# Feasibility study for choosing Database

In our project we will be dealing with large number of tweets. As a design decision database was chosen method to store these tweets. As this is an academic project, we were looking for two Database management system softwares – Microsoft SQL Server 2014 Express edition and MySQL community edition. Both are free of cost. But Microsoft SQL Server 2014 Express edition has size limit of 10 GB where as MySQL community edition has size limit of your systems secondary storage i.e. maximum folder size provided by the operating system. But one of the factors favoring Microsoft SQL Server was the experience of development done by the developers of the project. Which ever database handles 1000000 rows, where each row has a column of string of size 1024 bytes, in a better way will be chosen as our database management system. The database management should be better in terms of size mainly.

1. Microsoft SQL Server 2014 express edition – We created a Test Database. In this test Database we created a Test\_Table SQL table. It had two columns, ID with datatype as int and another column was test with column type as nvarchar(max). We created a stored procedure which tried to insert 1000000 rows into that table. It was able to insert only 999343 rows as storage limit of 10 GB got exceeded. It took nearly 35 minutes to complete the task.
2. MySQL community edition - We created a Test Database. In this test Database we created a Test\_Table SQL table. It had two columns, ID with datatype as int and another column was test with column type as nvarchar(10000). We created a stored procedure which tried to insert 1000000 rows into that table. It was able to successfully insert those number of rows to the table. It took only 8 GB of physical storage. For this operation it took 45 minutes.

So based on these observations we have decided to go with MySQL community edition for our project.