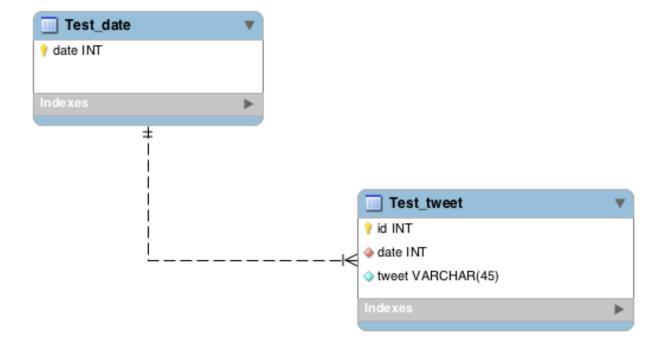
## Group 10

## Team Assignment 4 - Data

To setup a cache for our API call, we choose to use mySQL as our database. It is built as an app TestModel in our website and will be called when the request is sent to retrieve tweets within a range of date. if there is any date matches the record in our cache, our cache will return a list of tweets in those specific date and request the rest of the tweets through API call to remote server.

There are two table in our cache: Test\_date and Test\_tweet. In Test\_date, date is the only column and primary key. In Test\_tweet, there are three columns including id, date, and tweet. id is the primary key and date is the foreign key referred to Test\_date.



When a user sent a request to retrieve tweets within a range between a start date and a end date, firstly we will make sure if there is any date within the range we can find in our cache by checking Test\_date() table. If we found nothing in Test\_date() table, we will retrieve data through API call from twitter and save the to cache. If we found some dates from Test\_date() table, we'll use date data we found from Test\_date() to retrieve the corresponding tweets data from Test\_tweet() table, and retrieve the remaining tweets from twitter and return them to user.

