

UrSugar: Diabetes Management Record System with Data Visualization

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ABSTRACT

In Malaysia, most of the healthcare facilities are still dependent on paper-based record system. Ursugar Diabetes Management Record System with Data Visualization is a web application to assist diabetics patients and medical staff in managing health record. Following a visit or appointment at healthcare facilities, this system will document patients' information such as blood sugar tests, blood tests, cholesterol tests and eye tests. Diabetics also has ubiquitous access to their health record within the web app. Besides, Power BI dashboard is embedded in system for users to view statistics of related information to diabetics and the predictions of glucose and insulin by age. User Experience Testing (UXT) with 30 respondents was conducted to validate the prototype. The respondents include diabetic patients, medical staff and experts from IT fields. Results from the UXT shows that the prototype obtained constructive feedback from users. Therefore, it can be concluded that the objective for this study is successfully attained.

Keywords: UrSugar, Diabetes management record, User Experience Testing (UXT), Data visualization