FHIR Swagger Codegen Integration and Strategic Improvements

Primary mentor	Harsha Kumara
Backup mentor	Sanatt Abrol
Assigned to	Eunice Amoh

Abstract

The purpose of this project is to expand the capabilities and functions of the OpenMRS FHIR module. OpenMRS has recently undertaken a commitment to implement FHIR in order

to ensure better interoperability between healthcare systems. The OpenMRS FHIR module was developed as part of these efforts. FHIR specification is continuously subjecting to several development iterations

which improves the usability. Swagger also becoming more popular these days. Swagger provides client side library generation functionality which allows users to quickly build the clients for many languages.

Requirements

- Good Java skills
- Familiarity with J2EE web programming (e.g., JSPs)
- Ability to learn and work with FHIR and the HAPI
- Soft skills to interact with the HAPI and FHIR community in order to gather requirements and technical feedback

Skills Needed

- Java
- MySQL

Objectives

- Upgrading HAPI FHIR Library to it's updated version
- Upgrading DSTU2 resources to DSTU3
- Swagger document generation improvements after library upgrade
- Integrate the swagger codegen library which allow users to generate client with selected languages
- Research on new FHIR resources which can support for OpenMRS
- Improve the test coverage

Extra Credit

- Build an audit mechanism to track transactions and their outcome

Resources

- Work already completed under phase 01 of the FHIR module
- HL7 FHIR wiki
- OpenMRS FHIR GitHub Repo