UCLH PEACH and NHS Open Source: OpenEHR Architecture and Analytics

Team 38: Report 6

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Overview of progress:

During the first week, our team was mainly focused on preparing for the Elevator Pitch presentation and creating a work plan for term 2. We planned how we will present the deliverables by the end of the term as well as deciding on what our priorities are. Furthermore, we did some experimental work with Druid on our local machines so that we could get an idea of how we are going to implement it in the actual PEACH workflow.

During the second week, we focused on the PEACH Generator and managed to debug the function that generates novel data sets.

Problems Faced:

In the process of debugging the Generator, we were faced with various problems, including having to use poor documentation and bad designed code structure. We tried to understand the code by unit testing the functions and forcing the programme output message. Finally, the bugs appeared and we managed to recover the "Generate novel data" function, which will help us with future testing on the workflow.

Successes:

We successfully debugged and completed the core functionality of the the second PEACH Generator function which was previously incomplete. More specifically, this includes being able to generate novel data based on a previously anonymised dataset.

Plan for next two weeks:

No.	Task	
1	Create a test workflow in our local machines using NiFi and Kafka	
2	Use the Data Generator output to experiment with our workflow.	
3	Analyze the results to plan our next steps for the deployment on DC/OS	
4	Look towards improving the UI for the Generator using Java FX	

Summary of meetings held:

Meeting Date	Who attended	What we did
19/01/17	Sandipan Mengyang Desislava	 Met with a postgraduate team also working on the PEACH project (PEACH security), and discussed any project dependencies as well as ways to ensure our project deliverables are compatible
20/01/17	Sandipan Mengyang Desislava	 Finalised slides for the 2-minute elevator pitch event, rehearsed our team's presentation and made necessary adjustments to remain within the time frame Went over term outline and deliverables with our TA and general created plan of action
20/01/17	Sandipan Mengyang Desislava	 Presented our elevator pitch to the teaching assistants, demonstrating our problem statement, project plan, deliverables, and team management roles.
27/01/17	Sandipan Mengyang Desislava	 Demonstrated the complete random data generator to Dr Navin Ramachandran and received feedback on what to further improve on Started planning creating a workflow where we can connect it with the generator

Individual Contributions:

Sandipan Ganguly

During the last couple of weeks, I was mainly focused on preparing our Elevator Pitch where I worked on the last slide as well as creating a script for it. This included our final list of deliverables and any challenges we faced previously. Concurrently, I also started sorting out our future plans and priorities for this term so that we have a smooth road ahead till our final deadline. In the next couple of weeks, I will start working on implementing a workflow in my local machine so that we can test out the PEACH Generator output with Apache NiFi and Kafka.

Mengyang Wu

During the weeks after the Christmas break, I focused on two major tasks, the Elevator Pitch presentation and debugging the generator. On the one hand, I spared no efforts in preparing the presentation. Although the time limitation is just 2 mins, I as well as my teammates, practiced together and managed to finish in time. On the other, after the presentation, I turned to debug the previous generator code and find where the errors are. Fortunately, the basic structure of the app is correct, so that I can remain most of their code and achieved majority of the requirements. In the following weeks, I will start to construct the workflow on our own machines and exam the performance.

Desislava Koleva

During scenario week I was unfortunately unable to make much progress on the PEACH project because of how intense and time-demanding our task was. The following week, similarly to my teammates I was primarily focused on preparing for the Elevator Pitch event, where we were required to provide a brief 2-minute presentation of our project. I worked on the introductory slide, outlining the problem statement and our main goals. Next, I will start looking into ways to enhance the UI of the PEACH Generator.