Smart Hospital Diabetic Clinic Patient Management System

MADL Madushika[#], GAI Uwanthika and WPJ Premarathna

Faculty of computing, General Sir John Kotelawala Defence University, Sri Lanka

#35-cs-0008@kdu.ac.lk

Sri Lanka provides health facilities freely for everybody and most individuals benefit from these free health services. One of the main problems captured with the significant ongoing clinical process is lots of time-wasting, because of the manual paperwork system. This research aims to automate hospitals' clinic patient management system and develop a diabetic prediction system using machine learning algorithms. The main objectives of this study are to make this manual clinic process an automated, time-saving and efficient one, and to add more value to this significant process of the health sector, with a newly added feature – the diabetic prediction system. This proposed system is highly beneficial for doctors in the process of updating or retrieving patients' records. The main focus here is to automate the diabetic clinic as the first step. This paper presents a clearer clarification of the objective of this study and the relevance and motivation of the study. The proposed solution is a web application with multiuser login. The backend of the web will relate to the MySQL database, which is created by PHP MyAdmin. Initially, it is kept at localhost and build by using Xampp server software. A smart ID card that contains barcode technology is used for the authentication process, and there is no need of maintaining manual records. Fingerprint scanning is used at a sudden admit of a diabetic clinic patient, who does not have to bring the clinic ID. The recommendation system included on the web can be used by both clinic patients and normal users.

Keywords: *smart hospital, diabetic clinic, web-based patient management system.*