DEVELOPMENT OF A MODEL FOR LOCATION-BASED SERVICE

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ABSTRACT

Combining the functionality of personal locator technologies (RFID), global positioning systems (GPS), wireless and cellular telephone technologies (GSM/GPRS, Wi-Fi, WiMax,...), internet technologies and GIS enables new environments where almost all moving objects of interest can determine their locations. These technologies are the foundation for pervasive location-based services. Location-based Service is a service that is customized based on knowing the user's location. Such services have the potential to improve the quality of life by adding location-awareness to almost all moving objects of interest such as cars, planes, ships, laptops, mobiphones, pets and humans.

In the paper, the authors introduce a solution of location-based service that is customized to adapt to Vietnam 's situation and it can be developed more in the future. Many problems were researched and developed: simplifying, standardized map to suit resource-less of mobiphones; updating status/information to server; optimizing path-finding; integrating voice system... With this solution, a software (called PANav) is developing to help people finding the best way to anywhere they want. With advanced GPS features and voice-prompted directions, they'll always know exactly where their next turn is. In the early version PANav show only map of Hanoi but it can be extended easily in the next version. Finally, the authors present next direction of researching and developing to more adapt in Vietnam.