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Web Based Medical Knowledge Extraction Form to Take Out Medical Observation

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Abstract: Now a day's in online medical forum are biggest discussion topic from doctor side so the valuable information is shared rapidly in web application and increasingly large amount of patients and doctors are involved. Valuable information is shared through web-of-things so it can support crowded questions and answers. This information are extract from large amount of big data so it will have collection of valuable, invalid and repeated information, in this way can't be able to give proper solution from patient and doctor side. Facing the daunting scale of information generated on medical Q&A websites every day, it is unrealistic to full fill this task via supervised method due to the expensive annotation cost. In this concept, we propose a Medical Knowledge Extraction (MKE) system that can automatically provide high quality knowledge triples extracted from the noisy question-answer pairs, and at the same time, estimate expertise for the doctors who give answers on these Q&A websites. The MKE system is built upon a truth discovery framework, where we jointly estimate trustworthiness of answers and doctor expertise from the data without any supervision. We further tackle three unique challenges in the medical knowledge extraction task, namely representation of noisy input, multiple linked truths, and the long-tail phenomenon in the data.
Key Words: Data privacy, Record Linkage, SSN, EDR, Patient Records

I.   INTRODUCTION

Nowadays, the patients are looking for online health care suggestion and solution for the first aid for their health issues. The patients want to take a medical care from the worldwide doctors about their health and suggestion by questioning and answering. The doctors are able to communicate with the patients about their health and any type of health issues1-3.

The doctors are suggesting them over the complex and complicated issues. Early days, we were using the external dictionary for related medical data that really wasn't sufficient for helping the patients at online services. Nowadays, we incorporate the terminology of corpus aware that is being used by the help of natural language with the terminology of medical data that making a limitation between health care service providers and patients.

A.   Purpose of the system

1)   The main scope of this project to differentiate the medical concepts from other general noun phrases. Inspired by the efforts in, we assume that concepts that are relevant to medical domain occur frequently in medical domain and rarely in non-medical ones.

2)   So normal user's are collection some common suggestion from website and get proper prescription from medical Robert.

3)   The main roll of medical Robert are collect the feedback from user side it diagnose dieses level and it give auto prescription to required patient, so this medical Robert are depend on big amount of data from DB side this role are fully deboned on user feedback side.

II.   SYSTEM ANALYSIS

A.   Existing system

1)   Existing truth discovery methods can only work on structured data, but the knowledge extraction task deals with unstructured and noisy text data.

2)   In this concept are can't be able to predicate accurate diagnose result because they are implement in structured data so it returns unnecessary data from DB side.

3)   In this concept are have main drawback in finding the prescription from DB side and they reach only in mentioned data.

4)   The drawback of this group of methods is that to train a good classifier, they can't be able to maintain large amount of labeled data in DB structured.

5)   Even impossible for the large-scale knowledge extraction on the medical crowd sourced Q&A websites

B.   Proposed system

1) We propose an automated approach, which we implement as a Java framework (Hibernate), to locate redundant data problems.
2) We apply our framework on one enterprise and two open source systems. We find that redundant data problems exist in 87% of the exercised transactions.
3) Due to the large number of detected redundant data problems, we propose an automated approach to assess the impact and prioritize the resolution efforts.
4) Our performance assessment result shows that by resolving the redundant data problems, the system response time for the studied systems can be improved by an average of 17%.
5) We propose a Medical Knowledge Extraction (MKE) system that can automatically provide high quality knowledge triples extracted from the noisy question-answer pairs, and at the same time, estimate expertise for the doctors who give answers on these Q&A websites.
6) The main component in the proposed MKE system belongs to the topic of truth discovery
7) Truth discovery methods can automatically estimate source reliability (doctor expertise) from the data without any supervision, and incorporate such estimated source reliability into the aggregation of noisy multi-source information.

III.   DEVELOPMENT ENVIRONMENT

A.   Hardware requirement

RAM   : 2GB
PROCESSOR : Intel(R)Pentium(R)2.10GHz
HARD DISK : 80GB Hard Disk
MOUSE   : PS/2 Mouse
KEYBOARD : PS/2 Keyboard

B.   Software requirement

PLATFORM   : windows xp/7/8
FRONT END   : core java, css, js
BACK END : MongoDB shell version 3.2
WEB APPLICATION : J2EE

C.   Module Description

Nowadays, we incorporate the terminology of corpus aware that is being used by the help of natural language with the terminology of medical data that making a limitation between health care service providers and patients.

1) Crowd source login
2) Symptom checker
3) Medical Knowledge Extraction
4) Medical robot
5) Truth Discovery

D.   Crowd source login

Crowd sourcing is the process of getting work or funding, usually online, from a crowd of people. The word is a combination of the words 'crowd' and 'outsourcing'. The idea is to take work and outsource it to a crowd of workers.

Crowd sourcing & Quality: The principle of crowd sourcing is that more heads are better than one. By canvassing a large crowd of people for ideas, skills, or participation, the quality of content and idea generation will be superior.

