

Abstract

Although more and more geneticists and genealogists use computer software, certain requirements are yet to be addressed within Electronic Health Record Systems. The project is aimed to accomplish these unmet needs.

OpenMRS is an open source medical record system platform which can be customized to meet different requirements. To begin with, I have used that platform to create an Electronic Health Record system to be used in the Human Genetics Unit, University of Colombo.

Initially I had an in depth discussion with the clinical and non clinical staff on the manual system practiced in the unit to develop the Scope definition, the Problem analysis and Requirements analysis. After a thorough literature review, I prepared the logical design and implemented the system. The data was entered to the system by the permanent staff of the unit. It was evaluated at the unit and the feedback was used to improve the system.

Part of the literature was focused on finding the expectations of Geneticists and Genealogists from an Electronic Health Record System. I have screened some commonly used Electronic Health Record systems and searched for the availability of the above functionalities to detect those were yet to be addressed. Solutions were designed to accomplish these requirements.

I have prepared documentations like System Requirement Specifications, UML diagrams, and a user manual to address the unmet needs. Although I have designed the functionality, the implementation needs a thorough knowledge of J2EE, Maven and Spring. I will be able to complete the implementation when I acquire that knowledge or when I get a support of a professional J2EE software programmer.