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A WEB 2.0 FRAMEWORK FOR MEDICINAL HERB AND TRADITIONAL MEDICINE

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ABSTRACT

Introduction: Nowadays traditional medicine has received significant attention due to its many advantages compared with conventional treatments. In Iran, with regards to the long brilliant and ancient experience and culture, the revival and development of traditional medicine are necessary. However, with regards to the capabilities of Web 2 and crowdsourcing, this article introduces the requirements of creating a web-based system to aggregate, integrate, manage, and exploit the knowledge of medicinal herb and traditional medicine in Iran.

Methods: In this article, by using a descriptive study, the basic requirements to create a Web 2.0 framework for medicinal herbs and traditional medicine are addressed and described.

Results: The Web 2.0 framework for medicinal plants and traditional medicine will be in the form of a website. This framework is used and edited by different user groups such as ordinary users, supervisors, and administrators. The proposed system provides different access levels and features for different levels of users. The administrators are professionals who create system goals and rules and also monitor supervisor performances. Supervisors verify the accuracy of entered data by ordinary users. The identity and knowledge of supervisors and administrators must be validated at membership time. Ordinary users can write the new information and their experiences and edit the system information for personal use. They do not need to validate at the membership time. Designing the proposed system includes functional requirements such as creating an account and creating an appropriate user interface to easily managing and editing the system contents; searching; content classification and reporting; providing online multipurpose support to educate and respond to users' questions; suggesting new topics and areas of research to users, etc. Some important nonfunctional requirements for designing proposed framework are performance, availability, security, accessibility, ease of use, reliability, etc. Two types of challenges exist to designing the proposed framework: contents and technical challenges. Content challenges are encourage users to provide contents, determine the accuracy and organization of the approved contents, which can have an influence on the reliability of proposed framework, accelerating the validation of generated content by users, and preserve the diversity of the system's content. Designing a precise, expandable, and adaptable database; creating a powerful user-interface; the relatively high initial cost to build the required infrastructure; accessibility for all users; appropriate performance in the information insertion and retrieval; system security; and the ability to respond to large numbers of users are the technical challenges of creating proposed system.

Conclusion: Creating and utilizing the Web 2.0 framework for traditional medicine and medicinal herbs can improve the level of physician's knowledge and his or her ability to use traditional medicine. It also can propagate the use of traditional medicine doctrines among graduates of medical science. The proposed system makes it easy to share the Iranian traditional medicine and medicinal herbs knowledge and experiences between the public and experts in this field. The collection, searching, storage, and

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retrieval information can be more effectively accomplished by using the new generation of web technologies, Web 2.0, and take advantages of the semantic web. **KEYWORDS:** Web 2.0, Crowdsourcing, Traditional medicine, Medicinal herbs