E.   Symptom Checker

The purpose of this tool is to help you narrow your search along your information journey; this is not a diagnostic tool.

This tool allows you to choose a variety of factors related to your symptom, in order to help you narrow the potential medical conditions related to your symptom. This tool does not incorporate all the personal, health and demographic factors related to you, individually, that would allow a definitive cause or causes to be suggested.

F. Medical Knowledge Extraction

We use knowledge extraction as a preprocessing step to vectorize EHR for use in the other stages. This phase extracts medical concepts inbroadcategories of Problems, Tests and Treatments. Additionally, it enriches extracted concepts with the contextual attributes of negation, temporality and experience.

G. Medical Robot

In the concept is derived by automatically generate and compare to user and doctors suggestion.

H. Truth Discovery

In the module Finalize result. the result produce to user and the valuable result

IV.   SYSTEM DESIGN
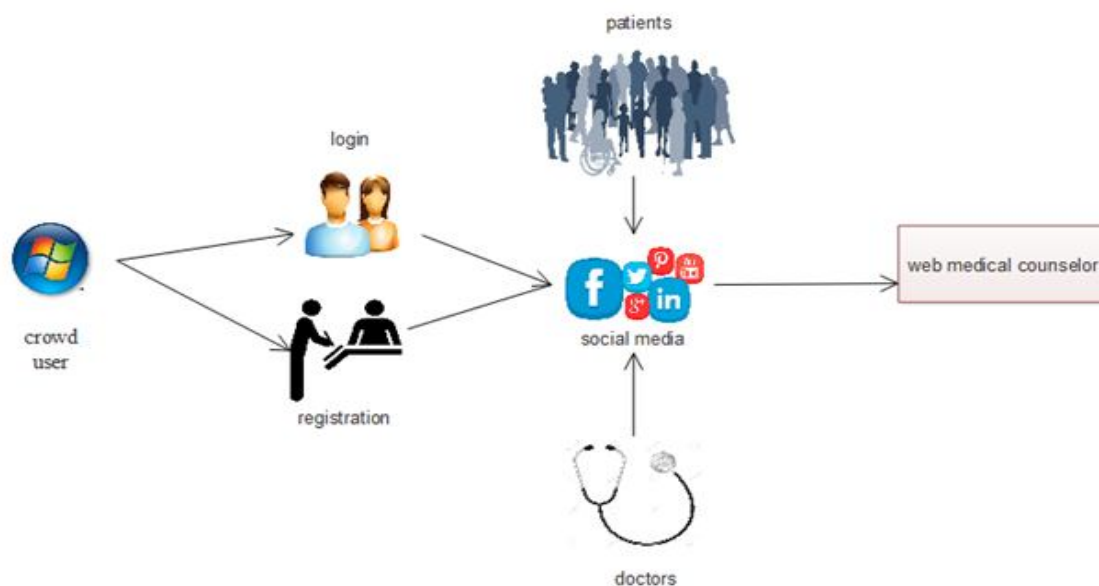
A. System Architecture Diagram

Fig: system architecture

B. Advantage
1) Big data is large number of data difficult to handle them by using these we easily maintain that record and privacy is maintained in this model, privacy-preserving technologies for record linkage.
2) In this yak out is used for securing some methods like privacy guarantee, scalability and linkage quality is maintained.
3) The laws and government policies can be used to ensure obedience and provide guidelines in privacy protection.
4) The Ethical, Legal, and Social Implications (ELSI) studies are essential for biomedical data privacy, which provides a new methodology to biomedical research by recognizing, investigating and tackling the ELSI of studies involving human subjects.
5) All government laws are maintained and ssn number is not used to find patient details.

V.   CONCLUSION

A. The main roll of medical Robert are collect the feedback from user side it diagnose dieses level and it give auto prescription to required patient.

B. We further tackle three unique challenges in the medical knowledge extraction task, namely representation of noisy input, multiple linked truths, and the long-tail phenomenon in the data .

C. Inspired by the efforts in, we assume that concepts that are relevant to medical domain occur frequently in medical domain and rarely in non-medical ones. So normal user's are collection some common suggestion from website and get proper prescription from medical Robert.so this medical Robert are depend on big amount of data from DB side this role are fully deboned on user feedback side. Finally find out the truth and truth less doctor.
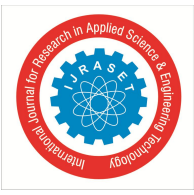
VI.   FUTURE ENHANCEMENT

A. Future work is implements patients provide unique OBC seat. Only permitted users can log on to the system and can have access according to their category. User- name, passwords and permissions are controlled in the server side.

B. Using server side validation, constraints on viral

C. No fake user and patients.

VII.   ACKNOWLEDGEMENT

BIBLOGRAPHY

[1] For .net installation
[2] www.support.mircosoft.com
[3] For deployment and packing on serve
[4] www.developer.com
[5] www.15seconds.com
[6] For sq
[7] www.msdn.microsoft.com
[8] For asp.neasp.net 3.5 unleashed
[9] www.msdn.microsoft.com/net/quickstart/aspplus/default.com , www.asp.net

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