Multimedia Answer Generation System

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Abstract : Searching for answers for any queries is built on community-contributed textual answers. Automated question answering still faces challenges such as processing and deep understanding of complex questions. In most cases human intelligence obtain better results than automated approach. As a result community question answering (CQA) emerged as an extremely popular alternative to obtain information in which users are able to obtain better answers provided by other participants. It not only allows community members to post and answer questions but also enables general users to seek information from a comprehensive set of well-answered questions. However, CQA forums usually provides textual answers, pictorial answers but these kinds of answer never obtained in combined form. This various kinds of answers are found out on different pages which are not informative enough for many questions. To get informative answers CQA can be extended to enrich textual answers with appropriate media data. It consists of three components: answer medium selection, query generation for multimedia search, and multimedia data selection and presentation. This approach will take all kinds of media such as text, images, audios, and videos which will be merged with a textual answer. In such a way, it automatically collects data from the web to enrich the answer. This process may consist of ranking of web pages to enrich the answer. By processing a large set of QA pairs and adding them to a pool, multimedia question answering approach for users which finds multimedia answers by matching their questions with those in the pool. The effectiveness of MMQA is determined by ranking of text, images, audios and videos in web pages. Thus, MMQA is able to deal with more complex questions where research efforts attempts to directly answer the questions with text, image and video data.

Key-Words: Answer Medium Selection, CQA, MMQA, Query Generation in Multimedia, re-ranking.

1. Introduction

The primary purpose of Multimedia Answer Generation system is to provide a clear and descriptive "statement of user requirements" that can be used as a reference in further development of the software system. This document is broken into a number of sections used to logically separate the software requirements into easily referenced parts.

This report aims to describe the Functionality, External Interfaces, Attributes and Design Constraints (IEEE Std.830-1993) imposed on Implementation of the software system described throughout the rest of document. Throughout the description of the software system, the language and terminology used should unambiguous and consistent throughout the document.

The rapid growth in the internet information now a day's the social websites is changing vastly. The completely new trends have raised the particular usages of search engine for information access is increasing rapidly. In these events the users have to search the question on web user gets some sort of lists of documents and also the user needs in order to browse through each document's to achieve information to the given question. So this question to answer may information overloading problem which means this problem can possibly be solved by multimedia Question Answering System.

2. Literature Survey

A literature survey is studying several scholarly papers on the said topic, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature review is focused on a research questions, trying to identify, appraise, select any synthesize all high quality research evidence and arguments relevant to that question. And further by using statistical methods to effectively combine the data used on all selected studies more reliable result can be produced.

The Trec: Text Retrieval Conference in 'Text based QA' , 1990 proposed that the re-ranking algorithm is being used in this paper to improve multimedia

search by extracting information of image and video. The S. A. Quarteroni, S. Manandhar proposed 'Text based QA based on type of questions', in 2008 which describe the importance of web to search multimedia content such as image or video which is classified into two categories such as text based search and content based search. D. Molla & J. L Vicedo discussed that the 'Restricted domain QA' ,in 2007 extension of text based QA (Question Answer) to research based multimedia QA to manage the range of factoid. H. Cui, M. Y. Kan proposed that the 'Definitional QA', in 2008 Queries are classified into two classes namely related query or non-related query. R. C. Wang, W. W. Cohen,E. Nyberg propose that the paper 'List QA' in 2008 to collect image and video data we need to generate queries through search engine.

3. Proposed System

The proposed system will gives answers for the question answering in any one of the following media formats as selected by the user based on the question enters

(a) Text: it means that original textual answers are sufficient

(b) Text+ image: it means that textual information is not sufficient to user so image information must be added

(c) Text +video: it means that text and information and video data must be added

(d) Text+image+video: it means that we add both image and video information

We have proposed algorithm for selecting the approximate multimedia data with corresponding answer.

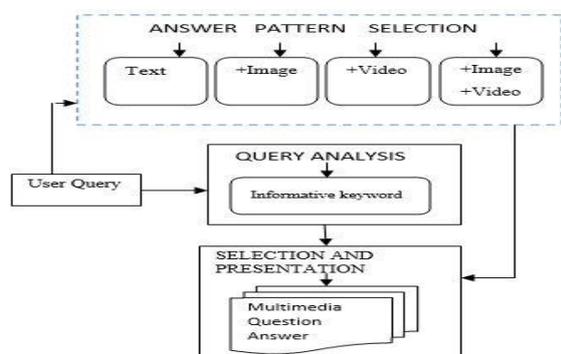the product perspective of multimedia answer generation system.

Figure : Block diagram of Multimedia Answer Generation System

List of components of block diagram is as follows:
  1.Query Analysis
  2.Answer pattern selection

3.Multimedia selection and presentation

1. Query Analysis
The first component of our model is query analysis. It helps to find the informative keyword for searching corresponding media data using multimedia search engines. The main objective of this process is to find the stem word which is considered as the informative keyword.

2. Answer pattern selections
The second component of model is answer pattern selection. In this model the given question is judged whether it requires any media data or it requires only textual answer. Here we will categorize mainly into four types such as text, text + image, text +video, text + image + video based on the given question. It is not sufficient for the user to understand if we provide only textual answers.

3. Multimedia selection and presentation
The third component of our model is multimedia data selection and presentation. For those question which require media data such images and videos we will vertically collect media data by using multimedia search engines such as YouTube for videos and Google images API(Application programming interface) .sometimes these multimedia search engine provides some irrelevant results. In order to overcome this we have to rearrange the result. Here we adopt the re-ranking method based on graph which is based on exploring visual information.

4. Conclusion

Thus, we studied and completed the literature survey of our project, Multimedia Answer Generation System. We completed the requirement analysis by studying requirements for our project. In the design phase we designed the working of project and draw the different UML diagrams, further we designed the prototype of our system.

Further we intend to study PHP and HTML for development and coding of proposed system, after this we would design the frontend, then we will code for registration basket, generation of registration slip and then testing will be done and finally a report describing these stages will be documented.

6. Acknowledgements

7. References

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