Final Project
CSD 3444 Emerging Technologies

In the project each group is asked to develop an application. There is no restriction on selection of business or topic other than the ones that have been in the course material or exams. Below are the criteria for evaluation.

*** Any team that does not follow the instruction and submission requirement will have marks deducted.

*** Teams of 1 to 3 is allowed and each team that is formed has to send an email to me by the project lead before next time we meet with the name of all the team members and their students ID and the topic of your project.

1. Create a NoSQL database; create as many collections as you need and enter as many documents you want to insert into the database. Ensure that you have enough collections and documents so that it looks like a NoSQL database for a medium size application. Ensure that each team member created at least 2 collections and entered sufficient documents to the collections. (20% marks)

2. Write a Python application to read data from your NoSQL Database. Create your collections so that you can Read, Insert, Delete, Update data through Pymongo. Each student must create the above functions for at least one collection. You need to comment out your name in the file. Each function must be implemented, and I will ask for the demo at the time of evaluation. (25% marks)

3. Create an application interface which will display data and take user input to insert, delete, update data into your database; reuse the code you have written in questions 2 to read, insert, delete, update data into mongoDB. If you use Django you will get 100% marks for this part otherwise you will get 80% (25% marks)

4. Use MatPlotlib library to display different charts on top of the data you are receiving from MongoDB. (10% marks)

5. Use at least one machine learning (ML) technique on top your nosql data (10% Marks)

5. Documentation with project details and screen shots (10% marks). To submit: 1 - Create a documentation on your project, check "Project Submission Sample Template.docx" in moddle for the requirements of the documentation. and upload into moodle. 2 - Place your codes in one folder, zip it and submit through moodle. Project Submission Rules: 1. Each team will be assigned for 10 minutes to demo their project to me. Team has to be in the classroom with project on time. 2. All team members must be present at the time of the project presentation. Any member not present will not be given any marks. 3. Each member of the team must work on specific items of the project and must be able to

answer questions to get marks for the project. 4. Codes and the report have to be all in one zip file on the Moodle by the project lead of each team.