Java Spring QM Assessment

We have setup a MongoDB database for you which contains data from reuters. We pretend that this data contains customer calls instead of news reports. In the data collection, the records have certain fields, including:

- date
- agent
- sentiment
- politeness score, with possible values "not polite", "polite", "very polite"
- duration

One of the applications of speech analytics is Quality Management, where we want to give our client more information about how well each agent is performing, also over time.

I came up with the following (fake) formula that brings all agent performance metrics together into one single score:

```
agent_score =
    sum(
        sentiment * 0.2
        + politeness=very polite * 0.2
        - politeness=not polite * 0.4
    )
    - avg(duration) * 0.2
```

for all conversations belonging to this agent.

Deliverable

A REST endpoint implemented in Java Spring, where the user can provide:

- The agent
- A start date
- An end date

In json the request can look like this:

```json
{
    "agent" : "John Smit",
    "start_date: "2019-01-30",
    "end_date" : "2019-02-10"
}
```

The response gives the total agent_score in the given time interval for that particular agent per day. This can be used to create a simple line chart of the agent score over time. Example:

```json
[
    {
        "date" : "2019-01-30",
        "agent_score" : 2.74
    },
    {
        "date" : "2019-01-31",
        "agent_score" : 1.92
    },
]
```