Abstract

Patient records constitute the bulk of the medical records of almost all the health care centers all over the world; The existing system of medical record keeping used in FUW Clinic is predominantly paper-based and it is associated with problems such as misplacement of patients' record, unnecessary duplication of patients' record as well as lack of effective back up facilities. In an attempt to address the problems associated with paper-based medical record, this project aimed at automating the whole processes by designing a web-based application to minimize the cost of procuring stationery materials needed for paper-based record keeping and enhancing the integrity and security of the patients' medical records. The proposed system uses the following security tools to prevent unauthorized users from gaining access to the system resources: The sign up module, the security measure employed on the sign up module to ensure that no unauthorized person is allowed to create a user account is that when a user clicks on the sign up button a prompt will be displayed asking the user to enter a One Time PIN (OTP) which is only obtainable from the appropriate authorities of the clinic. Another security
The tool used is the encryption of user’s password on the login tables using the MD5 encryption function. Once a user submits a new user account details during the sign up processes, the user’s password will be posted to the login table in an encrypted format. To achieve these objectives, the technologies used in the development of this automated system were: HTML, CSS, Javascript and PHP as the Scripting languages, MySQL as the database engine. The system grants different users privileges based on their statutory functions in the clinic which allow the clinical staff (users) the view and perform actions strictly within the domain of their official duties.

References

Based Healthcare Application Architecture and Electronic Medical Record Mining: An Integrated Approach to Improve Healthcare System: 2014 17th International Conference on Computer and Information Technology (ICCIT)


**Index Terms**

Computer Science  
Security

**Keywords**

FUW Clinic, MD5 encryption, Medical Records, Patients