

VN Univ. Real Estate Data Circulating Application and Management System



Challenges

- Lots of work, time and money have to be spent on appraising real estates and appraisers tend to be influenced by their own subjective factors; therefore, the price appraised from this system is anticipated to be close to the real market price, with the intention to be useful and fair.

Goals

- To reduced time and money and quickly obtain reasonable real estate prices.
- Combine GIS and appraisal procedures.
- Use GIS functions for spatial variable calculation and filtering cases.
- Automatically produce appraisal for the target through standard appraisal procedures.



Vanung University Real Estate Data Circulating Application and Management System

Scenario

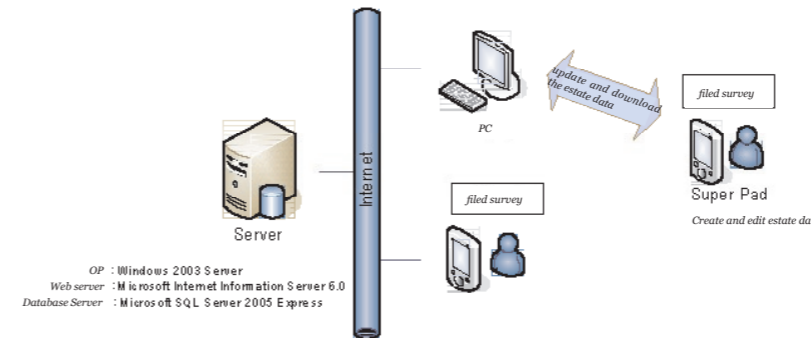
The Department of Civil Engineering of Vanung University is the only vocational department that combines professional knowledge of civil industry technology, real estate management and investing agency. The major courses of the department include two parts: professional technology and knowledge of civil engineering as well as the operation of civil industry. Practical courses of landscape planning and interior decoration are also emphasized. In addition, the combination of information technology and profession skills is particularly emphasized in order to fulfill the contemporary educational goal of fitting into the trend of information applications.

Challenges

At present, it takes great amount of work, time and money on appraising real estates and appraisers tend to be influenced by their own subjective factors and result in appraisals of great discrepancy. Therefore, the price appraised from this system is anticipated to be close to the real market price, with the intention of being to be useful and fair.

Goals

To prevent subjective human factors and for cost-down purpose, a standard procedure system will be required to run a large quantity of real estate appraisal. This way, time and money can be reduced and reasonable real estate prices can also be quickly calculated objectively. The project mainly combines GIS and appraisal procedures. As to the system operation, it uses GIS functions for spatial variable calculation and filtering cases. Then the target's appraisal is automatically produced through the standard appraisal procedure. This project's application boundary is within Chung-Li, Tao-Yuan County. With it, users can inquire, add, edit and appraise real estates through SuperWebGIS or mobile GIS-SuperPad.



The structure of the system

Solutions

The project is developed from Web-GIS and PDA. Its purpose is to allow real estate staff to control the immediate real estate information without limitation, whether they are indoor or outdoor. The system can act as an aid tool for real estate agents when they perform their jobs.

SuperWebGIS and SuperPad developed by SuperGeo are used as the developing platforms for Web-GIS and PDA. SuperWebGIS is a platform that distributes maps and services on the Internet, and is used to develop map services, build websites and perform map communication services. SuperPad is a set of mobile GIS. Through a hand-held device such as the PDA, users can draw maps, navigate via GPS, collect imagery data, and quickly perform all sorts of field data collection.

The main architecture of the system is Web-GIS. Through a web system, indoor users can inquire and create real estate spatial locations and attribute data and also use the automatic appraisal function. For field surveyors, under an environment with the Internet service, they can inquire and edit real estate spatial locations and attribute data, and also use the appraisal function on PDA to update the data through the Internet transmission. They can also use a PDA with SuperPad to browse, add and edit real estate cases. The figure above shows the architecture of the system hardware.

Solutions

- SuperWebGIS and SuperPad developed by SuperGeo are used as the developing platforms for Web-GIS and PDA in this system. Its purpose is to allow real estate staff to control the immediate real estate information without limitation, whether they are indoor or outdoor. The system will act as an aid tool for real estate agents when they perform their jobs.

