We use heat map to show the higher frequency of the topics related with the exercise collected in the certain area. In this way, users can obtain a straightforward impression of the health conditions of people in the certain area. Furthermore, the application provides users a personalized report of health condition, which encourage people to exercise more.

**Methodology**

**Mining Twitter Data**
The tweets and search results can be collected using both REST and Streaming API, including the location identified through geo tagging information and their profile.

**Storing Twitter Data**
We use Mongo DB as one example of a NoSQL implementation to deal with the large volume of Tweets, Tweeters, and network information. By using Mongo DB, we can store data in JSON-style, which could make it easy to store data from Twitter’s APIs and to search it for specific information.

**Analyzing Twitter Data**
By using LDA algorithm, we will select topics in the text and build a hashtag automatically. To analyze of emotional factor of the data, we do a two-layer-filter key searching, and re-arrange the data.

**Visualizing**
In order to analyze and understand how and why users interact on Twitter effectively, and to assist parts of our market demographic with data analysis, we visualized the data with network, temporal, geo-spatial, and textual information.

**Reference**

