Microsoft Capita Team 2 / Bi-Weekly Report 8

Date: 27/02/2017
Team: Lambros Zannettos, Nathan Liu, Junwen He

Sprint 3

Overview

Our project workload during the past sprint was less than usual due to Reading week and Scenario Week. We managed to fix the REST endpoints and integrate the Interpretation Engine to read files from the Azure Blob and send these files to Team 1 via the REST API. We also wrote a basic neural network to classify data types.

Meeting summary

Wednesday, 15 February 2017

We met to discuss and update our current progress on the tasks to be completed from the previous biweekly report. By this point we had successfully fixed the REST endpoints and configured the our system to read data from the Azure blob instead of a database. We also agreed on a date to meet Dr Strange to update him about on our progress.

Friday, 24 February 2017

We met after the ending lecture for Scenario Week to discuss about the next steps for the System engineering project and catch up on the work completed over the past week. We concluded that we will need further optimise the set engine and meet with Team 1 to gain feedback on the REST endpoints.

Monday, 27 February 2017

We met with Team 1 to discuss any problems they had and gained feedback on the REST endpoints. We agreed to find ways to separate the data and run speed tests on different methods of transport between server side and client side applications.

Tasks Completed

- Integration of Interpretation Engine with Azure Blob. The REST endpoint is now able to use the Interpretation Engine to get data from the Blob.

- Fixed REST endpoints for Team 1

- Developed basic feed forward neural network to classify data types. Back propagation has mostly been implemented but will need debugging.

Problems to be resolved

- Debug back propagation algorithm for data type classification neural network or alternatively design a decision tree to classify different data types.

Plan for next two weeks

- Make the set retrieval prioritise the sets that are currently in memory on the server, before looking for the requested set in storage.

- Optimise the way the database (sets/operations etc.) is modelled in C#.

- Further integration experiments and trials with Team 1's front end.

- Develop a classification system to classify data types and use it to enhance the structure of the sets on the blob.

Individual reports

Lambros Zannettos:

My main activity these past couple of weeks was to go back to the drawing board and rethink the modelling of the database (and the whole system in general) in terms of object-oriented design and C# data structures.

Nathan Liu:

I fixed the REST endpoint for Team 1, configured the Interpretation engine read from the Azure blob and attempted to write a neural network to classify data types but had problems debugging the back propagation algorithm. I think that the need to structure the data will help make the system more scalable and having a system to classify data types (since there are many ways to represent data types) can play a very useful role in this.

Junwen He:

For the past couple of weeks, I created sample database for testing the UDP and Zip functions, trying to find the best way which takes least time, to get data from Azure database and send them after zipped.