IBM Bluemix - Developing a Travel Guide using Watson Services  
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OBJECTIVE
Developing a travel guide to New York City as a cognitive application using Watson services on the IBM Bluemix platform.

INTRODUCTION
Cognitive applications can analyze problems and formulate solutions with a human like thinking capability and make decisions in the similar manner. 
IBM Watson is one of the leading cognitive systems. 
Bluemix serves as a platform for developing applications to incorporate cognitive systems.

DATA PRE-PROCESSING
The dataset comprises of 348 documents collected from Wikipedia, Wikitravel and similar travel oriented websites which have been used as html files. 
These files have been processed by scripts using the Document Conversion service of the IBM Bluemix - Watson service to make it in the answer units form as JSON structure. 
All of the data present in headers, footers, images and other such unwanted tags have been removed.

IMPLEMENTATION
- The question answering component of the application has been developed using the Retrieve and Rank service available with IBM Bluemix. 
- The Retrieve service has been implemented with the help of Solr clusters created on the Apache Solr with the JSON document from the data collection and configuration document created for it. Apache Solr is a search component comprising of the data to be searched. 
- The Rank service makes use of the training component which is a CSV file loaded with 100 training questions with the location of the answer unit specified. 
- Both the services output 10 results that the search can efficiently find and the first answer is displayed. 
- The user can input a question in the space provided and the output appears in the next step.

REFERENCES
1) http://www.ibm.com/cloud-computing/bluemix/watson/ 

RESULTS
The application has been tested on several questions and comparison of answers have been made with results obtained using the Retrieve system based on Apache Solr and the Ranked Trainer.

CONCLUSION & FUTURE WORK
The prominence of using a cognitive application is to make use of all the unstructured information that is present and provide as much as personalization over the application. The efficiency of the answers can be increased by using more dynamic and recent data with complex training questions as a part of the future work.