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Development of safety information management system

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It is the reality that interest and awareness of the people in Korea about the safety is not higher because many informations, related to the safety which are managed normally from each organizations, mostly are being used to just inside of the administrations. Additionally life safety information, despite the essential information for public safety, heretofore not provided to the public or has not been individually provided. Therefore, it is an object of this study to implement the map-based life safety information services and to prepare a foundation for dealing with the safety interest of the peripheral life for citizens. For this reason, in the database sector, database was structured so that the simultaneous control could be carried out through the Web and mobile with one DBMS which was integrated with the one-source multi-use enabled method and data lightweight technology. In the analysis sector, the processing speed was improved through visualizing technique with chart and graphic which refer to the results of impact analysis between the relation of safety indicator and index, and the GIS spatial analysis technique. In the service sector, the visibility of the safety information was ensured through various Pictogram and 3D spatial information. At the same time, the rapidly responsible Web-site was built up with HTML5 technique which is the latest Web standards technology, so that the efficiency of services was increased. Finally, by applying the error detection technique for GIS DB and by executing the automatic inspection of the data, this system could be configured to be able to guarantee the quality of the spatial data and attribute data. From the results of this study, it will be able to provide APIs for the utilization of 165 services (security, traffic accident situation, etc.) of the whole country, especially for the public and private sector. Furthermore, it would be able to increase the possibility for sharing safety information national-wide through offensive open information through the life safety management system like the result of this study 'SIMS (Safety Information Management System)'.

Biography

Kyungsoo Pyo has completed his PhD from Donga University. He is the Deputy Scientific Director of National Disaster Management Research Institute (NDMI) in Korea. He has published more than 10 papers in reputed journals.

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