia
* Tachycardia
* Arrhythmia
* Abnormal Heart Rhythms
* Home purposes
* Ambulances, and
* Intensive care units