Team 41
Bi-Weekly Report
UCLH Peach & Microsoft : Tools

German Mikulski, Nancy Amelia, Yuan Pan

12/02/2017 - 26/02/2017

Overview

Progress summary

The past two weeks varied significantly in the amount of time that our team was able to dedicate to the project. During the reading week we made a significant progress in digging deeper into `openEHR` concepts and their particular application in the context of `EHRScape`. Skype conversation that we had with our advisor was very helpful in this process. Furthermore, our team gained a significant understanding of `Electrode` platform and technological stack that it is based upon. That enabled us to start transferring components that were developed with raw `JavaScript` into the context of the framework.

Successes

- Established full understanding of Electrode platform and components it comprises

- Conducted a series of successful experiment with APIs provided by `EHRScape` service

- Enhanced understanding of `openEHR` reference model and its components

- Gained an in-depth understanding of how `openEHR` templates are transformed into Web Templates and how those can be parsed into JavaScript objects to generate markup from

Issues

- Integrate `EHRScape` API connectivity into Electrode components

- Several lean JavaScript components still have to be transformed into `React.js + Redux` components

Meetings

Skype conversation with advisor - 17/02/2017

OpenEHR architecture, especially its practical application has always been a major progress setback in this project. In order to make sure that we structure the final version of our system properly, we decided to consult our advisor - Ian McNicoll. Ian has a large amount of expertise in dealing with openEHR, and he managed to make the missing concepts clear to us. In addition, he provided a number of files and documents on which we continued to build our understanding of openEHR after the meeting. As a result, our team is now able to make full use of this robust architecture.

Progress update 22/02/2017

After taking some time to digest openEHR concepts and to do more exploring on the Electrode side, our team arranged a meeting in which the group was updated with everyone's progress. In addition, we exchanged knowledge we gained in order to make sure everyone is fully able to contribute to various aspects of the project.

Future plans

- Gain a deeper understanding of how React.Js is implemented in Electrode environment.

- Migrate the parser prototype and perform API calls in Electode.io

- Create a sample template that is limited to several data types such as ordinal,quantity,text/coded text and dates as suggested by Ian.

- Concentrate on parsing simpler templates limited to the data types mentioned above.

- Implementing form customization functionalities in the user interface to improve user experience.

Individual reviews

German

The main challenge that I personally had to address in these two weeks was understanding of how openEHR templates are structured. This was vital for constructing a proper JS object from which other members of my team would construct the markup. Apart from an in-depth study of available on the Internet resources, I constantly kept in touch with our advisor Ian, and have arranged a Skype meeting with him. After the meeting, I continued to work on the templates to ensure we can successfully work with this concept. In addition, I have also studied how various Electrode components - `React.js, Redux, Gulp, Yeoman, npm` (and etc.) work. After gaining understanding of those, I shared my knowledge with the rest of team.

Nancy

The last two weeks were the reading week and scenario week, therefore we didnt get to meet during the lab session. However, we had Skype meeting with Ian to help us understand better the OpenEHR template. Furthermore, during the reading week, I completed a series of React.Js tutorials on Codecademy.com to help me understand better the state and props components in React.Js. We have started coding in electrode platform instead of plain JavaScript environment to

ensure interoperability of system with other teams. Furthermore, throughout scenario week, I gained understanding of how complex computational geometry problem could be optimised in order to minimise the time complexity of NP-Hard problems.

Angela

During the past two weeks, I have been working on finishing the components required and started to learn how to use reactjs and electrode. Now I have finished the uploading page and insert the form generated into the generate page. Now the form generated will be shown on the same page as the generating page so that it saves time for the user to load another page.