

# OpenMRS in StAR2 project

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## I. OBJECTIVE

- 1) To update the status of StAR2 project.

## II. STAR2 PROJECT

### A. *Skype meeting*

Skype meeting with Dave Springer, Andrew Farmer, Kirsten Bobrow and John Prince was done on the 10 February 2016, 2 pm. In this meeting, the main discussion was on the management of the project, such as the allocation of test server, dummy phones, setting up WiFi in Malawi, RIFD tags, SANA and OpenMRS. After the meeting John and myself has a private session with David Spinger. He has done a tutorial with John last weekend and asked John to explain them to me. John and I had a 40-min hands-on on OpenMRS.

### B. *OpenMRS hands-on with John*

To start this project firstly I need to be registered as one of the administrators for the OpenMRS account created by David. From the discussion yesterday I understand that OpenMRS 1.6.1 uses Java 1.6. To compile a module, we need to install JDK 1.6.0\_30. We also need to have Eclipse as its integrated development environment (IDE). The module is compiled by executing build.xml file within Eclipse. Apache Ant is a Java library and tool to help building the module.

JavaServer Page (JSP) is code that generated web pages, which is based on html coding. It is more like a page to build a form, like google doc form. Once a "submit" button is pressed on this page, the background processing is performed by a controller.

A controller is a Java code that is linked to a JSP page. It performs background processing. In this Java script, the "onSubmit" tasks will be run when submit button is clicked. There is also a variable called "feedback". It gets the output from each task and will be added to ModelAndView class. The JSP page will then receive this info and display it after submit button has been clicked. The linking between JSP and the controller is specified in "moduleApplicationContext.xml".

I have also seen how the encounters or the list of different content of SMS created in StAR1. I have also understand that, for this study the schedule for the SMS sending is fixed. In StAR2, we will not receive reply from the participating patients. It will only be a one-way SMS.

The conclusion is, John and myself will be part of the team for StAR2. We will add modules for blood glucose data, Patient ID and the location of the patient into the existing OpenMRS. At the same time, we will also be adding some more questionnaires in SANA. SANA is an Android based mobile application which collect the input/data from Patients and clinicians. It will then submit those information to OpenMRS.

During the skype meeting, the team is looking for a mobile phone with near field communication (NFC) which can read the information from the RFID tag. I have told John yesterday, it is better to used QR code instead. The QR code reader is app-based and QR code is free to generate. Clinician can use the existing tablet without investing money buying phone such as Alcatel NFC compatible phones.

After coming back from my break, I will try to generate a new form for OpenMRS.