# Item 1: SQL queries

Some of the queries that I developed for this release include:

1. The first query that I wrote for this release was for the messaging system and had two different versions, the first was "SELECT messages.student\_id, messages.teacher\_id, messages.sent\_time, messages.message, messages.title, messages.sender, users.first\_name, users.last\_name FROM messages LEFT JOIN users ON messages.student\_id = users.user\_id WHERE teacher\_id = @userID;" which was used to load the messages a teacher had received by returning the required message details as long as the name of the sender. The second version was a modified version that was used to load the messages for a student. This query was used as the backbone for the messaging system.
2. The second query was a simple insert query that was used to write individual messages to the database so that a user can either compose a message or reply to a message that was sent to them. It was written as follows “INSERT INTO messages (student\_id, teacher\_id,sent\_time,message,title,sender) VALUES (@student, @teacher, @date,@message,@title,@sender);”.

NOTE: The @string characters were used with c#’s MySql.Data class to build the queries with supplied data

# Item 2: Business Letter

In the supporting documents I have included the business letter with the contributions that I made towards it highlighted.

# Item 3: Designs

In the supporting documents I have included rough designs for the messaging and message compose systems as well as screenshots of the final design of both. These rough sketches contributed to the assignment so that the other team could see what the user interface might look like before I put time into developing it. As can be seen with the final sketches the design is very similar with a few noticeable differences such as a box that lets you see teacher details before contacting them and the user search and title in the compose window being laid out slightly differently.

# Item 4: database design

There is a UML design of the database in the supporting documents that I have updated this release to represent the current state of the database which has gone under many changes over the last sprints. This is used to represent to the other team how our database interacts and helps us understand what queries need to be developed to get certain information from the database.

# Item 5: Unit Tests

In the supporting documents there is a folder for unit tests, in that there are the unit tests themselves, the objects they relate to and images of the outputs to the tests. These tests were very helpful because they helped guarantee that messaging objects for the messaging system were working as intended.