

**Bi Weekly Report 7**  
**COMP204P - Systems Engineering**  
**Group 31**

Marc de Fontenay  
Mohammad Afsharmoqaddam  
Jas Semrl

Nuffield Health & Microsoft Project

**Overview of progress**

2nd of February 2017

Both student teams met Alex Matei in Nuffield's offices in Barbican. Multiple decisions were made. He told us that it would most probably be difficult to obtain the desired subscription for Azure from Nuffield Health and that we need to not consider it as a possible option anymore. He then suggested us a number of open-source alternatives for identity management that we could have a look at for the next sprints.

Alex Matei also had a look at our work with AzureML and provided us with context on the data we were working with.

3rd of February 2017

In this lab session we informed Mirek Janatka, our TA, that we would conduct a two-week sprint, including during reading week. We also made him aware of the issues regarding subscriptions on Azure and that we would conduct this sprint as if we did not have any access to the B2C service. We had started looking at open source alternatives such as Forgerock.

He informed us that he would be in Florida for a presentation and that we needed to send him a daily sprint feedback by email.

6th of February 2017

In this Lab session we met our TA Mirek Janatka again. This was an occasion to show him our work for our presentation. We also set goals for the next week and initiated a number of technical tasks for us to work on in the coming week. We presented our elevator pitch in the afternoon.

9th of February 2017

Marc met Diana Darie, third year student working on the project as well. She shared her github repository with the rest of the team, containing the last draft of her work. This includes a data visualisation dashboard pulling data from the sample Nuffield Health database. She uses iCharts, as opposed to d3.js, because it enables her to produce weekly reports containing images of graphs sent by email to the user. The dashboard is very close to what

our team aims to achieve for the corporate client. She also informed us of her usage of AngularJS for frontend development, enabling us to make progress towards integrating work mutually.

Jas met Alex Matei and Matineh Akhlaghinia (Team Leader for Team 30) in Barbican and discussed integration and familiarisation with models within AzureML. Alex said we should not build anything further until we get the better data for now. Furthermore, the necessity of quick delivery of secure authentication was discussed alongside the integration with Team 30. Conclusions of the meeting were to implement the basic authentication as soon as possible, hopefully by the next meeting with Alex at the beginning of next week which will allow us to start working on its integration with other components, namely dashboards, message queuing and the other team's apps. An important deliverable of the meeting was the proposed approach to integration of the two systems developed by both teams.

10th of February 2017

This group meeting in labs didn't involve our TA but was used to debrief on the progress made during the week. Good progress was made on the AzureML and models front. Authentication and session management needed to be achieved and integrated to the dashboard. We are all present during reading week and determined to use it to make progress.

### **Individual section**

Marc de Fontenay :

*Identified node.js login tool and seeked methods to extend authentication to the rest of application. Attempted implementation of various tools such as Stormpath identity management or PassportJS strategies. Met Diana Darie and collected updates on her progress and at what level integration could be made. Worked on actually implementing node.js authentication and session management with help of team members.*

Mo Afsharmoqaddam:

*Started working on azure machine learning, working with Jas developed a script which organised and structured the dataset received from nuffield, after grouping the data, applied and created a machine learning model which trained on the data and gave a result based on how likely it is that someone will be attending the gym. Additionally, started working on implementing facebook authentication using node.js with Marc.*

Jas Semrl:

*Contributed to the organising of the backlog using VSTS for the sprint and assigning the tasks to be completed by the team by the end of next week. Helped building the basic machine learning model based on mock data. Successfully implemented the manipulation and training of the data. Discussed the integration with the other team and agreed on the integrations mechanisms that will be used.*

Following week work:

- Achieve login integration with dashboard and session management
- Implement and enable social identity login through facebook
- Construct a handful of functioning demos by the end of reading week to include in final report
- Keep in contact with Diana Darie and seize potential integration opportunities
- Send sprint reports to TA Mirek Janatka