Graph Theory Project 2017

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Design and prototype a Neo4j database for use in a timetabling system for GMIT.

For my third year project in the module Graph Theory we have been asked to detail and create a working prototype of a timetabling system for a third level institute, using a prototype neo4j database. I have chosen to detail a plan and create my graph-based database on the GMIT Galway Campus and more specifically Third year software development, which is my own class.

I thought that by using my own timetable it would feel more familiar to me and I would find it more comfortable working with it as I could see nodes as more than just information bubbles and see them as people and classrooms. By seeing them as real objects it will make it easier for me to rationalize them and store them in the database.

The reason why I am going to recreate the timetable using a graph based database is to show what I have learned over the semester in this module and by detailing and creating a graph database I am showing that I understand the concepts of Graph Theory, and that I am able to solve problems using graph based solutions, both simple and complex in this module by what I have learned over the last semester.

I will update and commit my written document outlining everything I plan to do and my actual project to github on a regular basis as to keep all of my work up to date and also it is a handy back up because if my computer crashes I will have all my information on github and can simply take it down off of github on to another computer and continue my work.

I have decided to use Microsoft word to write my document and Visual Studio code to create the graph database as I find them user friendly and easy to use. I also think Visual Studio code will be helpful as you can directly commit to Github off of it.