6COSC023W – Final Project Report

BLock Medic

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Abstract

Health records are an essential component of the patient's care taking road map. In order to experience an un interpreted treatment for a condition, consistent and updated medical records are a key component. Many patients experience in delays receiving treatment due to missing medical records and inaccessible databases. Unavailability of medical records eventually leads to misdiagnosis of medical conditions which can adversely affect patients' wellbeing. Accessing medical records in an unforeseen situation from a traditional patient data management context consumes a considerable time. In the event of missing medical records or an emergency, to progress in the process of treatment the patients may have to undergo pre-experienced medical examinations. Thereby, the patients face difficulties in accessing medical records in a traditional patient data management context.

Project BLock Medic aims to address the issues faced by patients when storing and retrieving medical records from traditional patient data management systems established in healthcare institutes. By understanding the issues associated and studying the gaps of existing solutions, a patient centric mobile health records application was designed, developed and evaluated to address administrative issues, integrity issues and support interoperability within different healthcare institutes.

The effectiveness, efficiency and the usefulness of the application was evaluated by industry experts and non-experts to establish the project's overall performance in addressing the highlighted challenges. The feedback and enhancements suggested by the evaluators were taken into consideration as future enhancements.

Keywords: Heath records, Interoperability, Data management, Hospital Administration, Blog suggestions, Vlog suggestions, Blockchain, Hyperledger fabric, Cloud computing, Mobile application.