Reflections on Development process.

Main purpose of project:
The purpose of our project was to develop a software to be used in remote areas of Nepal by patients with maternal health complications. The main features of the project were to allow the fieldworkers to send the information of the patients to the experts and receive back their response. Also, to allow the radiologists to be able to receive the information sent by the fieldworkers and annotate the ultrasound image of patients, and send their response back. Further, for superusers, it was to make them to be able to do the administration features such as adding and deleting the users, etc.

Explanation of tools and techniques used:
We implemented the Java client in order to receive and give response, and Android client in order to deal with the patient's information. Since the Android applications are mainly written in Java, we used Java to create the app. For the front-end we also used Java. Therefore we used Java API. To deal with database, we used MSSQL. Eclipse was used for IDE. Entirely in this course we used Agile software development technique, which was for most of us the first time to use this technique to develop any software. Starting from the beginning, after meeting our project champions, we dealt with developing user stories from the requirements of project champions, and then converting those user stories to tasks. Then estimating the sizes of those tasks. Then, for each sprint, choosing the tasks to be done, and prioritizing them. All of these work seemed to us difficult to handle in the very beginning, then we understood that it helps a lot to organize as a big team, and to be able to handle any difficulties while completing the big project. We, as a team, think that the effectiveness of agile development technique is mainly its focus on scheduling the project so that the tasks are done according to their priority, and in a fixed amount of time. This is particularly helpful to organize big teams as ours.

Things we didn't do:
As we described in "Remaining Unimplemented user stories", we did not implement some of the user stories. The reason was mainly the lack of time. We decided to implement only those things which took the highest priority first, and then implement those features which were of less importance for our project champions. For more details on the unimplemented user stories, please refer to "Remaining Unimplemented user stories" on our group page.

Things we learned from problems we encountered:
As it might be the case in this kind of big teams as ours (6 people), it is natural to have problems while completing one mutual project. However, we overcame any issues that occurred during the project. One of the main issues was the separating the sprint tasks according to their dependencies, for example, when the assigned tasks of one team member were dependent on other group member's task, some of us had difficulties on working on those dependent components. However, after we realized that was a problem, we created an action plan (which was mentioned in our Sprint Review), and we followed it by considering those dependencies when we planned the order in which to work on those tasks. Thus, we learned as a team member to be more considerate while working on any assigned task.

In conclusion, we want to say that the Ultrasound in Remote maternal health care project went on how we planned it, and being able to build a software to help people who really need help means that now we are ready to apply our knowledge from university in practice. When doing the final demo, the professor asked us whether it makes any difference of what kind of project we were working on. We think that we do not regret choosing namely this project because it makes us to feel that we can help those people who need help. Since Nepal is a developing country, and also because the women in the remote areas of Nepal really need help from experts, the project we completed is indeed very important. The project itself was interesting and challenging at some places we have pointed at previously. The most interesting and exciting place of the project was when everything was set up and we could really see our software working. In terms of what we learned, the project gave us a deeper understanding of how this kind of big projects are done by big teams. We believe that in near future we will be able to apply knowledge we got from this course to build even bigger projects than this, and to work in even larger groups as we had.