Project 1. Group project Pupil Data Analysis
COMP204P/COMP205P starting Oct
COMPGS01/COMPGS02 starting in Nov

Name of Company	Capita
Contact Details of company representative/supervisor(s)	Steven.Law@capita.co.uk
Introduction to Company	As the UK's leading provider of business process management and integrated professional support service solutions, we're comprised of 75,000 dedicated staff across the UK, Europe, South Africa and India. Using technology, insight and analytics to underpin everything we do, we work across the private and public sectors playing a vital role in helping our clients deliver modern services efficiently, effectively and to a high standard. We use innovative, often unique, IT and software platforms, together with a wide and deep understanding of excellent, accessible customer services to help our clients grow, become more profitable and deliver the best experience possible for their customers. We support clients across a range of sectors, including local government, central government, education, transport, health, life and pensions, insurance, and other private sector organisations. And we support them with expertise from across our business - in customer and property management, software and hardware, back and front office operations, recruitment and training - working together to provide a seamless, multidisciplinary solution.
Project Description Describe the problem to be solved by the project team giving as much details as possible.	Ideally initial focus would be Primary level education as SIMS 8 will be rolled out in this sector first, but this is not essential Step 1 -Establish a panel of education experts from the Institution of Education ("IoE") and Senior Leaders in Schools The purpose of the panel is to establish what some of the most pressing questions Senior Leaders in Schools would like the answers too where there is a potential cross over with the data SIMS captures with respect to pupils Students and Mentor to work with panel in a couple of workshop sessions to achieve this. Ideally initial focus would be Primary level education as SIMS 8 will be rolled out in this sector first, but this is not essential. Step 2 -In parallel to Step 1 Capita and IoE to establish a list of schools who are prepared to have their data anonymised and used in a data science exercise in order to answer some of the questions from Step 1 Step 3 -Capita to use established and approved anonymising approach to anonymise data from Step 2 and then share via secure environment in Azure Step 4 -Students to use various Data Science tools and approaches with the anonymised data from Step 3 to try and establish how they could answer questions from Step 1. Step 5 -iteration -Students to share findings with panel and mentor and iterate around the problem focusing where most promising results are found Step 6 -output -Students to capture conclusions in a manner which makes it easy to translate directly into visualisation POCs.
Commercial/Industrial context for project	http://www.capita-sims.co.uk/ Over 22,000 schools in over 45 countries choose SIMS to support them in achieving academic excellence alongside the smooth running of their school.
Challenges – technical and professional	Data sources; See Step 2 /3 above -data could be provided anonymised in SIMS 7 MS SQL data store in Azure -this could be accessed via any of the following; SIMS 7 client application / SIMS 7 ad-hoc reporter which can output CSV etc / direct SQL read / SIMS 7 APIs / etc.. Also external / public data sources could be used for extra demographic, deprivation, etc information ?

Roles/Expertise/Skills required i.e. any particular skills that would be essential/desirable	Knowledge of Microsoft toolset and the latest Cortana Intelligence Suite, SQL, R, Azure Machine learning, BOT framework and cognitive services capabilities
Resources available: £ in excess of £500 Personnel Equipment	Microsoft UK would loan Windows 10 devices to Student Project team Provide Azure Educator Azure Grants for FREE Azure Cloud services $250 for 12 months $100 per student for 6 months Non-Financial Contributions Provide Technical mentors to the project team Act in the role of an advisor Provide Loan hardware for testing on Windows 10