Results

- There are three systems developed in this system.
- **Real Estate Information Circulation, Application and Management System** allows users can browse the real estates for sale, perform map positioning, review closed cases within the past three years, adjust the weight value of the price, add and edit the real estates for sale, as well as promptly estimate and analyze the objects for sale.
- **Field Survey Internet Inquiry System** allows users to directly inquire real estates for sale by intersections, major landmarks, coordinates or conditional inquiries, and also allows users to position, browse, edit and appraise.
- **Field Survey System** collaborates the Taiwanese mobile GIS SuperPad with GPS positioning functions to browse, add and edit real estate cases during field surveys.



The estate inquiry interface on the desktop version

Results

1.Real Estate Data Circulating, Application and Management System

With the Real Estate Data Circulating Application and Management System, users can browse the real estates for sale, perform map positioning, review closed cases within the past three years, adjust price's weight value, add and edit the real estates for sale, as well as promptly estimate and analyze the objects for sale.

- Inquire and appraise real estates
On inquiry, users can search cases by intersections, major landmarks, coordinates or conditional statements, then browse the real estate's detail data, nearby facilities and their distances, sold listings and perform real estate appraisal.

2.Field Survey Internet Inquiry System

Under the environment with the Internet service, a Field Survey Internet Inquiry System allows field surveyors to inquire, edit and evaluate real estate data from the Real Estate Data Circulating Application and Management System through the Internet transmission by PDA. By the Internet connection, data can be updated instantaneously, which not only gives indoor and outdoor staffs the fastest and latest real estate information but also the appraisal

functions. As a result, work, time and money on surveying and appraising real estates are reduced.

Under the environment with the Internet service, the Field Survey Internet Inquiry System allows users to directly inquire real estates for sale by intersections, major landmarks, coordinates or conditional inquiries, and also allows users to position, browse, edit and appraise.

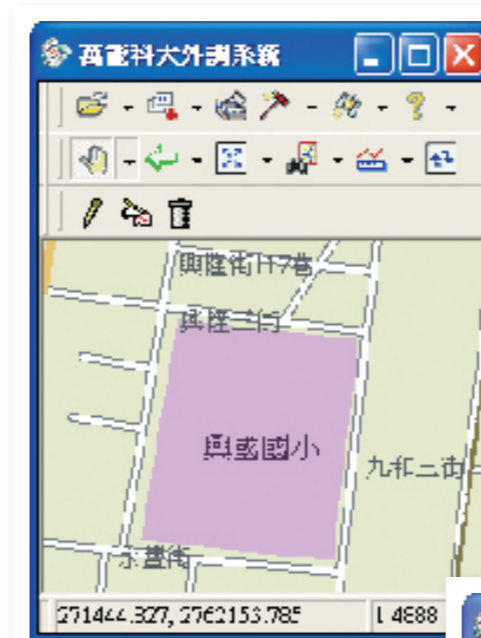


The estate inquiry interface on the PDA version

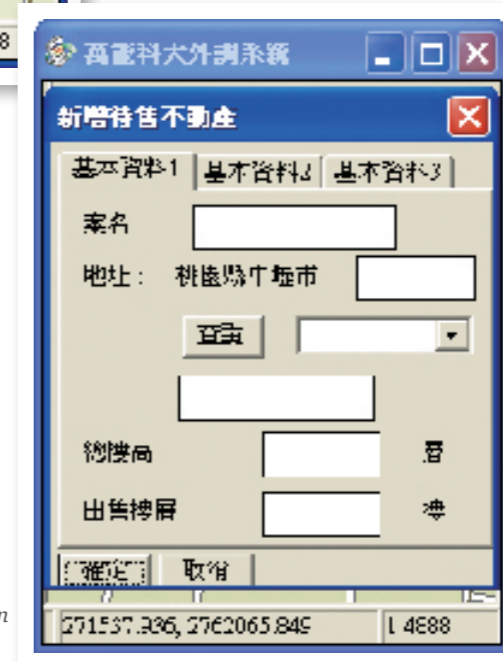
3.Field Survey System

Field Survey System is a system developed for PDA. With the system, field surveyors can collaborate the mobile GIS-SuperPad with GPS positioning functions to browse, add and edit real estate cases during field surveys. Before a survey starts, users can download the real estate objects in the database from the Web-GIS Real Estate Data Circulating Application and Management System or upload object data to PDA through the Field Survey System, so that field surveyors are enabled to browse, edit and add objects through SuperPad when surveying.

After a survey, under an environment with the Internet service, surveyors can upload the results to the system database of Real Estate Data Circulating Application and Management System via computers. It provides a way to quickly and easily survey and efficiently improve performances for surveyors.



The Field Survey System contains many maps provided to the surveyors.



New estate information can be filled into the form.

Products

- SuperWebGIS 2
- SuperPad 2